

VEDL/Sec./SE/19-20/38

June 13, 2019

BSE Limited Phiroze Jeejeebhoy Towers Dalal Street, Fort Mumbai - 400 001 National Stock Exchange of India Limited "Exchange Plaza" Bandra-Kurla Complex, Bandra (East), Mumbai – 400 051

Scrip Code: 500295 Scrip Code: VEDL

Dear Sir(s),

Sub: Submission of Notice of the 54<sup>th</sup> Annual General Meeting ('AGM') and Integrated Annual Report for the Financial Year 2018-19

We wish to inform you that the 54<sup>th</sup> Annual General Meeting (AGM) of the Members of the Company is scheduled to be held on Thursday, July 11, 2019 at 10.30 am at Rangsharda Auditorium, K C Marg, Bandra Reclamation, Bandra (West), Mumbai – 400 050.

The schedule of the AGM is as set out below:

Event	Day & Date	Time
Relevant date/cut-off date to vote on AGM resolutions	Thursday, July 04, 2019	-
Commencement of e-voting	Monday, July 08, 2019	9:00 am IST
End of e-voting	Wednesday, July 10, 2019	5:00 pm IST
AGM	Thursday, July 11, 2019	10:30 am IST

Pursuant to Regulation 34(1) of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (Listing Regulations), please find enclosed herewith the Integrated Annual Report and the Notice of the AGM for the Financial Year 2018 - 19 being dispatched / sent to the members of the Company by permitted modes.

The aforesaid documents are also available on the website of the Company at www.vedantalimited.com.

Further, in accordance with Regulation 42 of Listing Regulations, the Register of Members and Share Transfer Books of the Company will remain closed from Saturday, July 06, 2019 to Wednesday, July 10, 2019 (both days inclusive).

This is for your information and record.

Thanking you, Yours faithfully, For Vedanta Limited

Prerna Halwasiya Company Secretary & Compliance Officer

#### **CC: National Securities Depository Limited**

 $4^{\rm th}$  Floor, "A" Wing, Trade World, Kamala Mills Compound Senapati Bapat Marg, Lower Parel, Mumbai 400013

#### **Central Depository Services (India) Limited**

Marathon Futurex, Unit No. 2501,  $25^{\rm th}$  Floor, A Wing, Mafatlal Mills Compound, N M Joshi Marg, Lower Parel, Mumbai 400013

#### **VEDANTA LIMITED**

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REGISTERED OFFICE: Vedanta Limited, 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai – 400093, Maharashtra, India | T +91 22 6643 4500 | F +91 22 6643 4530

CIN: L132O9MH1965PLC291394



# GROWING RESPONSIBLY

VEDANTA LIMITED
INTEGRATED REPORT
AND ANNUAL ACCOUNTS
2018-19

## **About the report**

# Growing Responsibly

This report builds on the previous year's theme of growth, but also emphasises our commitment to sustainability - to the ecosystems we rely on, to our business and to our stakeholders, including employees and contractors, customers, communities, suppliers and to our host countries. This focus is in keeping with the scale of our operations and the expectations our stakeholders have from the organisation. It seeks to highlight our commitment to the global movement of minimising ecological footprints, upholding human rights, and aligning business decision-making to the long-term societal needs.

#### **ABOUT THE REPORT**

This is the second integrated report of Vedanta Limited (VEDL). Again, in keeping with our values, we remain committed to ensuring maximum and relevant disclosure of our material issues and strategic performance. In 2018, we were proactive in starting to report our performance and strategy using the International Integrated Reporting framework, as outlined by the International Integrated Reporting Council (IIRC).

Our integrated reports are prepared to allow our capital providers to make an informed assessment of VEDL's ability to create holistic value over the short, medium and long term. They strive to showcase our capacity to grow and our ability to deliver on established strategies that can drive significant financial and non-financial value for all stakeholders.

#### **SCOPE AND BOUNDARY**

This report covers the reporting period from 1 April 2018 to 31 March 2019 and provides 360° information on Vedanta Limited, a subsidiary of Vedanta Resources

It gives an overview of operations across our business units: Zinc-Lead-Silver, Oil & Gas, Aluminium, Power, Iron Ore, Steel and Copper. Our assets are spread across India, South Africa and Namibia, and across the value chain comprising exploration, asset development, extraction, processing and value accretion activities.

The report aims to give a concise explanation of VEDL's performance, strategy, operating model, business outputs and outcomes using a multicapital approach. It includes measures of engagement with identified material stakeholder groups and outlines the organisation's governance framework, together with its risk mitigation strategy.

#### **APPROACH TO MATERIALITY**

This report contains information that we believe is of interest to our stakeholders, and presents a discussion around matters that can impact our business. We consider an issue to be material if it can substantively affect the organisation's ability to create value over the short, medium and long term.

## APPROACH TO STAKEHOLDER ENGAGEMENT

Our stakeholders are those individuals or organisations who have an interest in, and whose actions impact our ability to execute our strategy. We periodically engage with different stakeholder groups and actively respond to their concerns and issues.

#### **ANNUAL ACCOUNTS**

This integrated report should be read in conjunction with the Annual Accounts (page 244-440) to gain a complete picture of VEDL's financial performance. The consolidated and standalone financial statements in our printed report have been prepared in accordance with the Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and have been independently audited by S.R.Batliboi & Co. LLP. The Independent Auditor's Report for both consolidated and standalone financials can be found on page 244 and 334 respectively.

## BOARD AND MANAGEMENT ASSURANCE

The Board of Directors and the Company's management acknowledge their responsibility to ensure the integrity of this integrated report. They believe the report addresses all material issues and presents the integrated performance of VEDL and its impact in a fair and accurate manner. The report has therefore been authorised for release on 5 June. 2019.



#### STRATEGIC REPORT

About the report Vedanta at a glance Highlights 2018-19 8-9 Investment case 10-13 Chairman's statement 14-17 CEO's statement

#### **GROWING RESPONSIBLY**

18-19 Aluminium 20-21 **Flectrosteel** 22-23 Oil & Gas 24-25 Copper

#### **OUR INTEGRATED APPROACH**

20.20	Matariality matriy
28-29	Materiality matrix
30-31	Our six capitals and stakeholder value creation
32-33	Our value creation model
34-37	Strategic framework and focus areas
38-41	Key performance indicators
42-49	Opportunities and risks

50-53 Stakeholder engagement 54-55 Awards and accolades 56-59 **Board of Directors** 60-67 **Executive Committee** 

#### **MANAGEMENT REVIEW**

68-75 Market review 76-89 Sustainability and CSR

90-135 Management discussion and analysis

#### STATUTORY REPORTS

136-149 Business responsibility report

150-205 Directors' report

206-243 Report on corporate governance

#### **ANNUAL ACCOUNTS**

#### Standalone financials

244-253 Independent Auditor's report 254 Balance sheet 255 Statement of profit and loss Statement of cash flows

Statement of changes in equity

258-333 Notes forming part of the standalone financial

#### Consolidated financials

334-341 Independent Auditor's report

342 Balance sheet

343-344 Statement of profit and loss 345-346 Statement of cash flows 347-348 Statement of changes in equity

349-440 Notes forming part of the consolidated financial

statements

"Vedanta, with its strong and scalable assets, is well positioned being at the heart of the world's fastest growing economy. The diversified, well-invested and low-cost portfolio of the Company delivered industry-leading volume growth during the year."

**Navin Agarwal** Chairman

Forward-looking statements

Certain statements in this document constitute 'forward-looking statements' which involve known and unknown risks and opportunities, other uncertainties and important factors that could turn out to be materially different following the

These forward-looking statements speak only as of the date of this document. The Company undertakes no obligation to update publicly, or release any revisions, to these forward-looking statements, to reflect events or circumstances after the date of this document, or to reflect the occurrence of anticipated events.

Operating responsibly and ethically is an integral part of Vedanta's core values. We deliver on our commitments to all internal and external stakeholders by demonstrating these values through our actions, processes, systems and interactions. We constantly learn as we develop, and never stop looking to improve our operations. Throughout our successful expansion over the last three decades into many locations around the world, we have operated with integrity and uncompromised business ethics.

We are committed to give back to the stakeholders who play a vital role in powering our growth. Reducing the social and economic divide by generating economic value, distributing wealth, investing in employees and enhancing standard of living are all key elements of our sustainability framework.



#### WHAT WE DO

We supply natural resources that help the world grow, focusing on the core product portfolio. Our strategic capabilities and alliances are singularly focused on creating and preserving value for our wide stakeholder groups and our customers.

The Company has a portfolio of world-class, low-cost, scalable assets that consistently generate strong profitability and robust cash flows. We also enjoy industry-leading market shares across our core divisions.

As India's only diversified natural resources group, we are uniquely placed to make a 'home-grown' contribution to the nation's growth and to assist in its process of modernisation.

#### **CORE PURPOSE AND VALUES**

Since we first introduced Vedanta Values, they have become a vital part of our culture and an essential underpinning of our growth and success. Every person at Vedanta understands what is important, how we work together as a team and how growth and sustainable development are at the centre of what we do. These are universal values, which guide us as we expand into new markets and countries.

Our people are empowered to drive excellence and innovation and we demonstrate world-class standards of governance, safety, sustainability and social responsibility. Our business was built with a simple mission envisioned by the Group's Chairman, Anil Agarwal: "To create a leading global natural resource Company."

We also play an increasingly significant role in the society as we continue to create jobs, supporting our host communities through our various social programmes in the areas of childcare, health, education and women empowerment, generating value along our entire supply chain and contributing to the national exchequer.

Main picture: Off shore facility of

Inset: Diversity and inclusion are our core values

## Vedanta at a glance

# A diversified natural resources company

Large and diversified asset base of long-life, low-cost assets



#### ZINC | LEAD | SILVER



#### **Businesses:**

- Zinc India (HZL)
- · Zinc International

#### **Production volume:**

Zinc India (HZL)

Silver: 679 tonnes

Zinc International

79% share of India's zinc market

#### EBITDA (₹ crore):

Zinc India:

Zinc International

#### Asset highlights:

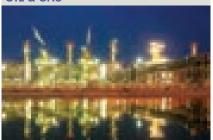
- World's largest integrated zinc-lead producer. World's second largest zinc mine at Rampura Agucha, India.
- 9th largest silver producer in the world.
- Developing the largest undeveloped zinc deposit in the world at Gamsberg.
- Zinc India has R&R of 403 million tonnes with mine life of c.25 years.
  Zinc International has R&R of more than 434
- million tonnes, supporting mine life in excess of 30 years.

#### Application areas:

- Galvanising for the infrastructure and construction sectors.
- Die-casting alloys, brass, oxides and chemicals.



**OIL & GAS** 



**Business:** 

#### **Production volume:**

Average Daily Gross Operated Production

189kboepd

EBITDA (₹ crore): 7,656

#### Asset highlights:

- Largest private sector oil & gas producer
- Operating 25% of India's crude oil production.
- Executing one of the largest polymer EOR projects in the world.
- Footprint over a total acreage of c.50,000 square kilometres.
- Gross proved and probable reserves and resources of 1,195mmboe.

#### Application areas:

- Crude oil is used by hydrocarbon refineries.
- Natural gas is mainly used by the fertiliser sector.



#### **ALUMINIUM**



#### **Business:**

Aluminium smelters at Jharsuguda and Korba (BALCO), and Alumina refinery at Lanjigarh

#### **Production volume:**

1,959kt

1,501kt

EBITDA (₹ crore):

2,202

#### Asset highlights:

- Largest installed aluminium capacity in India: 2.3 million tonnes per annum (mtpa).
  Strategically located large-scale assets with integrated power and an Alumina refinery.
- 37% market share among domestic primary aluminium producers

#### Application areas:

- Primary use in automotive, building & construction, transportation and electrical
- Product portfolio includes ingots, wire rods, billets, primary foundry alloys and rolled



#### **POWER**



#### **Business:**

Power plants at Talwandi Sabo, Jharsuguda and Korba

#### Sales volume:

c.14bn kWh

EBITDA (₹ crore): 1,527

#### Asset highlights:

- One of India's largest power generators with 9GW diversified power portfolio.
  TSPL is the largest thermal power producer in the state of Punjab.
- 3.3GW of commercial power generation capacity, with balance for captive usage.
- Leading producers of wind power in India: 96% thermal power and 4% from renewable energy sources.

#### Application areas:

 63% is for captive use while 37% is used for commercial purposes, of which c.95% is backed by long-term Power Purchase Agreements with local Indian distribution companies.



#### **IRON ORE & STEEL**



#### **Businesses:**

- Iron Ore India
- Electrosteel Steels Ltd

#### **Production volume:**

686kt

1.2mn tonnes

#### EBITDA (₹ crore):

#### **Asset highlights:**

#### Iron Ore

- Karnataka iron ore mine with R&R of 81 million tonnes, and life of 18 years.

   Value added business: three blast furnaces (0.8mtpa), two coke oven batteries (0.5mtpa) and two power plants (60MW).

#### Steel

- Acquired in June 2018 under IBC process for an
- integrated iron ore and steel business.

   Design capacity of 2.5mtpa.
- Largely long steel products.

#### **Application areas:**

- Construction, infrastructure, transport, energy, packaging, appliances and other industry.
- Product portfolio includes pig iron, billets, TMT bars, wire rods and ductile iron pipes.





#### **Business:**

Copper India

#### **Production volume:**

#### EBITDA: (₹ crore)

Currently not operational.

#### Asset highlights:\*

- One of the largest copper producers in India.
- NB: The copper plant at Tuticorin has not been operational since March 2018.

#### Application areas:

 Cables, transformers, castings, motors and alloy-based products.

## Highlights 2018-19

#### **FINANCIAL HIGHLIGHTS**

- Revenue at ₹90,901 crore, 1% lower y-o-y (FY2018: ₹92,011 crore) driven mainly by shutdown of Tuticorin smelter partially offset by Aluminium business ramp up, ESL acquisition and rupee depreciation.
- EBITDA at ₹24,012 crore, 4% lower y-o-y (FY2018: ₹24,900 crore).
- Robust adjusted EBITDA margin of 30% (FY2018: 35%).
- ROCE at c.13% in FY2019 (FY2018: 16.9%).
- Free cash flow (FCF) post-capex of ₹11,553 crore (FY2018: ₹7,880 crore).
- Gross debt at ₹66,226 crore (FY2018: ₹58,159 crore), due to ESL acquisition and temporary borrowing at Zinc India.
- Net debt at ₹26,958 crore (FY2018: ₹21,969 crore).
- Strong financial position with cash and liquid investments of ₹39,268 crore.
- CRISIL and India ratings changed the outlook on Company's rating (CFR) from 'AA/Positive' to 'AA/Stable'.
- Highest-ever contribution to the exchequer of c₹42,400 crore in FY2019.
- In December 2018, the Group purchased an economic interest through a structured investment in the equity shares of Anglo-American Plc, from Volcan Investments Limited for a total consideration of ₹3,812 crore. As of March 31 2019, the transaction was positively marked to market by ₹1,041 crore.

#### **BUSINESS HIGHLIGHTS FY2019**

#### Zinc India

- Record underground mined metal production at 936kt, up 29% y-o-y. Total mined metal production marginally down 1% y-o-y, post closure of open-cast operations.
- Record lead metal production at 198kt, up 18% y-o-y.
- Record refined silver production at 679 tonnes, up 22% y-o-y.

#### **Zinc International**

 Commercial production commenced at Gamsberg in March 2019.

#### Oil & Gas

- Average gross production of 189kboepd for FY2019, up 2% y-o-y.
- 11 development drilling rigs as on March 2019, 99 wells drilled and 33 wells hooked up during FY2019 in Rajasthan.
- Production sharing contracts (PSC) of Rajasthan and Ravva block extended for 10 years, subject to conditions.
- · Revenue sharing contract signed for 41 OALP blocks.

#### **Aluminium**

- Record aluminium production at 1,959kt, up 17% y-o-y
- Record alumina production from Lanjigarh refinery at 1,501kt, up 24% y-o-y.
- Q4 FY2019 hot metal cost of production significantly lower at US\$1,776 per tonne, lower by 12% q-o-q.

#### Power

• Record PAF of 88% at the 1,980MW TSPL plant in FY2019.

#### Iron Ore

- Goa operations remain suspended due to state-wide directive from the Hon'ble Supreme Court; engagement continues with the Government for a resumption of mining operations.
- Production of saleable ore at Karnataka at 4.1 million tonnes, up 89% y-o-y.

#### Steel

- Record annual steel production at 1.2 million tonnes for FY2019, up 17% y-o-y.
- Achieved hot metal production run-rate of c.1.5mtpa in FY2019.

#### **Copper India**

• Due legal process being followed to achieve a sustainable restart of the operations.



Above: Employees at Gamsberg Left: Employee at operational site, Hindustan Zinc Limited

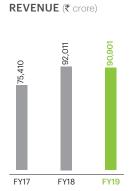


#### **CONSOLIDATED GROUP RESULTS**

(₹ crore, unless stated)

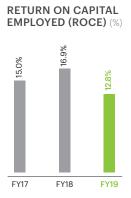
Particulars	FY2019	FY2018	% Change
Net sales/Income from operations	90,901	92,011	(1)%
EBITDA	24,012	24,900	(4)%
Adjusted EBITDA margin (%) <sup>1</sup>	30%	35%	-
Profit before depreciation and taxes	21,432	22,955	(7)%
Profit before exceptional items and tax	13,240	16,672	(21)%
Profit after taxes after exceptional items	9,698	13,692	(29)%
Profit after taxes (before exceptional items)	9,490	12,869	(26)%
Profit after taxes (before exceptional items & DDT)	9,490	11,333	(16)%
Attributable PAT after exceptional items	7,065	10,342	(32)%
Attributable PAT (before exceptional items)	6,857	9,561	(28)%
Attributable PAT (before exceptional items & DDT)	6,857	8,025	(15)%
Basic earnings per share (₹/share)	19.07	28.30	(33)%
Basic EPS before exceptional items (₹/share)	18.50	26.17	(29)%
Basic EPS before exceptional items & DDT (₹/share)	18.50	21.96	(16)%
ROCE (%)	12.8%	16.9%	_
Total dividend (₹/share)	18.85	21.20	-

- Excludes custom smelting at Copper India and Zinc India Operations.
- 2. Previous period figures have been regrouped/rearranged wherever necessary to conform to current period presentation.









#### Investment case

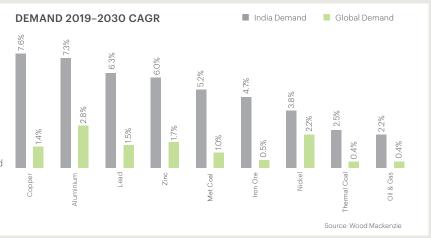
# Delivering returns and creating value

Our investment case is focused on delivering sustainable long-term returns to our shareholders and creating value for our broader stakeholder base. Natural resources constitute an important engine of growth for any economy and as India's only diversified natural resources company, we are very well placed to make a significant contribution to the nation's growth.

# LARGE, LOW-COST AND DIVERSIFIED ASSET BASE WITH AN ATTRACTIVE COMMODITY MIX

Vedanta's large-scale, diversified asset portfolio, with attractive cost positions in many of its core businesses, positions the Company well to deliver strong margins and free cash flows through the commodity cycle. Vedanta has an attractive commodity mix, due to its focus on base metals and oil, commodities with strong fundamentals and leading demand growth.

This fiscal year, markets have seen an upturn in the second half, driven by improved demand and continuing supply side constraints, which has benefited the commodities sector; in particular, Vedanta's core commodities including zinc, aluminium and oil & gas.



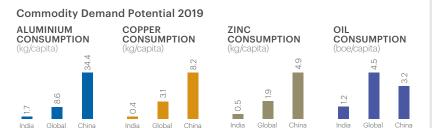
# IDEALLY POSITIONED TO CAPITALISE ON INDIA'S GROWTH POTENTIAL

India is Vedanta's main market and one which has huge growth potential since current per capita metal consumption in India is significantly lower than the global average.

India's GDP is estimated to grow by 7.3% in 2019 and 7.5% in 2020. Urbanisation and industrialisation, supported by government initiatives on infrastructure and housing, continue to drive strong economic growth and generate demand for natural resources. India currently has a resources import bill of US\$465 billion, which offers huge opportunities for a diversified player such as Vedanta. The Indian government has recently announced various policy measures to support the metals, mining and oil sectors further making India an attractive operational ground.

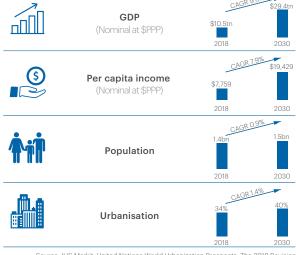
We are uniquely positioned to benefit from India's growth due to:

- a diversified portfolio of established operations in India
- a strong market position as India's largest base metals producer and largest private sector oil producer and
- an operating team with an extensive track record of executing growth in India



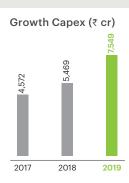
Source: Wood Mackenzie, IMF, IHS Markit, BMI, BP Energy Outlook 2019 Note: All commodities demand corresponds to primary demand

#### **India Growth Potential**



Source: IHS Markit, United Nations World Urbanization Prospects: The 2018 Revision

A significant proportion of our capital investment programme has been completed, and we are now ramping up production to take advantage of our expanded capacity. We have already started seeing the results of our investments, with Zinc India and Aluminium delivering record production in the past year, and we expect our Zinc International Gamsberg project to provide further impetus to our Zinc business going forward. In the Oil &Gas business, we have begun to implement our growth projects with gross capex of over US\$3.2 billion, and this will enable us to increase volumes in the near term. These increases in production are leading to strong cash flow generation.



#### OPERATIONAL EXCELLENCE AND TECHNOLOGY DRIVING EFFICIENCY **AND SUSTAINABILITY**

We are consistently striving to improve our operations, integrate our businesses through the value chain and optimise our performance through operational efficiencies and innovative technological solutions.

We also employ these tools to ensure we operate sustainably and are focused on delivering a positive impact for all our stakeholders and, more broadly, society as a whole



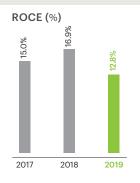
#### STRONG FINANCIAL PROFILE

Our operational performance, coupled with a strong focus on optimisation of capital allocation, has helped strengthen Vedanta's financial profile. In FY2019, our operational excellence, supported by the robust price environment, has helped us to deliver:

- Revenues of ₹90,901 crore and EBITDA of ₹24 012 crore
- Strong ROCF of c.13%.
- · Deleveraging and extension of our debt

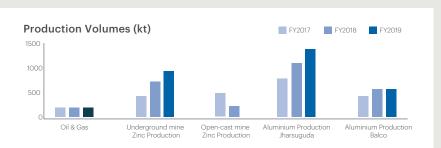
maturities through proactive liability management exercises.

- Strong and robust FCF of ₹11,553 crore.
- Cash and liquid investments of ₹39,268 crore.
- · A strong balance sheet, with respect to ND/ EBITDA and gearing, compared to our global diversified peers.
- Interim dividend of ₹7,005 crore paid in FY2019.



#### PROVEN TRACK RECORD

Our management team has a diverse and extensive range of sector and global experience, which ensures that operations are run efficiently and responsibly. We have taken a disciplined approach to development, growing our production steadily across our operations with an ongoing focus on operational efficiency and cost savings. Since our listing in 2003, our assets have delivered an average of c.15% CAGR production growth.



## Chairman's statement

# We Are...

Delivering for our people, investors, communities and India

It gives me immense pleasure to report a strong operating and financial performance for the year. We have constantly challenged ourselves to deliver more and set new benchmarks in the process.

This year as well, alongside robust financials, we have again delivered meaningful returns to our shareholders and significantly contributed to the exchequer as a proud corporate citizen. The Company has set rigid standards and strong processes to further improve its environmental and social performance.

On each aspect, we are proud of what we achieved in FY2019.



#### **RISING TO A POSITIVE CLIMATE**

Commodity prices rebounded in the last quarter of FY2019 from a decline in the previous quarters. The price increase reflected the supply concerns, progress in trade negotiations between US and China and expectation of fiscal stimulus in China. Metal prices are expected to continue rebounding from 2018 troughs and face upside risks from the possibility of tighter than expected environmental policies and slower than expected easing of commodity-specific supply bottlenecks.

We responded to the market's opportunities in FY2019 by maximising our productivity and increasing production while driving down cost. Indeed, we broke our previous production records in lead, silver, aluminium and alumina, and set further records in steel and power generation

THESE ABUNDANT VOLUMES TRANSLATED INTO ROBUST FINANCIALS. WE REGISTERED A REVENUE OF ₹90.901 **CRORE WITH A HEALTHY ADJUSTED** EBITDA MARGIN OF 30% AT ₹24.012 **CRORE. OUR STRONG OPERATIONAL DELIVERY SUPPORTED BY PRODUCTIVITY FOCUS HELPED IN DELIVERING FCF AT** ₹11.553 CRORE WITH AN INCREASE OF 47% Y-O-Y. IN KEEPING WITH OUR PHILOSOPHY **OF CONTINUALLY REWARDING OUR** SHAREHOLDERS, WE PAID A DIVIDEND OF ₹18.85 PFR SHARF IN FY2019 AGGREGATING TO A TOTAL PAYOUT OF ₹7.005 CRORE DURING THE YEAR.

#### **A GROWING PORTFOLIO**

During the year we welcomed Electrosteel Steels Ltd (ESL) into the Vedanta fold, taking a 90% stake in the business. This very rapidly became a turnaround success story, as we applied our experience and methods to ramp up output and to focus on achieving a more profitable product mix, commercial excellence and cost efficiencies. Production run rate has now increased by c.50%, from around 1 million tonnes per annum before the acquisition to 1.5 million tonnes per annum now.

In our Oil & Gas business, the acquisition of 41 blocks in the Open Acreage Licensing Policy (OALP) bid has established Cairn as one of the largest private acreage holders in the country, with a tenfold leap from c.5,000 to c.55,000 sq. km. These blocks have prospective resource bases of ~1.4 -4.2 billion boe. Over the next 2-4 years, we have a work programme commitment of US\$550 million, comprising seismic acquisition and the drilling of over 150 exploratory wells.

In our Zinc business, our long-standing dream to commence production at Gamsberg was achieved this year, when the mine started trial production in November 2018 and subsequently shipped the first parcel of concentrate produced in December. This is the first large-scale mine to open in South Africa for more than a decade.

With one of the largest deposits in the world, Gamsberg is a significant addition to our Zinc business. Add this to our reserves, skills and capacity in aluminium and oil & gas, and we have three high-performing businesses that are creating a world-class powerhouse in natural resources.

#### **PLAYING OUR PART**

In FY2019, we contributed around 47% of our turnover, amounting to c.₹42,400 crore, to the public exchequer of the countries in which we operate. We also provided high-quality employment for 76,000+ men and women.

c.₹42,400 crore

SR programme spend

"FY2019 was a year of strong performance leading to stronger contributions. Vedanta contributed c.₹42,400 cr to the exchequer. We look forward to FY2020 as a year of accelerated execution on our growth plans resulting in enhanced stakeholder value."

**Navin Agarwal** Chairman

### Chairman's statement continued

In addition, Vedanta invested ₹309 crore in social programmes, directly touching the lives of three million people across more than 1,169 villages. The year included the milestone inauguration of our 500<sup>th</sup> 'Nand Ghar'. These community resource centres are especially created for women and their children, providing everything from nutritious meals and healthcare to safe play areas and e-learning resources. This is just the beginning as we have budgeted to invest ₹800 crore to set up a network of 4,000 Nand Ghars across India.

Meanwhile, our outreach programmes helped to deliver health services to more than 1.5 million patients; provided clean, safe drinking water to well over 0.4 million people; reached over 35,000 women through dedicated self-help groups; and guided numerous people through youth skills programmes, sports coaching and sustainable farming training.

Vedanta's Medical Research Foundation, which in the prior year inaugurated Central India's first world-class cancer facility in Raipur, Chhattisgarh, delivered healthcare to more than 1,000 patients during the year.

Our outreach activities are delivered by a team of over 180 dedicated engagement professionals, who represent Vedanta in the communities and become valued local points of contact.

#### **INDIA'S GROWTH: WE STAND READY**

I believe India is the most exciting economy in the world as of today. It is a nation teeming with opportunity and potential, as the country looks to modernise, expand and accommodate the rising aspirations of a growing population. Indeed, in just a decade from now, India is expected to be home to 1.5 billion people and have an economy worth US\$6 trillion.

This presents Vedanta, as India's only diversified natural resources group, with a unique opportunity to provide the vital commodities the country needs for infrastructure development, asset creation, mobility, housing, consumer goods and general consumption.

The demand potential for our metals such as aluminium, zinc and steel, therefore, is immense.

Companies such as Vedanta will also be instrumental in addressing a major national mineral deficit as India currently imports around 80% of its oil and mineral needs. We stand ready to supply 'home-grown' products that the nation requires.

#### **POLICY AND REGULATION**

Against this backdrop, we were naturally pleased to see a renewed focus by the Government of India on the mining sector as an engine of economic growth.

Its National Mineral Policy (NMP), launched during the year, aims to increase mineral production in India by 200% and to reduce India's trade deficit in minerals by 50% in the next seven years. NMP brings in a more

"We responded to the market's opportunities in FY2019 by maximising productivity and increasing production while driving down cost."

Navin Agarwal
Chairman

**Right:** Examining the Drill Core at H7I





effective and meaningful policy, with more transparency and better regulation enforcement. A pro-growth ambition requires a pro-business environment, and the NMP will encourage private sector participation in exploration.

We have offered our suggestions to NITI Aayog in its deliberations on a new pathway for the regulatory framework for mining.

In a similar vein, we welcomed landmark policy reforms in the oil & gas sector, aimed at raising domestic output and cutting imports, while also providing a smooth transition to cleaner fuels.

In South Africa, the revised Mining Charter III, announced by the Minister for Mineral Resources, addressed the needs of the country and provided a highly welcome certainty to the sector, and we support the efforts of the Government in this regard. As evidenced during the formal inauguration of our Gamsberg mine by His Excellency, Cyril Ramaphosa, the President of the Republic, our project is in keeping with the spirit of the Charter.

#### **OUR PEOPLE**

On March 1, 2019 we welcomed Srinivasan Venkatakrishnan (Venkat) as the Company CEO. He is a widely respected business leader and brings extensive global experience in the natural resources space.

My special thanks to Kuldip Kaura, who served us well as interim CEO before Venkat's arrival.

On March 1, 2019. Venkat was also appointed as the Executive Director on the Board. There were no other Board changes during the year.

I also want to place on record my thanks to the 76,000+ people who make up the Vedanta family and who, during this year, have innovated, broken records, and driven up our output with ever-increasing efficiency.

#### **FY2020 AND BEYOND**

Vedanta sits at the heart of the world's fastest-growing economy, and the outlook for our products, both domestically and globally, remains positive.

In every aspect of our business, I see a Company inspired and focused on the opportunities ahead of us.

We will continue to innovate and reap the benefits of digitalised mining technologies. We will further drive up efficiencies and, in particular, focus on creating a safety culture to match our other world-class standards.

As we grow, we will continue to deliver for you, our shareholders and stakeholders including our own people and their development; our communities and the environments in which we operate. These are exciting times for us all.

#### **Navin Agarwal**

Chairman May 7, 2019

### **CEO's statement**

# We Are...

Registering a steady sustainable performance and setting a solid base for FY2020

I am pleased to table my first report to all our stakeholders for the year ending 31 March 2019. It was a year that saw the setting of new production records across our businesses, commissioning of a new zinc mine, efficiencies to mitigate cost pressures, growth projects being on track, an increase in our oil reserves and mineral resources and reserves and a healthy dividend to shareholders.



What I've found since joining, is a Company with a strong purpose of giving back for the greater good, a track record of achievement, coupled with an equally strong sense of selflessness. Vedanta has always recognised that business and people are interdependent. We regard supporting our local communities, respecting our environments and sharing the collective fruits of our work as imperatives for our social licence to operate. This is an area where we recognise we need to improve and communicate better and these will receive added attention during the forthcoming year.

As we look forward to the year ahead, our three key businesses are well positioned. In the case of our Zinc, Lead and Silver business, we will see the benefit of increased volumes and therefore lower costs, augmented by our newly commissioned mine in South Africa. In oil & gas, we are India's largest private producer of crude, and rank with the world's lowest-cost producers with a production, development and exploration pipeline. In aluminium we offer India's largest production capacity, supported by our own captive power generation and we are increasingly integrating backwards for our own alumina

We continue to consolidate our position as one of the largest diversified natural resource businesses in the world, positioned in commodities that have a growing demand in one of the largest, most stable and fastest-growing democracies in the world. We operate long-life, high-growth, low-cost assets, and deliver consistent returns through the cycle. This set of strengths, together with our focused growth strategy, excellent talent, hunger for technology and modernisation, and an anchor shareholder who is committed to the long term, helps create a truly inspirational company.

#### **SAFETY & SUSTAINABILITY**

A life lost at work is a life too many and we are deeply saddened to report that we recorded nine fatal accidents in the Group.

'Zero harm' is our non-negotiable safety tenet across all our operations at Vedanta, and we are determined to bring about a clear and measurable improvement in our safety record, and are ramping up a range of actions to achieve this. These include strengthening compliance and accountability; instilling a new culture of care in the field; and ensuring transparent reporting of incidents, near-misses and high impact potential incidents and consequence management.

For FY2020, we have also enhanced safety scorecards with the three focus areas of 'Visible Felt Leadership', managing safety critical tasks and better management of business partners. We have seen some improvement in the fourth quarter ended 31 March 2019, with no fatal accidents across the businesses. However, we also recognise that 'Zero Harm' is a journey and we continue to monitor this as a high priority.

Our initiatives on water, energy and carbon management progressed well during the year. We recycled 94% of the high-volumelow-effect-wastes such as fly ash, slag, red-mud and jarosite. We had set ourselves a target of reducing our greenhouse gas intensity by 16% by FY2020, against the baseline year of 2012. By the end of this year, we had already achieved a 14.6% reduction and are on track to achieving the target.

"Our key strategic priority is focusing on ethics, governance and our social licence to operate where we will continue our journey towards zero harm by ensuring greater levels of safety; an even gentler impact on our environments and resources; and even greater inroads into delivering healthcare, education, skills and quality of life where it is needed in our communities."

Srinivasan Venkatakrishnan Chief Executive Officer

#### **CEO's statement continued**

We have strengthened our efforts on tailings dam management. We apply stringent steps to comply with all local environmental standards, ensuring that the water contained in this waste is treated and made safe before it can be discharged into local drainage systems. We have worked with independent industry experts to provide long-term monitoring and advice on the safe design, construction and operation of all our tailings facilities. I am happy to share that these efforts are resulting in further advances towards making our operations sustainable. For example, at Zinc India, instead of disposing off tailings in land-hungry surface pits, we have found a way to turn them into paste and use them for backfilling of empty underground voids. We have also rehabilitated one retired tailing dam into a haven of over 1.5 million trees, and another into a vibrant football academy for India's most promising young talent.

## BUSINESS PERFORMANCE & GROWTH OPPORTUNITIES

The year saw our three large businesses Zinc, Aluminium and Oil & Gas – which together represent 90% of the Group's EBITDA, achieve significant milestones which give us a strong base for the near-term targets we have set for these businesses

**Zinc:** We are pleased with the transition Zinc India has made from open-cast to fully underground mining, with the latter increasing by 29% y-o-y. The increased silver production at our Sindesur Kurd mine has resulted in the business now being ranked 9<sup>th</sup> in the elite club of top 10 silver producers with a record production of 679 tonnes during the year, up 22% y-o-y.

We now look to build on this success in FY2020 to achieve a mined metal design capacity of 1.2 million tonnes and further ramp up the silver production. We are expecting these volume increases to also translate to unit cost reductions in the business.

The Company achieved a significant milestone in December 2018, when our flagship Gamsberg project in South Africa shipped out its first parcel of concentrate. It is now ramping up to its target MIC capacity of 250,000 tonnes. This new age, fully automated and digital mine will be a catalyst for the region's development and a significant contributor to Vedanta's earnings over the next 9-12 months.

Certainly, in FY2019 we took a step towards becoming the largest producer of the zinc in the world.

Oil & Gas: We continue to make progress on the various growth projects in the Oil & Gas business. We have deployed 11 development drilling rigs, drilled 99 wells and hooked up 33 wells in Rajasthan during the year. We are aiming to grow this production base by using better well reservoir management, enhanced recovery technologies that we have already successfully piloted thereby bringing on line more new wells, augmenting our surface infrastructure to appropriate levels and adding further gas and off-shore production. We are keeping a careful lid on our lifting and discovery costs which are some of the most competitive globally.

We won 41 blocks under the Government's new Open Acreage Licensing Policy (OALP) and are excited by the potential it offers to make Vedanta an even more significant contributor to India's domestic oil & gas production. The discovery of oil & gas in the two fields in the KG basin enhances our position.

During the year, we also received an extension of the Production Sharing Contract for the Rajasthan block till 2030, subject to certain conditions. We have now committed to a gross capex of US\$3.2 billion and we are partnering with international oil service providers to achieve our objective.

Aluminium: Despite cost pressures seen in the first half of FY2019, we are very encouraged by the many structural changes we have put in place in the Aluminium business to reduce the overall cost of production - increased bauxite sourcing, reducing our dependence on imported alumina, improved volumes from our alumina refinery, better coal availability, linkage and coal stock on hand and more efficient logistics. The business exited the year with coal linkage at 72% of its consumption and indigenous bauxite sourcing to address more than one-third of our yearly requirement. With this and the proposed ramp up of the alumina refinery, I am certain that our target of aluminium COP of US\$1500 per tonne is achievable in the near term.

"Our focused growth strategy, excellent talent, hunger for technology and modernisation and an anchor shareholder who is committed to the long term, all combine to create a truly inspirational company."

**Srinivasan Venkatakrishnan**Chief Executive Officer

**Steel:** We are also pleased with the acquisition of ESL, which we completed in June 2018. The year has been transformational for them with production ramping up to 1.2 million tonnes for the year and with an exit run rate of c.1.5 million tonnes and EBITDA margins of US\$115 per tonne.

#### **RESOURCES AND RESERVES**

As a natural resource company, we are clear that the greatest value adding growth can come from our existing land positions. We are therefore sharply focused on the areas of exploration and conversion of resources to reserves, to more than off-set depletion and create a long runway for our assets.

We are pleased to report a healthy resources and reserves base across our businesses as follows:

Business	Reserves and Resources
Zinc India	403 million tonnes
Zinc International	434 million tonnes
Oil & Gas	1,195mmboe gross proved and probable reserves and resources

#### **DIVIDENDS**

During the year, the Board declared dividends aggregating to ₹7,005 crore. This equates to a dividend yield of 8.6%, representing an industry-leading dividend yield.

#### **PFOPLE**

Good results are, of course, the product of great people, and the energies and talents of our 76,000+ employees across locations truly came to the fore during the year.

During the year we were also pleased to announce a number of new appointments as we strengthened our leadership in the business units. Ajay Kapur was appointed as the CEO of our Aluminium and Power business; Pankaj Malhan as Deputy CEO of ESL and Pankaj Kumar, CEO of Sterlite Copper. Since the year-end, Ajay Dixit has been appointed as the CEO of our Oil & Gas business.

The new leadership team is excited to take Vedanta forward on its journey to deliver the best from its assets and create value added growth. Importantly, it is well supported by a deep bench-strength of talent that will see the new leaders emerge to fill the succession pipeline for later years.

I also express my sincere thanks to Mr Kuldip Kaura for his valuable contribution to Vedanta as interim CEO and for a seamless handover.

#### **OUTLOOK**

Looking ahead to FY2020, we have in place the building blocks to enhance our performance in the three key businesses. We are excited by the prospects ahead which include: a ramp up in zinc, lead and silver production from Hindustan Zinc, the benefit of a full year's production from our Gamsberg Zinc mine, increased production from our Oil & Gas business as the first phase of our projects come on stream and embedding the structural changes to our cost structure in our Aluminium business while improving volumes. For our Iron Ore Business in Goa, we will continue to engage with and encourage the Central and State Governments to resume production given the benefits to all stakeholders. We regret the tragic loss of thirteen lives in the demonstrations in Tuticorin and we will continue to engage with the Government, the relevant authorities, the courts and all stakeholders to enable the safe and supported restart of operations at the copper smelter at Tuticorin.

In our markets we expect base metals prices to remain stable and to inch higher to catch up with demand-supply inventory dynamics. The refined metal market for aluminium and zinc remains in short supply and hence we expect favourable conditions. Also, as the only diversified natural resources company in India, we expect to benefit from economic development in this region. The various policy moves in India are encouraging. The approval of the National Mineral Policy, (NMP) 2019 is an important milestone in the liberalisation of the mines and minerals sector in India. The new licensing policy for awarding the oil blocks is also a positive move to develop this sector.

#### OUR STRATEGIC FOCUS AREAS FOR **FY2020 WILL CONTINUE TO BE:**

· Ethics, governance and our social licence to operate:

Here we will continue our journey towards zero harm by ensuring greater levels of safety; an even gentler impact on our environments and resources; and even greater inroads into delivering healthcare, education, skills and quality of life where it is needed in our communities.

#### · Expanding our reserves and resource base:

Focused exploration to augment our long-life, low-cost assets by improving our land positions, growing our reserves and resource positions in our businesses by more than offsetting depletion and bringing on stream more discoveries.

#### Continued track record of delivering value adding growth:

Continuing to build on the track record of our three key businesses whereby the project pipeline is strong and projects are stress tested to deliver at least 20%+ returns off conservative price assumptions.

#### · Strict capital allocation and balance sheet focus:

As managers of the business we will follow strict capital allocation whilst keeping the balance sheet in sharp focus. Balance sheet is proactively managed with businesses having to earn their capital before spending.

#### Delivering the best out of our assets with the best teams and means:

Our business CEOs will remain focused on operational delivery and having the right management and teams in place to deliver. Asset planning, execution, operational excellence, cost control and reduction, productivity enhancements, improving realisations, risk mitigation, use of technology, innovation and digitalisation will all help us sweat our assets better to deliver enhanced performance.

Together with our Chairman, the Board, all our colleagues and business partners, I thank all our loyal shareholders for their continuing support and look forward to delivering another year of value adding

#### Srinivasan Venkatakrishnan

Chief Executive Officer





Since the first hot metal tapping in March 2008, the aluminium smelting unit at Jharsuguda has come a long way to establish itself as the world's largest single-location smelter. With an installed capacity of 1.75mtpa, backed by two smelters – 0.5mtpa and 1.25mtpa (SEZ) – and two power plants with a combined capacity of 3615MW, it boasts a run-rate of over 1.3mtpa. BALCO operates through its plant at Korba in Chhattisgarh with a smelter capacity of 0.57mtpa and power generation capacity of 2010MW. The state-of-theart alumina refinery at Lanjigarh feeds the aluminium smelters at Jharsuguda and BALCO and forms a crucial link in the value chain. It is one of the world's largest, one-site integrated alumina refining complexes with a current capacity of c.2mtpa that can be ramped up to 6mtpa.

The production capability of the smelter and refinery has been significantly enhanced in the last few years. With the ramp up of both smelters, aluminium production has more than doubled from c.0.8 million tonnes in 2014 to c.1.96 million tonnes in 2019. Alumina production has increased from c.1.0 million tonnes in FY2016 to 1.5 million tonnes in FY2019 due to debottlenecking of the refinery operations.

With the boost in production capability, both raw material security and backward integration take on the utmost importance for stable operations at optimal cost. All the assets have been configured to be fully integrated operations – from bauxite ore reserves, secured coal and energy sources, and captive alumina refinery and power plants.

37% MARKET SHARE

2.3mtpa

capacity

FY2019 was a transformational year in this direction. On the alumina front, it was an exceptional year for Lanjigarh refinery with the unit achieving its highest-ever production of 1.5 million tonnes, 24% higher than FY2018. Production loss mapping across various stages of the refinery and relentless focus on plant maintenance helped to improve productivity significantly.

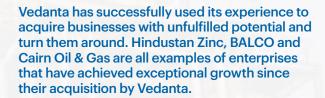
On the refinery feedstock, multiple bauxite sources were reduced to three to four sustainable sources, selected due to geological similarities, supplemented with the advent of a fresh supply of locally sourced bauxite meeting around 1/3rd of our requirement. With a strong national mineral policy focusing on increased production to feed the 'Make in India' initiative, we expect further growth in bauxite production and the auction of bauxite blocks as per the MMDR Act 2015. This will ensure sustainable refinery operations at the optimal cost structure.

The efforts on improvement in operational efficiency, coupled with robust bauxite sourcing, resulted in a substantial reduction in captive alumina cost from US\$358 per tonne in Q2 FY2019 to US\$290 per tonne in Q4 FY2019.

Power is another key input in the aluminium production process. Significant strides have been made to improve the coal security for our captive power plants. With our Chotia mines operational and Tranche IV sourcing, our coal security increased to 72% from 49% in the last two quarters.

With strong bauxite supply and coal linkages to back the raw material needs, the focus will be on further improving our operational and supply chain efficiencies, driving profitability and growth in the business and achieving the goal of US\$1500 per tonne for cost of production. These milestone strides take Vedanta closer to fulfilling its vision of being the largest low-cost manufacturer of Aluminium.

Main Picture: Aluminium Smelter at Balco Inset: Employees at operational site, Balco



In June 2018, Vedanta acquired a 90% stake in ESL, a primary producer of steel and downstream value-added products.

The business was acquired under the Insolvency and Bankruptcy Code (IBC) 2016, in line with the Resolution Plan approved by Honourable National Company Law Tribunal (NCLT), Kolkata. The acquisition was made for a consideration of ₹5,320 crore, paid upfront for a 90% stake. Following the deal, the Company was delisted from the Indian Stock Exchange and is now owned by Vedanta Limited through Vedanta Star Limited.

ESL's manufacturing facility is a green field integrated steel plant located near Bokaro, Jharkhand, India, which has a current capacity of 1.5mtpa and the potential to increase to 2.5mtpa. It consists primarily of two sinter plants, a coke oven, two basic oxygen furnaces, a steel melting shop, a wire rod mill, a bar mill, a power plant and a ductile iron pipe plant.

Prior to the acquisition, the production capacity for the business was c.1mtpa, with around 22% of its output comprising primary products such as pig iron and billets. This was mainly due to sub-optimal use of assets, weak liquidity and limited working capital that resulted in an inadequate availability of resources.

Since June 2018, within 10 months of Vedanta's ownership, the business has seen consequential improvements leading to a healthy financial position. There have been significant gains in operational efficiencies, such as a substantial reduction in the coke rate at blast furnaces 2 & 3 by about 3% and 7% respectively y-o-y; optimisation of the coal mix and iron ore blending; and improved yields of the finishing mill to 96.7% (from 95.9% in FY2018).

Initiatives on commercial excellence by leveraging Vedanta's strong market presence, as well as best practices using the broader technical experience and expertise of the Group, have yielded exceptional results. This has been well supplemented by an internal cost optimisation drive and focus on valueadded products. Consistent and reliable execution of the business strategy by encouraging partnership through leadership further accelerated the turnaround.

With operations completely revamped, FY2019 has seen record production levels. The business achieved a run-rate of c.1.5mtpa in Q4 FY2019. The production ramp up and other operational efficiencies have resulted in a record EBITDA margin for the business, improving from US\$53 per tonne in FY2018 to US\$122 per tonne in Q4 FY2019.

These achievements, underpinned by a strong emphasis on safety practices, position ESL well to become a significant player in the Indian steel sector.

POTENTIAL TO INCREASE TO **2.5**mtpa





# Fuel for change: Growing to meet India's demand





#### An essential element in any nation's prosperity is its ability to create its own energy.

And yet, 80% of oil consumed in India is currently imported. As one of the world's fastest growing economies, this dependence on imports needs to be reduced in order to foster sustainable growth.

At Vedanta, we are passionate believers in India's potential, and in our position to help the nation achieve it. Indeed, our vision is to contribute half of the total oil produced in India. Over the next few years, we aim to increase production from today's 200kboepd to 300kboepd. This will lay the foundations to achieve 500kboepd in the long term, with reserves of three billion barrels of oil equivalent.

Main picture: Mangla Processing Terminal, Barmer Inset: Employees at operational site, MPT, Barmer

Our targets are unashamedly ambitious, but we have a robust road map and are focusing our energies and resources on two fronts:

#### MAJOR CAPEX INVESTMENT

We intend to increase volumes from our prolific operating blocks through gross capex investment of over US\$3.2 billion, awarded on an integrated basis in partnership with global oil field service companies. This includes investment of US\$2.8 billion in development projects to add reserves of around 400 million barrels. These projects comprise a rich portfolio of enhanced oil recovery, tight oil, tight gas and facility upgrade activity. Execution has already started on the ground, meaning we can look forward to a quantum leap in volumes in the near term. In addition, we are allocating exploration capex of US\$400 million in the prolific Barmer Basin and KG offshore. The target is to add over one billion barrels of oil equivalent to our resource base.

#### **SCALING UP BASIN EXPLORATION**

We intend to increase significantly our exploration efforts across the basins in India through participation in the OALP and Discovered Small Fields (DSF) rounds, initiated by the Government of India. The acquisition of 41 blocks in the OALP bid has established Cairn as one of the largest private acreage holders in the country, with a tenfold jump in acreage from c.5,000 to c.55,000 sq. km. These blocks have prospective resource bases of c.1.4 - 4.2 billion boe. Over the next 2-4 years, we have a work programme commitment of US\$550 million, comprising seismic acquisition and the drilling of over 150 exploratory wells.

**LONG-TERM VISION TO ACHIEVE** 

500 kboepd



# The Tuticorin smelter: State of the art and ready to serve



#### The Tuticorin copper smelter, operated by Vedanta's Sterlite Copper business, is located in Thoothukudi in the state of Tamil Nadu.

It ranks as one of the largest custom copper smelters in India and is among the largest producers of copper rods in the country. With a design capacity of 400,000 tonnes, the business held a 33% market share of the country's refined copper demand of around 675,000 tonnes in Fy2018. The facilities include a custom smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant and a copper rod plant.

The plant is equipped with comprehensive air pollution control measures and robust solid waste management systems and facilities. It has also been able to claim 'zero liquid discharge' since inception; all the effluent is treated and recycled back into operations. The solid waste from effluent treatment plants is disposed in secure landfill, designed in accordance with Central Pollution Control Board guidelines. The smelter's water consumption is the second lowest in the world at 6.0m³ per mt of cathode. With a 20% reduction in specific water usage since FY2014, it has been recognised over recent years for its excellence in water efficiency by FICCI, UNESCO, CII and other organisations. Emissions of sulphur dioxide are well below the prescribed standards and are at par with several European and Japanese smelters. With the continuous endeavour to conserve energy, the plant ranks No. 7 in energy intensity among global smelters.

The business has spent over US\$74.5 million on environmental mitigation. In particular, flue gas desulphurisation units with bag filters, and modern technology-based reverse osmosis plants and evaporators, are among several state-of-the-art environmental protection measures.

Since March 2018, the plant has been shut by order of the Tamil Nadu State Government. The Company challenged the closure order through an appeal before the National Green Tribunal (NGT). Following the appeal, a three-member independent committee, set up by the NGT, set aside an order for closure by the Tamil Nadu Pollution Control Board. The NGT ruled that the order for closure by the Tamil Nadu Government was "nonsustainable" and "unjustified". The matter is currently being heard before the Madras High Court as per the directions of the Supreme court.

Reaffirming the commitment to the local people of Thoothukudi, the Company has announced an ₹100 crore investment in social infrastructure plans. The vision includes a clean and green community with the planting of one million trees, high-quality education delivered through a fine and well-equipped school, a world-class hospital, a desalination plant and youth development schemes.

The Company remains continuously engaged with the local community and would like to prosper with them.

Main picture: Copper rods Inset: Thoothukudi copper smelter

DESIGN CAPACITY OF 400,000 tonnes



# HZL: Partnering the state to manage its sewage



#### Hindustan Zinc, India's largest integrated zinclead-silver producer, is proud to be a corporate citizen of Udaipur, which has been shortlisted as one of India's 'Smart Cities'.

The Company has always maintained high environmental standards, pioneering the adoption of clean and green technology in running its operations. In particular, saving water has been a special focus area.

In 2014, the Company commissioned a 20 million-litre-per-day (MLD) sewage treatment plant (STP) to ensure Udaipur's lake remained free of sewage inflow pollution. The plant, which was the first of its kind to be built by an innovative publicprivate partnership, also developed an alternative source of potable water.

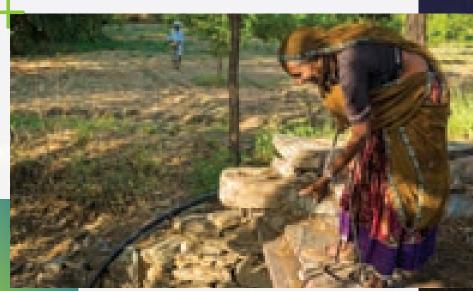
In June 2017, the plant's success led to an agreement to build a second STP project - with double the capacity at 40 MLD. The development was greeted with widespread local approval and 25 MLD of this extra capacity will be commissioned by Q1 FY2020. Two further decentralised sewage treatment plants, with a combined capacity of 15 MLD, will complete the

The STP is a fully automatic plant and uses hydraulics to minimise power consumption. The entire system is environmentally friendly with no hazardous waste generated during treatment. In total, the plant will treat 60 million of Udaipur's 70 million litres of daily sewage, conserving water and taking crucial steps towards zero-discharge into the locality's lakes.

STP TO TREAT

# million

of Udaipur's 70 million litres of daily sewage



Main picture: Dariba Smelting Complex at night Inset: CSR Initiative at HZL

# Materiality matrix Identifying material concerns

Continuous engagement with our internal and external stakeholders enables us to identify the relevant issues for each group and to take the temperature on the expectations they have of the Company. The views of our stakeholders serve as important input to our management group, to help it identify the material issues for the Company.

The materiality matrix compiled from the results of this engagement is presented below:

Critical importance	High importance	Average importance	
Policies and actions to restrict unethical business practices	Leadership development and talent management	Public policy and advocacy	Local hiring and content
Rights of indigenous peoples and human rights	Disclosure on slavery and human trafficking	Diversity and equal opportunity	
Employee health, safety and well-being	Transparency in reporting on revenue and production figures	Broader economic benefit to host country	
Community engagement and development initiatives	Labour rights and industrial relations	Responsible supply chain management	
Ethics and integrity – compliance to Code of Conduct	Community health and safety		
Environmental management (water management, waste management, air emissions and quality control, biodiversity management, environmental incidents management)	Energy management and climate change		
	Mine and site closure plans		
	Employee retention		
	Tax transparency and reporting		



**Above:** Community health initiative at Vedanta **Right:** Building talent through teamwork at Balco







Left: Building a culture of best practices at HZL

#### **OUR SIX CAPITALS**



#### **FINANCIAL CAPITAL**

We are focused on optimising capital allocation and maintaining a strong balance sheet while generating strong free cash flows. We also review all investments, taking into account the Group's financial resources with a view to maximising returns to shareholders.



#### **NATURAL CAPITAL**

India and Africa have favourable geology and mineral potential. These regions provide us with world-class mining assets and extensive reserves and resources. Additionally, operating our mines requires a range of resources including water and energy which we aim to use prudently and sustainably.



#### **HUMAN CAPITAL**

We have employees drawn from across the world, and their diverse skills and experience contribute to our operations. The mining and plant operations require specialised skills for which we employ qualified technical, engineering and geology experts. In addition, we create a culture which nurtures safety, innovation, creativity and diversity, which helps us to meet our business goals while also enabling our employees to grow personally and professionally.



#### **INTELLECTUAL CAPITAL**

As a relatively young Company, we are keen to embrace technological developments and encourage innovation. We encourage our people to nurture and implement innovative ideas which will lead to operational improvements across our operations.



#### **SOCIAL AND RELATIONSHIP CAPITAL**

We aim to forge strong partnerships by engaging with our key stakeholders, including shareholders and lenders, suppliers and contractors, employees, governments, communities and civil society. These relationships help maintain and strengthen our licence to operate.



#### MANUFACTURED CAPITAL

We invest in best-in-class equipment and machinery to ensure we operate as efficiently and safely as possible, both at our current operations and in our expansion projects. This also supports our strong and sustainable cash flow generation.

#### CREATING VALUE FOR ALL OUR **STAKEHOLDERS**



For shareholders



For employees



#### For communities



For governments



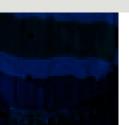
For suppliers, customers and service providers
Building long-term partnerships



For civil society



Further Information on our stakeholders See pages 50-53



### Our business model

# Our six value creation model

Our business model provides an overview of how Vedanta employs the six capitals to create long-term, sustainable value for its key stakeholders. It is presented using the International Integrated Reporting Council's Integrated Reporting framework.



#### **INPUTS**



#### **Financial Capital**

Net worth:

₹77,524 crore

Gross debt:

₹66,226 crore

₹7,549 crore

Cash and cash equivalents:

₹39,268 crore



#### **Natural Capital**

R&R - Zinc India:

403 million tonnes, containing 34.6 million tonnes of zinc-lead metal and 964.9 million ounces of silver

R&R - Zinc International:

434 million tonnes, containing 24.4 million tonnes of zinc-lead metal

R&R - O&G:

1,195 mmboe gross proved and probable reserves

Energy consumption:

546 million GJ

Water consumed:

243 million m<sup>3</sup>

32 million tonnes



#### **Human and Intellectual Capital**

No. of employees including contractors:

76,752

HSE employees including contractors:

1.141

Safety training (hrs):

1.4 million

No. of geologists including contractors:

191

### **Technology Used**

- World's largest Enhanced Oil Recovery polymer flood project in Mangala Field
- New age technology of High Density Multi Stage Fracturing in horizontal transverse wells - first in India

#### Zinc International

· Smart Ore a digital concept providing end-to-end solutions for mine performance and mine condition

#### **Zinc India**

· Autonomous machines for 24x7 mining at SK mine & Remote controlled LHD for ore hauling

#### **Aluminium**

Parameters defined for Category "A" pots based on power consumption, Fe content



#### Social and Relationship Capital

Community investment:

Rated by two domestic rating agencies - CRISIL and India Ratings

Strong network of

25

global and domestic relationship banks

No of independent Directors:

5



#### **Manufactured Capital**

PP&E

₹121,356 crore

Capital CWIP

₹22.236 crore

- · Debottlenecking of smelters at zinc and alumina refinery
- · Oil & Gas: projects in progress to increase production volumes









#### **OUTPUTS**



#### **Financial Capital**

Turnover

₹90,901 crore

EBITDA

₹24,012 crore

Adjusted EBITDA Margin

30%

ROCE

c.13%

Attributable PAT\*:

₹6,857 crore

FCF Post capex

₹11.553 crore



#### **Natural Capital**

Water recycled:

28%

Water savings:

2.3 million m<sup>3</sup>

High-Volume-Low-Effect Waste recycled %:

94%

GHG emitted:

58 million tCO<sub>2</sub>e

Fly ash utilisation rate:

111%



WHAT WE DO

### Explore

and appraisal to extend mine and

We operate across the mining value chain focusing on long-term and low-cost assets in India



#### Develop



#### Extract



#### **Process**



#### Market



#### Restore

We manage our long-life assets as effectively as possible and return them to a natural state at the end of their

Delivering on our strategic priorities to generate growth and long-term, sustainable value



Strategic framework See pages 34-37



#### **Human and Intellectual Capital**

Total remuneration wages & incentives paid:

₹3,023 crore

Attrition rate:

7%

Diversity ratio:

10.5%

0.46

per million man hours

worked



#### Social and Relationship Capital

Interim dividends paid:

₹7.005 crore

Dividends royalty and taxes paid to govt.

c.₹42,400 crore

No of people reached by our CSR programme

c.3.1 million

Youth provided with vocational skills to find employment

3,600+

No of Nand Ghars (womenchild welfare centres) operational

502



#### **Manufactured Capital**

Production target for three main businesses

Zinc India:

**C.1.0** million tonnes

750-800 tonnes

Zinc International:

Skorpion and BMM

>170kt

Gamsberg

180-200kt

Record production at Aluminium, Steel business and Zinc India underground

Oil and Gas:

Gross volume

200-220<sub>kboepd</sub>

Aluminium:

Alumina

1.7-1.8 million tonnes

Aluminium

1.9-1.95 million tonnes

\* Before exceptional

### Strategic framework and focus areas for short and long term

Framing our strategy while addressing the material concerns of our stakeholders

#### Strategic priorities



#### Continued focus on worldclass ESG performance

**Description:** We operate as a responsible business, focusing on achieving 'zero harm, zero discharge & zero wastage', thereby minimising our environmental impact. We promote social inclusion across our operations to promote inclusive growth. We put management systems and processes in place to ensure our operations create sustainable value for all our stakeholders.

#### FY2019 update

- · Nine fatalities occurred in the fiscal year.
- · Average score of 61% achieved in six safety performance standards.
- · LTIFR reported at 0.46.
- Achieved water savings of 2.3 million cubic metres.
- Achieved c.14.6% reduction in GHG intensity over baseline of 2012.
- · Achieved energy saving of 1.4 GJ
- Audits completed on our tailing management practices; recommendations under consideration.
- · Completed baseline and social impact assessments in all businesses.
- · c.111% of the generated fly ash is being utilised
- · 358 Nand Ghars constructed this year, taking the total to 502.
- 100% of new hires trained on Code of Conduct
- On gender diversity, 20% of Vedanta's Board comprises women.
- Focus on Right Management-in-Place in each SBU with 41 SBUs in place, each led by the respective president. SBU Management-in-Place is regularly reviewed by the Group Chairman and Group ExCo.
- · Sustainability Committee constituted.



## Augment our Reserves & Resources (R&R) base

**Description:** We look at ways to expand our R&R base through targeted and disciplined exploration programmes. Our exploration teams aim to discover mineral and oil deposits in a safe and responsible way, to replenish the resources that support our future growth.

#### Zinc India

- During the year, gross additions of 5.4 million tonnes were made to reserve & resource (R&R), prior to depletion of 13.8 million tonnes.
- Combined R&R were estimated to be 403 million tonnes, containing 34.6 million tonnes of zinc-lead metal and 965 million ounces of silver.
- · Overall mine life continues to be more than 25 years.

#### Zinc International

 Combined mineral resources and ore reserves estimated at 434 million tonnes, containing 24.4 million tonnes of metal.

#### Oil & Gas

- PSC extension received in Rajasthan taking our probable reserve base (2P reserves) to 567 mmboe, subject to certain conditions.
- Awarded integrated contracts for exploration in the prolific Barmer Basin, Ravva and KG
  offshore with a target to add over 1 billion barrels of oil equivalent to our resource base.
- Announced gas and oil discovery in the first and second exploratory well in KG Basin in the East Coast of India.
- Acquired 41 blocks in OALP Round I bid spread over an acreage of c.50,000 sq. km with a prospective resources base of c.1.4 – 4.2 bn boe, establishing Vedanta as one of the largest private acreage holders in the country.



## Delivering on growth opportunities

**Description:** We are focused on growing our operations organically by developing brown field opportunities in our existing portfolio, Our large well -diversified and long life asset portfolio offers us attractive growth opportunities, which are evaluated based on our return criteria for long term value enhancement of the Company.

#### Zinc India

- Ramp up of underground mines delivered mined metal production at 936kt, 29% higher y-o-y and offsetting the closure of open-cast operations last year.
- The announced mining projects are nearing completion and expected to reach 1.2 million MT per annum of mined metal capacity in FY2020.

#### Zinc International

- Achieved the milestone of Gamsberg zinc project commissioning; despatched first shipment in December 2018.
- 41mt rock moved during the year, including pre-stripping and healthy stockpile of 1.0mt built for smooth feed to Plant.

#### Oil & Gas

- Integrated contracts have been awarded to global oilfield service providers such as Halliburton, Schlumberger, Petrofac and GE-Baker Hughes, to be executed in a span ranging from one to three years to achieve a near-term target of 300kboepd.
- Gas production ramp up through early production facility commenced; peak rate of 90 mmscfd expected in Q1 FY2020.
- Revenue-sharing contracts for 41 exploration blocks awarded through OALP 1, and two discovered small satellite fields secured in Discovered Small Fields (DSF) round 2.

#### ESL

• Completed the acquisition of ESL to further our plans on iron ore business.

#### **Objectives for FY2020**

- Achieve score >75% in ten safety performance standards.
- · Zero fatal accidents and an LTIFR of 0.30.
- · Achieve water saving of 2.5 million cubic metres.
- Achieve fly ash utilisation of 80%
- Reduce our GHG emissions intensity by 16% from a 2012 baseline
- · Achieve energy savings of 1.75 million GJ.
- Third-party review of tailings/ash dyke management system and development of site specific improvement plan (India operations)
- · Ensure alignment of all BU plans with issues identified during baseline surveys.
- 1,200 Nand Ghars to be constructed in FY2020.
- · Roll out of employee engagement platform across the Group.
- A standard on-line community grievance record/redressal software (NIVARAN) across the Group.
- Achieve 33% female representation at Vedanta Board-level by 2020.
- Diversity % improvement in our campus hiring program by 5%.
- Ensuring right ExCo & succession for each business.

#### **KPIs**

- LTIFR
- CSR footprint
- Gender diversity

#### Risks

- · Health, safety and environment (HSE)
- · Tailings dam stability
- Managing relationship with stakeholders
- Regulatory and legal risk

#### Oil & Gas

- Start exploration in 41 blocks awarded through first round auctions under OALP.
- Further appraisal at KG Basin to establish its size and commerciality
- High ranked prospects are being taken up for drilling of wells across our assets.
- Participate and fulfil the government's vision of tripling the mineral sector output over seven years as announced under New Mineral Policy.
- · Continue to build R&R base and generate new green field targets for our commodities/metals.
- Total 2P+2C Reserves & Resources in O&G
- Total R&R in Zinc India & ZI
- · Health, safety and environment (HSE)
- Discovery risk
- Regulatory and legal risk

#### Zinc India

- Ramp up underground mines to 1.2 million tonnes MIC per annum design capacity.
- Planning for the next phase of expansion from 1.2 to 1.35mtpa mined metal capacity announced in April 2018 is underway.

#### Zinc International

- Ramp up Phase I production in H1 of FY2020.
- Carry out a project study for Swartberg Phase 2 and Gamsberg Phase 2 to extend the life of the Black Mountain complex.
- Complete the feasibility study for an integrated smelter-refinery with 250ktpa metal production.

#### Oil & Gas

- Evaluate further opportunities to expand the exploration portfolio through OALP and other opportunities
- · Execute growth projects within schedule and cost.

- Revenue • ROCE
- FCF post-capex
- Growth capex
- Major project deliveryCairn related challenges
- Regulatory and legal risk

### Strategic framework

#### Continued

#### Strategic priorities



#### **Optimise capital allocation** and maintain strong balance sheet

**Description:** Our focus is on generating strong business cash flows and maintaining strict capital discipline in investing in profitable high IRR projects. Our aim is to maintain a strong balance sheet through proactive liability management. We also review all investments (organic & acquisitions) based on our strict capital allocation framework, with a view to maximising returns for shareholders.

#### FY2019 update

- FCF improvement from ₹7,880 crore to ₹11,553 crore, up 47% y-o-y
- Net debt increased from ₹ 21,969 crore to ₹ 26,958 crore, primarily due to Electrosteel
- ND / EBITDA at 1.1x on a consolidated basis
- Dividend worth 7,005 crores, 18.85/share distributed in VEDL and 10,187 crores, 20/share in Hindustan Zinc



#### **Operational excellence**

**Description:** We strive for all-round operational excellence to achieve benchmark performance across our business, by debottlenecking our assets to enhance production, supported by improved digital and technology solutions. Our efforts are focused on enhancing profitability by optimising our cost and improving realisation through the right marketing strategies.

- Underground mined metal production at 936kt, up 29%; total mined metal production down 1% despite closure of open-cast operations
- Record refined lead metal production at 198kt, up 18%.
- Record silver production at 679 MT, up 22%
- Underground crusher and production shaft were commissioned for 3.75mtpa at Sindesar Khurd.
- · New mills commissioned at SK and Zawar taking milling capacity to 6.2mtpa and 4.7mtpa respectively.
- At RA mines the second paste fill plant was commissioned ahead of schedule during Q4.

#### Zinc International

• Pre-stripping of Pit 112 completed as per mine plan.

- 11 development drilling rigs as on March 2019, with 99 wells drilled and 33 wells hooked up in Rajasthan during the year.
- Production from the offshore assets stood at a combined 32,881boepd, higher by 19% y-o-y, supported by gains from the Cambay infill campaign
- Gas production increased by 37% to 63.5 mmscfd due to debottlenecking of exiting
- Signed an agreement with GSPL India Gasnet Limited for constructing eighteen-inches diameter pipeline connecting Raageshwari Gas Terminal to Pali and thereon connecting Mehsana to Bhatinda to Palanpur.
- 4 wells were fracked in RDG field, including the Hi-Way frack technique enabling connection to more reservoirs, leading to improved production and recovery of the field.
- Proactive geo-steering with the state of art LWD tools having advanced bed boundary detection capabilities was used. Successfully placed 370m lateral section in FM3 clean oil zone which resulted in well going online with production c.10kboepd.
- · Volume enhancement through e-line campaign with innovative paraphernalia of advanced robotic tools in Ravva.
- Completed well preparations works for the CB/OS-2 drilling campaign with rigless intervention methods for the side-track wells; leading to significant saving of rig time

- · Record aluminium production at the smelters at 1,959kt, up 17% y-o-y.
- Record alumina production from Lanjigarh refinery at 1,501kt, up 24% y-o-y due to debottlenecking of the refinery.
- · Locally-sourced bauxite of c.1.3 MT during the year; alumina COP flat y-o-y at US\$322/T despite higher caustic and imported bauxite cost.
- 3.2 million tonnes of coal linkages added during FY2019 from Tranche IV auctions, taking our coal security to 72%
- · Significant improvement in coal materialisation in Q4 FY2019, resulting in no power imports from the grid in last 4 months of FY2019
- FY2019 exit CoP for aluminium was less than \$1800 per tonne.

- Record steel production at 1.2 million tonnes, up 17% y-o-y, as a result of improved plant availability and optimum utilisation. Exited with a run rate of c.1.5mtpa.
  • FY2019 EBITDA margin of 19% was among the sector leaders in India.

#### Copper and Iron Ore

- Karnataka production at 4.1 million tonnes, up 89% y-o-y.
  Continued engagement with the Government and local communities to restart
- operations at Goa and Tuticorin.

#### **Objectives for FY2020**

- · Generate healthy free cash flow from our operations.
- Disciplined capex across projects to generate healthy ROCE.
- · Improve credit ratings.
- · Reduce working capital.

#### **KPIs**

- FCF post-capex
- ND/EBITDA (Consol)
- EPS (before exceptional items)
- Interest cover ratio
- Dividend

#### Risks

- · Access to capital
- Fluctuation in commodity prices (including oil) and currency exchange rates
- · Regulatory and legal risk
- · Tax related matters

#### Zinc India

- Achieve significantly higher production for both mined and finished metal at c.1.0 million tonnes.
- · Rampup silver production to 750-800 tonnes.
- Achieve cost of production for zinc at < \$1,000/mt.
- De-bottleneck and expand smelting capacity to maintain mines/ smelter synergies at higher levels of production.

#### Zinc International

- Production of Skorpion @ 110kt & BMM at 60kt.
- Gamsberg production to ramp up to 180-200kt.

#### Oil & Gas

- For FY2020, with the surge in drilling activities and well hook up, production volumes to be 200-220 kboepd.
  Control opex at c.-\$7.5/boe.

#### Aluminium

- $\bullet\,$  Production at Lanjigarh refinery of 1.7-1.8 million tonnes, with aluminium production at smelters remaining stable at 1.9-1.95mtpa.

  Reduce the aluminium COP, with a target of \$1725-1775/T.
- Improve coal linkage security further and ensure better materialisation and continued production at our Chotia mines.
- · Enhance our raw material security of bauxite & alumina.

#### Copper & Iron ore

• Engage with government and relevant authorities to enable restart of operations.

#### Steel

• Achieve full-year production to rated capacity of c.1.5mtpa.

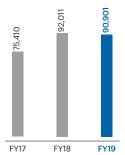
**EBITDA** Adj. EBITDA margin FCF post-capex ROCE

- · Fluctuation in commodity prices (including oil) and currency exchange rates
- Health, safety and environment (HSE)
- · Tailings dam stability
- Loss of assets or profit due to natural calamities

### **Key performance indicators**

#### **GROWTH**

#### REVENUE (₹ CRORE)



#### **Description**

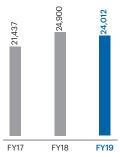
Revenue represents the value of goods sold and services provided to third parties during the year.

#### Commentary

FY2019, consolidated revenue was at ₹90,901 crore compared with ₹92,011 crore in FY2018. This was mainly on account of lower zinc volumes, shutdown of Tuticorin smelter and lower metal prices partially offset by ramp up of volumes at Aluminium, volume addition from ESL acquisition, improved oil prices and rupee depreciation.

#### **EBITDA**





#### **Description**

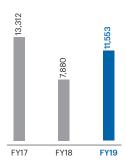
Earnings before interest, tax, depreciation and amortisation (EBITDA) is a factor of volume, prices and cost of production. This measure is calculated by adjusting operating profit for special items and adding depreciation and amortisation.

#### Commentary

EBITDA for FY2019 was at ₹24,012 crore, 4% lower y-o-y. This was mainly on account of shutdown of Tuticorin smelter, input commodity inflation, lower metal prices and higher cost of production, which was partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition, improved oil prices and rupee depreciation.

#### **FCF POST CAPEX**

#### (₹ CRORE)



#### **Description**

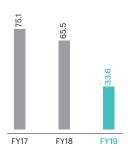
This represents net cash flow from operations after investing in growth projects. This measure ensures that profit generated by our assets is reflected by cash flow, in order to de-lever or maintain future growth or shareholder returns.

#### Commentary

We generated FCF of ₹11,553 crore in FY2019, driven by active working capital management and disciplined capital allocation.

#### OTHER KEY FINANCIAL RATIOS

#### **DEBTORS TURNOVER RATIO\***



#### **Description**

(IN TIMES)

The debtors' turnover ratio is an accounting measure used to quantify a company's effectiveness in collecting its receivables. This is calculated as a ratio of revenue from operation to average trade receivables.

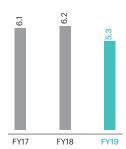
#### Commentary

The reduction in debtors' turnover is mainly on account of shutdown of Tuticorin smelter as it generated significant revenue being a custom smelting business and change in revenue mix across businesses.

#### \* Excluding Power Debtor

#### INVENTORY TURNOVER RATIO

(IN TIMES)



#### **Description**

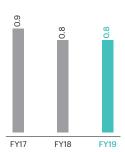
The inventory turnover ratio is an efficiency ratio that shows how effectively inventory is managed. This is calculated as a ratio of cost of goods sold to average inventory.

#### Commentary

The inventory turnover ratio for the Company was at 5.3 times in FY2019 as compared to 6.2 times in FY2018.

#### CURRENT RATIO

(IN TIMES)



#### **Description**

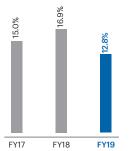
The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. This is calculated as a ratio of current assets to current liabilities.

#### Commentary

The current ratio of the Company remained flat at c.0.8 times.

#### **RETURN ON CAPITAL EMPLOYED (ROCE)**

(%)



#### **Description**

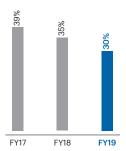
This is calculated on the basis of operating profit, before special items and net of tax outflow, as a ratio of average capital employed. The objective is to earn a post-tax return consistently above the weighted average cost of capital.

#### Commentary

ROCE down by 4.1%, primarily owing to closure of Tuticorin smelter, inflation in commodity prices leading to increase in cost of production and higher depreciation charge partially offset by volume growth in Aluminium, ESL acquisition and rupee depreciation.

### ADJUSTED EBITDA MARGIN

(%)



#### **Description**

Calculated as EBITDA margin excluding EBITDA and turnover from custom smelting of Copper India and Zinc India businesses.

**Commentary** Adjusted EBITDA margin for FY2019 was 30% (FY2018: 35%).

#### **NET DEBT/EBITDA**

(CONSOLIDATED) (IN TIMES)



#### **Description**

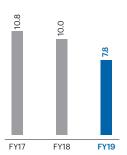
This ratio represents the level of leverage of the Company. It represents the strength of the balance sheet of Vedanta Limited. Net debt is calculated in the manner as defined in Note 18 of the consolidated financial statements.

#### Commentary

Net debt/EBITDA ratio as at 31 March, 2019 was at 1.1x, compared to 0.9x as at 31 March, 2018. The net debt is higher primarily due to ESL acquisition.

#### **INTEREST COVER**

(IN TIMES)



#### **Description**

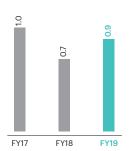
The ratio is a representation of the ability of the Company to service its debt. It is computed as a ratio of EBITDA divided by gross finance costs (including capitalised interest) less investment revenue.

#### Commentary

The interest cover for the Company was at c.7.8 times, lower y-o-y on account of lower EBITDA and higher net finance costs due to increase in debt.

#### **DEBT EQUITY RATIO**

(IN TIMES)



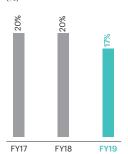
#### **Description**

This is a financial ratio indicating the relative proportion of shareholders' equity and debt used to finance a company's assets. It is calculated as a ratio of total external borrowing to total equity (share capital + reserves + minority).

#### Commentary

The ratio has increased to 0.9 times in FY2019 primarily because of increase in gross debt due to ESL acquisition and temporary borrowing at Zinc India.

#### **OPERATING PROFIT MARGIN**



#### Description

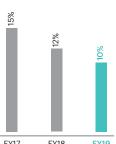
Operating profit margin is a profitability or performance ratio used to calculate the percentage of profit a company produces from its operations. This is calculated as a ratio of operating profit (EBITDA less depreciation) to revenue from operations.

#### Commentary

The operating profit margin was lower in FY2019 as compared to FY2018, primarily due to increase in depreciation in the current year.

#### **NET PROFIT MARGIN**

(%)



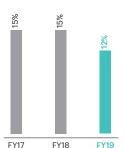
#### Description

This is a measure of the profitability of a company. It is calculated as a ratio of net profit (before exceptional items and DDT) to revenue from operations.

#### Commentary

The operating profit margin was lower in FY2019 as compared to FY2018, primarily due to increase in depreciation in the current year.

#### **RETURN ON NET WORTH**



#### **Description**

This is a measure of the profitability of a company. It is calculated as a ratio of net profit (before exceptional items and DDT) to average net worth (share capital + reserves + minority).

#### Commentary

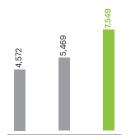
The return on net worth has reduced, mainly on account of increase in depreciation expense during the year partially offset by consequent tax impact on the same

## **Key performance indicators**

### Continued

#### LONG-TERM VALUE

#### **GROWTH CAPEX** (₹ CRORE)



FY18

#### **Description**

FY17

This represents the amount invested in our organic growth programme during the year.

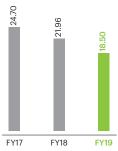
**FY19** 

#### Commentary

Our stated strategy is of disciplined capital allocation on high-return, low-risk projects. Expansion capital expenditure during the year stood at ₹7,549 crore, with the majority invested in projects at Zinc India, the Gamsberg project at our Zinc International business, growth projects at Oil & Gas and ramping up our Aluminium capacities.

#### **EPS**





#### **Description**

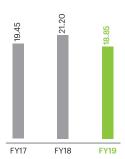
This represents the net profit attributable to equity shareholders and is stated before exceptional items and dividend distribution tax (net of tax and minority interest impacts).

#### Commentary

In FY2019, EPS before exceptional items was at ₹18.50 per share. This mainly reflects the impact of higher depreciation charges and lower FBITDA

#### **DIVIDEND**





#### **Description**

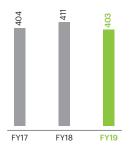
Dividend per share is the total of the final dividend recommended by the Board in relation to the year, and the interim dividend paid out during the year.

#### Commentary

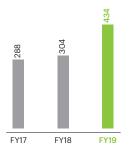
The Board has recommended a total interim dividend of ₹18.85 per share this year compared with ₹21.2 per share in the previous year.

#### **RESERVES AND RESOURCES (R&R)**

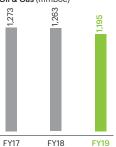
#### Zinc India (million tonnes)



#### Zinc International (million tonnes)



### Oil & Gas (mmboe)



#### **Description**

Reserves and resources are based on specified guidelines for each commodity and region.

#### Commentary

#### Zinc India:

During the year, gross additions of 5.4 million tonnes were made to reserves and resources, prior to depletion of 13.8 million tonnes. Overall mine life continues to be more than 25 years.

### Zinc International:

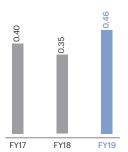
During the year, gross additions of 130.36 million tonnes were made to reserves and resources, prior to depletion. Zinc International is further pleased to announce the declaration of a maiden resource at its Big Syncline project, located on its Black Mountain mining licence in South Africa. Resource estimation was carried out by SRK Consulting (UK) and resulted in an inferred resource of 151.7 million tonnes grading 3.6% (zinc and lead). The majority of the resource is accessible through open-cast operations at low stripping ratios. Overall mine life is more than 30 years.

During FY2019, the gross proven and probable reserves and resources were depleted by 68mmboe primarily due to production during the year.

#### SUSTAINABLE DEVELOPMENT

#### **LTIFR**

(MILLION MAN HOURS)



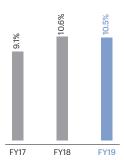
#### **Description**

The lost time injury frequency rate (LTIFR) is the number of lost-time injuries per million man-hours worked. This includes our employees and contractors working in our operations and projects.

**Commentary** This year the LTIFR was 0.46. Safety remains the key focus across businesses.

#### **GENDER DIVERSITY**

(%)



#### Description

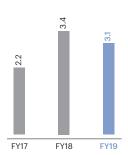
The percentage of women in the total permanent employee workforce.

#### Commentary

We provide equal opportunities to men and women. During the year, the ratio of female employees was 10.5% of total employees.

#### **CSR FOOTPRINT**

(MILLION BENEFICIARIES)



#### **Description**

The total number of beneficiaries through our community development programmes across all our operations.

#### Commentary

We benefited around 3.1 million people this year through our community development projects comprising community health, nutrition, education, water and sanitation, sustainable livelihood, women empowerment and bio-investment.

## **Opportunities and risks**

# **Opportunities**

We proactively work to minimise our risks by accepting and eliminating them while identifying and taking advantage of opportunities. Our strategic priorities and strong opportunity management culture give us a competitive edge in spotting opportunities and making the best of them.



Above: An employee at the Mangala Processing Terminal, Barmer

#### **POSITIVE MARKET FUNDAMENTALS**

The commodities market is fundamentally on an uptick, underpinned by a supply-demand deficit in most of the commodities. Most base metals prices face upside risks from the possibility of tighter than expected environmental policies and a slower than expected easing of commodity-specific supply bottlenecks. Additionally, a stable global growth is expected that will lead to higher demand for metals and oil.

Vedanta's diversified portfolio and attractive basket of commodities position us well to take advantage of this projected uplift in demand and a resulting improvement in price outlook.

#### **INDIA-LED GROWTH**

India is the primary market for Vedanta. The Indian economy remains one of the fastest growing in the world supported by strong macroeconomic fundamentals and policy changes, attributable to the sustained rise in consumption and a gradual revival in investments, especially with a greater focus on infrastructure development. Together with the economic reforms and supportive policies of the government, the growth path for the economy is healthy. This is also supported by urbanisation plans of the country and positive demographic factors such as an increasing workforce.

As India's only diversified natural resources group, we are uniquely placed to take advantage of this domestic growth.

# A PORTFOLIO OF DIVERSIFIED LOW-COST ASSETS WITH LONG ASSET LIFE

Vedanta has a portfolio of world-class, low-cost, scalable assets that consistently generate strong profits and robust cash flows enjoying industry-leading market shares across our core divisions. The long asset life of this scalable diversified portfolio provides a strong base of opportunities for Vedanta. The many brownfield opportunities being explored in each of the businesses are indicative of this position

# UNDER-UTILISED RESOURCES IN INDIA WITH SIGNIFICANTLY LOW PER CAPITA CONSUMPTION

India has a huge underutilised potential of rich and diverse resources which can be tapped with Vedanta's extensive exploration plans. This has been very strongly supported by the recent policy reforms of the government. Additionally, the per capita consumption of metals in India is significantly lower than global averages, providing ample opportunities for growth.

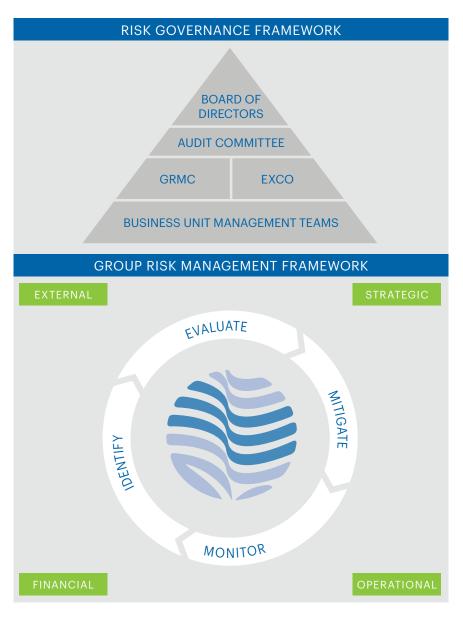
## TECHNOLOGICAL ADVANCEMENT AND DIGITALISATION

New technological and digital advances have helped in improving productivity and reducing costs, and so improving profitability for the Company.

## Risks

#### PRINCIPAL RISKS AND UNCERTAINTIES

As a global natural resources company, our businesses are exposed to a variety of risks. It is therefore essential to have in place the necessary systems and a robust governance framework to manage risk, while balancing the risk-reward equation expected by stakeholders.



Our risk management framework is designed to be simple & consistent and provides clarity on managing and reporting risks to the Board. Together, our management systems, organisational structures, processes, standards and Code of Conduct and Ethics form the system of internal control that governs how the Group conducts its business and manages the associated risks. The Board has ultimate responsibility for the management of risks and for ensuring the effectiveness of internal control systems. The Board's review includes the Audit Committee's report on the risk matrix, significant risks and the mitigating actions we put in place. Any weaknesses identified in the review are addressed by enhanced procedures to strengthen the relevant controls, and these are reviewed at regular intervals.

The Audit Committee is in turn assisted by the Group-level Risk Management Committee in evaluating the design and effectiveness of the risk mitigation programme and control systems. The Group Risk Management Committee (GRMC) meets every quarter and comprises the Group Chief Executive Officer, Group Chief Financial Officer, Non-Executive Director and Director-Management Assurance. The Group Head of Safety, Environment & Sustainability is invited to attend these meetings. The GRMC discusses key events impacting the risk profile, principal risks and uncertainties, emerging risks and progress against planned actions.

## **Opportunities and risks**

#### Continued

Since it is critical to the delivery of the Group's strategic objectives, risk management is embedded in businesscritical activities, functions and processes. The risk management framework helps the Company by aligning operating controls with the objectives of the Group. It is designed to manage rather than eliminate the risk of failure to achieve business objectives and provides reasonable and not absolute assurance against material misstatement or loss. Materiality and risk tolerance are key considerations in our decision-making. The responsibility for identifying and managing risk lies with every manager and business leader.

In addition to the above structure, other key risk governance and oversight committees in the Group include the following:

- The Committee of Directors (COD) and Finance Standing Committee (FSC) having oversight on treasury-related risks. The COD comprises of Directors of the Company and the FSC comprises of the CEO, Non-Executive Director, and Group CFO. Invitees to these committee meetings are the business CFOs, Group Head Treasury and BU Treasury Heads. In addition to this, the Investment Committee reviews the investment-related risks.
- The Board has also constituted a Sustainability Committee effective from April 1st, 2019, which will oversee the Company's sustainability performance and the adequacy of the Company's sustainability framework.
- The Group Project/Capex Council which evaluates risks while reviewing any capital investment decisions as well as applying risk management framework to projects.

In addition to the above, there are various Group-level councils such as the Procurement Council, Tax Council, HSE Council, Insurance Council, CSR Committee, and so on, who work towards identifying and mitigating various risks in the Group.

The Group has a consistently applied methodology for identifying risks at the individual business level for existing operations and for ongoing projects.

At a business level, formal discussions on risk management occur at review meetings at least once a quarter. The respective businesses review their major risks, and any changes in their nature and extent since the last assessment and discuss the control measures which are in place as well as further action plans. The control

measures stated in the risk matrix are also periodically reviewed by the business management teams to verify their continued effectiveness. These meetings are chaired by the respective business CEOs and attended by CXOs, senior management and appropriate functional heads. Risk officers have been formally nominated at each of the operating businesses as well as at Group level, whose role is to create awareness of risks at senior management level and to develop and nurture a risk management culture. Risk mitigation plans form an integral part of the performance management process. Structured discussions on risk management also happen at business level with regard to their respective risk matrix and mitigation plans. The leadership team in the businesses is accountable for governance of the risk management framework and they provide regular updates to the GRMC.

Each business has developed its own risk matrix, which is reviewed by their respective management committee/ executive committee, chaired by their CEOs. In addition, each business has developed its own risk register depending on the size of its operations and number of SBUs/locations. Risks across these risk registers are aggregated and evaluated and the Group's principal risks are identified based on the frequency, and potential magnitude and impact of the risks identified.

This element is an important component of the overall internal control process, from which the Board obtains assurance. The scope of work, authority and resources of Management Assurance Services (MAS) are regularly reviewed by the Audit Committee. The responsibilities of MAS include recommending improvements in the control environment and reviewing compliance with our philosophy, policies and procedures. The planning of internal audits is approached from a risk perspective. In preparing the internal audit plan, reference is made to the risk matrix, and inputs are sought from senior management, business teams and members of the Audit Committee. In addition, we make reference to past audit experience, financial analysis and the current economic and business

Each principal subsidiary has procedures in place to ensure that sufficient internal controls are maintained. These procedures include a monthly meeting of the relevant management committee and quarterly meeting of the Audit Committee of that subsidiary. Any adverse findings are reported to the Audit Committee. The Chairman of the Audit Committee may request MAS and/or the external auditor to look at certain areas identified by risk management and the internal control framework. The findings by MAS are presented monthly to the Executive Committee and to the Audit Committee periodically. Due to the limitations inherent in any system of internal control, this system is designed to meet the Group's particular needs, and the risks to which it is exposed, rather than to eliminate risk altogether. Therefore, it can only provide reasonable and not absolute assurance against material misstatement or loss.

The order in which these risks appear in the section below does not necessarily reflect the likelihood of their occurrence or the relative magnitude of their impact on our business. The risk direction of each risk has been reviewed based on events, economic conditions, changes in business environment and regulatory changes during the year. While Vedanta's risk management framework is designed to help the organisation meet its objectives, there can be no guarantee that the Group's risk management activities will mitigate or prevent these or other risks from occurring.

The Board, with the assistance of management, carries out periodic and robust assessments of the principal risks and uncertainties of the Group and tests the financial plans for each of risks and uncertainties mentioned below

### Sustainability risks

#### **Impact** Mitigation **Risk direction**

#### Health, safety and environment (HSE)

The resources sector is subject to extensive health, safety and environmental laws, regulations and standards. Evolving requirements and stakeholder expectations could result in increased cost or litigation or threaten the viability of operations in extreme cases.

Emissions and climate change: Our global presence exposes us to a number of jurisdictions in which regulations or laws have been, or are being, considered to limit or reduce emissions. The likely effect of these changes could be to increase the cost for fossil fuels, impose levies for emissions in excess of certain permitted levels, and increase administrative costs for monitoring and reporting. Increasing regulation of greenhouse gas (GHG) emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets, is likely to raise costs and reduce demand growth.

- HSE is a high priority area for Vedanta. Compliance with international and local regulations and standards, protecting our people, communities and the environment from harm and our operations from business interruptions are key focus areas.
- Policies and standards are in place to mitigate and minimise any HSE-related occurrences. Safety standards issued/continue to be issued to reduce risk level in high risk areas. Structured monitoring and a review mechanism and system of positive compliance reporting are in place.
- The Company has implemented a set of standards to align its sustainability framework with international practice. A structured sustainability assurance programme continues to operate in the business divisions covering environment, health, safety, community relations and human rights aspects, and is designed to embed our commitment at operational level.
- All businesses have appropriate policies in place for occupational health-related matters, supported by structured processes, controls and technology.
- Strong focus on safety during project planning/execution and contract workmen safety.
- · Building safety targets into performance management to incentivise safe behaviour and effective risk management.
- · A 'Leadership in Action' programme has been launched for identification of critical risks to identify critical risk controls and to measure, monitor and report the control effectiveness.
- Leadership remains focused on a zero-harm culture across the organisation.
- · Carbon forum with business representation monitors developments and sets out defensive policies, strategy and actions.
- · Defined targets and action plans in place to reduce the carbon intensity of our operations. This includes reducing emission intensity, increasing renewable mix and green cover at locations. New Emission norms for thermal power plants will require capex - working towards the same.
- Institutionalise systems to manage carbon risks and opportunities across the business over the life cycle of its products.
- Engage with stakeholders in creating awareness and developing climate change solutions.



### **Opportunities and risks**

#### Continued

### Sustainability risks continued

#### Impact Mitigation Risk direction

## Managing relationship with stakeholders

The continued success of our existing operations and future projects are in part dependent on broad support and a healthy relationship with our respective local communities. Failure to identify and manage local concerns and expectations can have a negative impact on relations and therefore affect the organisation's reputation and social licence to operate and grow.

Risk has been increased compared to last year, due to community-related incidents at some of our facilities.

- The CSR approach to community programmes is governed by the following key considerations: the needs of the local people and the development plan in line with the new Companies Act in India; CSR guidelines; UN Millennium Development Goals (UNMDG); CSR National Voluntary Guidelines of the Ministry of Corporate Affairs, Government of India; and the UN Sustainable Development Goals.
- Our BU teams are proactively engaging with communities and stakeholders through a proper and structured engagement plan, with the objective of working with them as partners.
- Business ExCos factor in these inputs, and then decide upon focus areas of CSR and budgets while also aligning with strategic business priorities.
- All BUs follow well-laid processes for recording and resolving all community grievances.
- Every business has a dedicated Community Development Manager, who is a part of the BU ExCo. They are supported by dedicated teams of community professionals, totalling nearly 110 people.
- Our business leadership teams have periodic engagements with the local communities to build relations based on trust and mutual benefit. Our businesses seek to identify and minimise any potentially negative operational impacts and risks through responsible behaviour – acting transparently and ethically, promoting dialogue and complying with commitments to stakeholders.
- Periodic meetings with existing and potential SRI investors, lenders and analysts, as well as hosting a Sustainable Development Day in London, helps in two-way engagement and understanding the material issues for stakeholders.
- CSR communication and engagement with all stakeholders within and outside communities.

#### Tailings dam stability

A release of waste material leading to loss of life, injuries, environmental damage, reputational damage, financial costs and production impacts. A tailings dam failure is considered to be a catastrophic risk – i.e. a very high severity but very low frequency event that must be given the highest priority.

- The Risk Management Committee included tailings dams on the Group Risk Register with a requirement for annual internal review and three-yearly external review.
- Operation of tailings dams is executed by suitably experienced personnel within the businesses.
- Vedanta is currently reviewing its approach to tailings dam management, particularly upstream raised dams, in the wake of Brumadihno in Brazil.
- Golder Associates has been engaged to review tailings dam operations, including improvement opportunities/remedial works required and the application of Operational Maintenance and Surveillance (OMS) manuals in all operations. This is an oversight role in addition to technical design and guidance arranged by respective business units. Technical guidelines are also being developed.
- Those responsible for dam management received training from Golder Associates and will receive ongoing support & coaching from international consultants.
- Management standard implemented with business involvement.
- System of monitoring of tailings dams instituted





#### Impact Mitigation Risk direction

#### **Challenges in Aluminium and Power business**

Our projects have been completed and may be subject to a number of challenges during the operationalisation phase. These may also include challenges around sourcing raw materials and infrastructurerelated aspects and concerns around ash utilisation/evacuation.

- Global uncertainties reflected as fall in aluminium LME prices.
- Continue to pursue new coal linkages to ensure coal security. Operations at Chotia coal mines also started.
- · Local sourcing of bauxite from Odisha.
- · Jharsuguda facilities have ramped up satisfactorily.
- · New Ash Dyke being built in Jharsuguda.
- Dedicated teams working towards addressing the issue of new emission norms for power plants.
- Global technical experts have been inducted to strengthen operational excellence.
- · Continuous focus on plant operating efficiency improvement programme to achieve design parameters, manpower rationalisation, logistics and cost reduction initiatives.
- · Continuous augmentation of power security and infrastructure.
- Strong management team continues to work towards sustainable low-cost production, operational excellence and securing key raw material linkages.
- Talwandi Saboo (TSPL) power plant matters are being addressed structurally by a competent team.

#### **Discovery risk**

Increased production rates from our growth-oriented operations place demand on exploration and prospecting initiatives to replace reserves and resources at a pace faster than depletion. A failure in our ability to discover new reserves, enhance existing reserves or develop new operations in sufficient quantities to maintain or grow the current level of our reserves could negatively affect our prospects. There are numerous uncertainties inherent in estimating ore and oil & gas reserves, and geological, technical and economic assumptions that are valid at the time of estimation. These may change significantly when new information becomes available.

- Dedicated exploration cell with continuous focus on enhancing exploration capabilities.
- · Appropriate organisation and adequate financial allocation in place for exploration.
- Strategic priority is to add to our reserves and resources by extending resources at a faster rate than we deplete them, through continuous focus on drilling and exploration programme.
- Exploration Executive Committee (ExCo) has been established to develop and implement strategy and review projects Group-wide.
- Exploration-related systems being strengthened and standardised Group wide and new technologies being utilised wherever appropriate.
- International technical experts and agencies are working closely with our exploration teams to enhance our capabilities.

#### **Breaches in IT / cybersecurity**

Like many global organisations, our reliance on computers and network technology is increasing. These systems could be subject to security breaches resulting in theft, disclosure or corruption of key/strategic information. Security breaches could also result in misappropriation of funds or disruptions to our business operations. A cybersecurity breach could have an impact on business operations.

- Group-level focus on formulating necessary frameworks, policies and procedures in line with best practices and international standards.
- Implementation and adoption of various best-in-class tools and technologies for information security to create a robust security
- Special focus to strengthen the security landscape of plant technical systems (PTS) through various initiatives.
- Adoption of various international standards relating to Information Security, Disaster Recovery & Business Continuity Management, IT Risk Management and setting up internal IT processes and practices in line with these standards.
- Periodic assessment of entire IT systems landscape and governance framework from vulnerability and penetration perspective through reputed expert agencies and addressing the identified observations in a time-bound manner.







## **Opportunities and risks**

#### Continued

#### Operational risks continued

#### Impact Mitigation Risk direction

## Loss of assets or profit due to natural calamities

Our operations may be subject to a number of circumstances not wholly within the Group's control. These include damage to or breakdown of equipment or infrastructure, unexpected geological variations or technical issues, extreme weather conditions and natural disasters – any of which could adversely affect production and/or costs.

#### Vedanta has taken appropriate group insurance cover to mitigate this risk.

- An external agency reviews the risk portfolio and adequacy of this cover and assists us in our insurance portfolio.
- Our underwriters are reputed institutions and have capacity to underwrite our risk.
- Established mechanism of periodic insurance review in place at all entities. However, any occurrence not fully covered by insurance could have an adverse effect on the Group's business.
- Continuous monitoring and periodic review of security function.
- · Continue to focus on capability building within the Group.

#### Cairn-related challenges

Cairn India has a 70% participating interest in Rajasthan Block. The production sharing contract (PSC) of Rajasthan Block runs until 2020. The Government of India has granted its approval for 10 year extension at less favourable terms, pursuant to its policy for extension of Pre-NELP Exploration Blocks, subject to certain conditions. Production ramp up vs envisaged may have impact on profitability.

- Ongoing dialogue with the Government and relevant stakeholders to address the conditions prescribed.
- The applicability of the Pre-NELP Extension Policy to the RJ Block is currently sub judice.
- The growth projects are being implemented through an Integrated Contracting approach. Contracts have a built-in mechanism for risk and reward
- A project management committee & a project operating committee are being put in place to provide support to the outsourcing partner and address issues on time to enable better quality control as well as timely execution for growth projects.
- Third party is engaged to conduct a study on growth projects with key objectives of providing assurance on project delivery, highlight risks, identify areas needing management intervention and suggest opportunities to deliver the outcome.



#### Compliance risks

#### Impact Mitigation Risk direction

#### Regulatory and legal risk

We have operations in many countries around the globe. These may be impacted because of legal and regulatory changes in the countries in which we operate resulting in higher operating costs, and restrictions such as the imposition of or increase in royalties or taxation rates, export duty, impacts on mining rights/bans, and change in legislation.

- The Group and its business divisions monitor regulatory developments on an ongoing basis.
- Business-level teams identify and meet regulatory obligations and respond to emerging requirements.
- Focus has been to communicate our responsible mining credentials through representations to government and industry associations.
- Continue to demonstrate the Group's commitment to sustainability by proactive environmental, safety and CSR practices. Ongoing engagement with local community/media/NGOs.
- SOX compliant subsidiaries.
- Common compliance monitoring system being implemented in Group companies. Legal requirements and a responsible person for compliance have been mapped in the system.
- Legal Counsels within the Group continue to work on strengthening the compliance and governance framework and the resolution of legal disputes.
- Competent in-house legal organisation is in place at all the businesses and the legal teams have been strengthened with induction of senior legal professionals across all Group companies.
- Standard operating procedures (SOPs) have been implemented across our businesses for compliance monitoring.
- Contract management framework has been strengthened with the issue of boiler plate clauses across the Group which will form part of all contracts. All key contract types have also been standardised.
- Framework for monitoring performance against anti-bribery and corruption guidelines is also in place.



### Compliance risks continued

#### Impact Mitigation **Risk direction**

#### **Tax-related matters**

Our businesses are in a tax regime and changes in any tax structure or any tax-related litigation may impact our profitability.

- Tax Council reviews all key tax litigations and provides advice to the
- · Continue to engage with concerned authorities on tax matters.
- Robust organisation in place at business and Group level to handle tax-related matters.
- Continue to consult and obtain opinion from reputable tax consulting firms on major tax matters to mitigate the tax risks on the Group and its subsidiaries



#### Financial risks

#### Impact Mitigation **Risk direction**

#### Fluctuation in commodity prices (including oil) and currency exchange rates

Prices and demand for the Group's products may remain volatile/uncertain and could be influenced by global economic conditions. Volatility in commodity prices and demand may adversely affect our earnings, cash flow and reserves.

Our assets, earnings and cash flows are influenced by a variety of currencies due to the diversity of the countries in which we operate. Fluctuations in exchange rates of those currencies may have an impact on our financials.

- The Group has a well-diversified portfolio which acts as a hedge against fluctuations in commodities and delivers cash flows through
- Pursue low-cost production, allowing profitable supply throughout the commodity price cycle.
- Vedanta considers exposure to commodity price fluctuations to be an integral part of the Group's business and its usual policy is to sell its products at prevailing market prices and not to enter into price hedging arrangements other than for businesses of custom smelting and purchased alumina, where back-to-back hedging is used to mitigate pricing risks. Strategic hedge, if any, is taken after appropriate deliberations & due approval from ExCo.
- · Our Forex policy prohibits forex speculation.
- Robust controls in forex management to hedge currency risk liabilities on a back-to-back basis.
- Finance standing committee reviews all forex and commodity-related risks and suggests necessary courses of action as needed by business divisions.
- Seek to mitigate the impact of short-term movements in currency on the businesses by hedging short-term exposures progressively, based on their maturity. However, large or prolonged movements in exchange rates may have a material adverse effect on the Group's businesses, operating results, financial condition and/or prospects.
- Notes to the financial statements in the Annual Report give details of the accounting policy followed in calculating the impact of currency translation.



Shortfall in achievement of expansion projects stated objectives leading to challenges in achieving stated business milestones - existing & new growth projects.

- Enlisting internationally renowned engineering and technology partners on all projects.
- Empowered organisation structure has been put in place to drive growth projects.
- · Strong focus on safety aspects in the project.
- Geo-technical audits are being carried out by independent agencies.
- Reputable contractors are engaged to ensure completion of the project on indicated time lines.
- Mines being developed using best-in-class technology and equipment and ensuring the highest level of productivity and safety.
- Stage gate process to review risks and remedy at multiple stages on
- Robust quality control procedures have also been implemented to check safety and quality of services/design/actual physical work.

#### Access to capital

The Group may not be able to meet its payment obligations when due or may be unable to borrow funds in the market at an acceptable price to fund actual or proposed commitments. A sustained adverse economic downturn and/or suspension of its operation in any business, affecting revenue and free cash flow generation, may cause stress on the Company's ability to raise financing at competitive terms.

- · A focused team continues to work on proactive refinancing initiatives with an objective to contain cost and extend tenor.
- · The team is actively building the pipeline for long-term funds for near- to medium-term requirements both for refinancing and growth сарех.
- Track record of good relations with banks, and of raising borrowings in last few years.
- The Group's structured investments, including the Volcan transaction, are exposed to underlying equity price variance of Anglo shares. (For further details on the Volcan transaction, refer note 38 of the consolidated financial statements).
- Regular discussions with rating agencies to build confidence in operating performance.
- Business teams ensure continued compliance with the Group's treasury policies that govern our financial risk management practices.







### Our approach

At Vedanta we are committed to constructive dialogue with our key stakeholders. We believe that open, ongoing and systemic communication is key to building successful relationships with our stakeholders. This also helps us to identify their material issues, and foresee emerging risks, opportunities and challenges.

Our social responsibility performance standards help ensure effective engagement with relevant stakeholders across multiple industries and geographies; provide adequate grievance mechanisms to help resolve situations of potential conflict; and develop specialised standards for potentially vulnerable communities such as indigenous people. The standards follow five principles of engagement:

#### **ASK**

Our dialogue begins with questions that solicit feedback. Our stakeholders have access to a number of platforms to reach out to Vedanta personnel and voice concerns.

#### **ANSWER**

We disclose not just because we want to be heard, but because we are responsible. We aim to provide a constructive response to feedback received.

#### **ANALYSE**

We have established a robust investigation process for complaints reported via the whistleblowing mechanism, sustainability ID and Group communications ID, involving senior management and relevant personnel.

#### **ALIGN**

We work hand-in-hand with stakeholders and align our goals and actions with their high-priority areas. The feedback from all our engagement becomes part of our materiality identification process.

#### **ACT**

We back up our words with demonstrable actions that move the needle towards promised outcomes.





Right top: Investing in the future of children through CSR initiatives

Right bottom: Access to affordable and quality healthcare



### Stakeholder engagement

#### Continued

The table below sets out how we engaged with our stakeholders during the year to address their concerns and meet their expectations.

# Stakeholder Local Community

Community group meetings, village council meetings, community needs/social impact assessments, public hearings, grievance mechanisms, cultural events, engaging philanthropically with communities via the Vedanta Foundation

**Types of Engagement** 

#### **Key Expectations**

### Initiatives in FY2019

- Needs-based community development projects
- Increasing reach of community development programmes
- Improved grievance mechanism for community
- Completed baseline, need, impact and SWOT assessments in all BUs
- ₹309 crores invested in social investment
- 3.1 million beneficiaries of community development programmes
- Community grievance process followed at all operations

### **Employees**



Chairman's workshops, Chairman's/CEO's town hall meetings, feedback sessions, performance management systems, various meetings at plant level, V-Connect mentor programme, event management committee and welfare committee, women's club

- Improved training on safety
- Increased opportunities for career growth
- Increasing the gender diversity of the workforce
- 1.4 million man-hours of training on safety
- 22% of all new hires are women
- Identification of top talents and future leaders through workshops

#### Shareholders, Investors & Lenders



Regular updates, investor meetings, Sustainability Day for investor interaction, site visits, AGM and conference, quarterly results calls, dedicated contact channel – ir@vedanta.co.in and sustainability@vedanta.co.in

- Consistent disclosure on economic, social, and environmental performance
- ₹90,901 crore in revenue with an interim dividend of ₹18.85 per share
- Sustainability assurance audits conducted through Vedanta Sustainability Assurance Programme (VSAP)
- Bi-weekly investor briefings and pro-active engagement with the investment community on ESG topics

#### **Types of Engagement Key Expectations Initiatives in FY2019**

### Stakeholder Civil Society



Partnerships with and membership of international organisations, working relationships with organisations on specific projects, engagement with international, national, and local NGOs, conferences and workshops, dedicated contact channel sustainability@vedanta.co.in

- Expectation of being aligned with the global sustainability agenda
- Compliance with Human Rights
- Membership of international organisations including the United Nations Global Compact, TERI, CII, The World **Business Council for** Sustainable Development (WBCSD), and Indian **Biodiversity Business** Initiative (IBBI)
- Focus towards implementing Sustainable Development Goals
- · Compliance to the Modern Slavery Act

Industry (Suppliers, Customers, Peers, Media)



Customer satisfaction surveys, scorecards, in-person visits to customers, supplier, and vendor meetings

- Consistent implementation of the code of business conduct & ethics
- Ensuring contractual integrity
- Hotline service and email ID to receive whistleblower complaints

#### Governments



Participation in government consultation programmes, engagement with national, state, and regional government bodies at business and operational level

- Compliance with laws
- · Contributing towards the economic development of the nation
- ₹309 crores invested in community development
- . c.₹42,400 crore in payments to the exchequer



For more information on our activities during the year, please see our Sustainability section on pages 76-89

## Awards and accolades

S No.	Name of Awards	Category/Recognition	Recipient (Business Unit)
Оре	erational Excellence 🔯		
1	IMC RBNQA National Quality Award	Manufacturing Excellence	Balco
2	Quality Circle Conventions	Improvement Projects	Balco
3	Safety award by Oil Industry Safety Directorate (OISD)	Individual category	Cairn Oil & Gas
4	FTSE4Good Emerging Index Series	Sectorial leadership in Environmental, Social and Governance (ESG) performance	HZL
Sus	tainable Development & CS	R 🚇	
5	ET 2 Good 4 Good Rating	CSR Activities	Balco
6	Dainik Jagran Award	Poverty Eradication	Balco
7	FICCI CSR Award	Private Sector Companies with turnover of ₹3001 crores per annum and above	Nand Ghar
8	Sustainability Award 4.0	Sustainable Business practices	Balco
9	CII-ITC Sustainability Award 2018	Significant Achievement for impactful CSR programs and initiatives across all assets	Cairn Oil & Gas
10	FICCI Corporate Social Responsibility Award 2017 – 2018	Health, Water and Sanitation category	Cairn Oil & Gas
11	CII-ITC Sustainability Awards 2018	For Corporate Excellence  Outstanding Accomplishment Award  Commendation for Significant Achievement in CSR  Excellence in Environment Management	HZL
12	Greentech Safety Award	Gold/Safety Management	Vedanta Limited, Lanjigarh
13	India Green Manufacturing Award	Resource Conservation and Green Manufacturing Processes	Vedanta Limited, Lanjigarh
14	India CSR Leadership Award 2019	'Aajeevika Skill Development' initiatives including Dhokra Art and Tribal Painting	Vedanta Limited, Lanjigarh
15	ET Now- CSR Leadership Awards	Sports Development	Vedanta Football & Nand Gha
16	Golden Bird award	Environment Excellence	TSPL
17	Shrishti Good Green Governance Award	Environment	TSPL
18	Apex India CSR Excellence Award 2018	Gold Award	TSPL
19	AON Hewitt Best Employer Award	Commitment to Engagement (2017-2018)	Vedanta Limited, Jharsuguda
20	National Best Employer Brands 2018	HR practices and exemplary use of marketing communication for Human Resource Development	Vedanta Limited, Jharsuguda
Hur	man Resources		
21	CII HR Excellence Award	HR Initiatives	Balco
22	ET HR Talent Management Leadership Award	Leadership Development Program	Balco
23	Great Place to Work Certification	Employer of Choice and Workplace quality recognition	Cairn Oil & Gas
24	ET Now Dream Companies to Work For	Employer of Choice and Workplace quality recognition	Cairn Oil & Gas
25	'Significant Achievement in HR Excellence' during 9th CII-HR Excellence Award 2018-19	HR practices	HZL
26	CII National HR Excellence Award	Strong Commitment to HR Excellence	Vedanta Limited, Lanjigarh un
27	The Employer Branding Awards	National Best Employer Brand	Sterlite Copper

S No.	Name of Awards	Category/Recognition	Recipient (Business Unit)
Inno	ovation & Technology		
28	7th International Bauxite – Alumina & Aluminium Conference & Exhibition	Improvement Projects	Balco
29	INCAL	Improvement Projects	Balco
30	Indian Institute of Metals – Non-Ferrous Best Performance Award 2018	For best quality, registering highest product development and environmental performance during 2017-18	HZL
31	QualTech Award 2018	Improvement Category	Sesa Goa Iron ore – Value Addition Business unit
32	SECONA Shield Awards 2018	Innovative Practices & Technology	Vedanta Sesa Goa Iron Ore – Security Team
33	Smart logistics Summit & Awards 2019	Smart Exporter Metals	Vedanta Limited, Jharsuguda
Ene	ergy Conservation		
34	CII National Energy Conservation Award	Energy	Balco
35	Clean Energy Management Insight Award	Spreading awareness about ISO 50001 Energy Management System	Balco
36	Gold in SEEM National Energy Management Awards 2017	Industries Captive Power Plant	Chanderiya Smelting Complex (HZL)
37	19th National Award for Excellence in Energy Management 2018	Energy Efficient Unit	Sesa Goa Iron ore – Value Addition Business unit
38	Golden Bird award	Energy Efficiency	
Indu	ustry Achiever/National Con	tributor 🗐	
39	1st Edition of CNBC - Awaaz Rajasthan Ratna Award	'The Best Company in Mining Sector' in the state of Rajasthan	HZL
40	Dun & Bradstreet Infra Awards 2018	Power - Thermal & Hydro - Best Project category	TSPL
41	South African Institution of Civil Engineering, Awards for the Most Outstanding Civil Engineering Achievements of the Year	Most Outstanding Project in the Geotechnical Engineering Project Division	Gamsberg Business Partner, VZI
Bus	iness Awards 🕎		
42	Best Environment Practices by SKOCH Leadership Award for Energy	Natural gas recovery – zero flaring during frack well milling operation project under the category – 'most innovative environmental project'	Cairn Oil & Gas
43	7th FICCI Safety Systems Excellence Award	Platinum Prize	Bhagyam field, Cairn Oil & Gas
44	5th CII Environmental Best Practices Award 2018	Natural gas recovery – zero flaring during frack well milling operation project under the category – 'most innovative environmental project'	Cairn Oil & Gas
45	'Dun & Bradstreet Corporate Award 2018'	Under 'Non-Ferrous & Precious Metals' category for their role as 'Champions of Change' in transformation of the Country	HZL
46	Recognised for the 'Best Investor Relations Program' (nominated by the sell-side) and for hosting the "Second Best Analyst Day" (overall) by Institutional Investor Magazine's 2018 all-Asia (ex-Japan) Executive Team rankings.	Basic Materials industry	Vedanta Limited





### **Board of Directors**

#### NAVIN AGARWAL Executive Chairman

Mr. Agarwal has been associated with the Group since its inception and has over 35 years of strategic executive experience. He has been instrumental in leading the growth of the Group through organic projects and acquisitions. He plays a pivotal role in providing direction for development of the top leadership talent at the Group. He is credited with creating a culture of business excellence and delivering superior benchmark performance through application of advanced technology and global best practices.

He was recently conferred the 'Industrialist of the Year 2018' award by the Bombay Management Association for his outstanding contribution to the natural resources sector. He has led Vedanta's evolution to the highest standards of corporate governance and enhanced engagement with key stakeholders. He pursues a vision to enhance the enormous potential of the natural resources sector as an engine of growth for the country.

# AMAN MEHTA Non-Executive Independent Director

Mr. Mehta has over 35 years experience in various positions with the HSBC Group from where he retired in January 2004 as CEO Asia Pacific. Mr. Mehta occupies himself primarily with corporate governance, with Board and advisory roles in a range of companies and institutions in India as well as overseas. Formerly, he has been a Supervisory Board member of ING Group NV and a Director of Raffles Holdings, Singapore. He is also a member of the governing board of the Indian School of Business, Hyderabad. Mr. Mehta is an economics graduate from Delhi University.

#### **K VENKATARAMANAN**

#### **Non-Executive Independent Director**

Mr. Venkataramanan brings with him four decades of experience and has also been CEO & Managing Director, Larsen & Toubro Limited (L&T) from April, 2012. Further, he has also served on the L&T Board from May, 1999 until his retirement in September, 2015. He has spearheaded L&T in the world of E&C, strengthened every aspect of EPC value chain and transformed L&T to one of the respected names in the global EPC fraternity. He is a graduate in Chemical Engineering from Indian Institute of Technology, Delhi. He is also a distinguished alumni awardee from IIT Delhi.

#### LALITA D GUPTE

#### **Non-Executive Independent Director**

Ms. Gupte has more than three decades of experience in the financial sector and has held various leadership positions in diverse areas. She is the former Joint Managing Director of ICICI Bank and was the Chairperson of ICICI Venture Funds Management Company Limited till October 2016. She is presently Chairperson of ICICI Lombard General Insurance Co Ltd and India Infradebt Ltd and sits on other Boards. Ms Gupte holds a Bachelor's Degree in Economics (Hons) and a Master's degree in Management Studies. She did her advanced management programme from INSEAD.

#### **UK SINHA**

#### Non-Executive Independent Director

Mr. Sinha has served as the Chairman of Securities and Exchange Board of India (SEBI) from February 2011 to March 2017. He was instrumental in bringing about key capital market reforms. Under his leadership, SEBI introduced significant regulatory amendments to the various acts enhancing corporate governance and disclosure norms. Prior to SEBI, he was the Chairman & MD of UTI Asset Management Company Pvt. Ltd. and has also worked for the Department of Economic Affairs under the Ministry of Finance.

#### **RAVIKANT**

#### **Non-Executive Independent Director**

Mr. Kant brings with him experience of around five decades and he is an Honorable Industrial Professor at the University of Warwick. In addition, he is also a visiting Leader at China Europe International Business School, Shanghai. He served as the Managing Director and Vice Chairman in Tata Motors. He was the Chairman of the Indian Institute of Management, Rohtak and Indian Institute of Information Technology, Allahabad. He had completed his education at Mayo College, Ajmer, Indian Institute of Technology, Kharagpur and Aston University, Birmingham, UK from where he did his Masters in Management in Industry. He was conferred with an Honorary D.Sc. by the Aston University, in Birmingham in July 2008.

#### **PRIYA AGARWAL**

#### **Non-Executive Director**

Ms. Agarwal brings with her experience in Public Relations with Ogilvy & Mather and in Human Resources with Korn Ferry International. She has done B.Sc. Psychology with Business Management from the University of Warwick in the UK.

#### TARUN JAIN

#### Whole-Time Director

Mr. Jain has 36 years of experience in the corporate finance, audit and accounting, tax, mergers and acquisitions and corporate secretarial functions. He is responsible for our strategic financial matters, including corporate finance, corporate strategy, business development and mergers and acquisitions. Mr. Jain was a Whole-Time Director of the Company till March 31, 2019 and has been reappointed as a NED effective April 01, 2019. Mr. Jain is a graduate of the Institute of Cost and Works Accountants of India, a Fellow Member of the Institute of Chartered Accountants of India and the Institute of Company Secretaries of India.

## SRINIVASAN VENKATAKRISHNAN Whole-Time Director & CEO

Mr. Venkatakrishnan (Venkat) joined as Whole-Time Director and CEO of Vedanta Limited on March 1, 2019. He is the CEO and a member of the Board of Directors of Vedanta Resources Limited effective from August 31, 2018. He has been CEO of Johannesburg-based AngloGold Ashanti Limited. During his tenure, he has had significant success, delivering major projects on time and on budget improving productivity, strengthening the balance sheet, reducing operating and overhead costs, and improving overall safety and sustainability performance.

Prior to his appointment as CEO in May 2013, Venkat was AngloGold Ashanti's Chief Financial Officer, a post he held since 2005. Before that, between 2000 and 2004, he was CFO of London-listed Ashanti Goldfields Limited. Venkat has accumulated extensive experience throughout his career in the UK, India, Africa, Australia and South America. He is a qualified Chartered Accountant who holds a Bachelor's degree from the University of Madras.

#### ARUN KUMAR GR Whole-Time Director & CFO

Mr. Arun Kumar has over 23 years of experience at global multinationals like Hindustan Unilever and General Electric. Prior to his joining Vedanta, he was the CFO for General Electric's Asia-Pacific Lighting & Appliances businesses based out of Shanghai. He is responsible for overall health of the balance sheet, driving performance in profit and cash, treasury, investor relations, credit ratings, tax, secretarial, controllership, recording & reporting and other key strategic matters from time to time. He is a Fellow Member of the Institute of Chartered Accountants of India.

### **Executive committee**



SRINIVASAN VENKATAKRISHNAN Whole-Time Director & Chief Executive Officer

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SUNIL DUGGAL
Chief Executive Officer- HZL

Sunil Duggal was appointed as the Chief Executive Officer and Whole-Time Director of HZL in October 2015. He was also given the responsibility of leading the Base Metal Group comprising of zinc, copper and iron ore businesses. Prior to this, he was Executive Director from August 2010 to April 2012, Chief Operating Officer for over two years before being made Deputy Chief Executive Officer from April 2014. He has over 32 years of experience of leading high performance teams and more than 19 years in leadership positions. He also serves as Vice Chairman of the International Zinc Association, President of the Indian Lead Zinc Development Association, Chairman of FIMI Non-Ferrous Metals Committee and co-chair of the FICCI Non-Ferrous Metals Committee 2017. Recently, he has been appointed as Chairman of the Skill Council for Mining Sector, India. Sunil Duggal holds a Bachelor's degree in Electrical Engineering from the Thapar Institute of Engineering and Technology, Patiala. He has participated in a leadership development and management development programme at the International Institute for Management Development, Lausanne, Switzerland and the Indian Institute of Management, Kolkata, India.



**AJAY KUMAR DIXIT** Chief Executive Officer (Acting) -Oil & Gas Business

Ajay Kumar Dixit was appointed as the Acting Chief Executive Officer of our Oil & Gas business on 5th April, 2019. Prior to his role as CEO of the Oil & Gas business, he was the Chief Executive Officer of Alumina and Power from February 2017 to April 2019. He was appointed as interim Chief Executive Officer of Aluminium & Power from November 2018 to February 2019. He joined the Group as Chief Executive Officer of our Power business in May 2015 and has 39 years of experience in the power industry. Prior to this, he was the Chief Executive Officer of Energy with Siemens, responsible for the overall operations of South Asia. He has a wide experience in the entire energy chain comprising power generation, automation, transmission and distribution. He also has experience in manufacturing and setting up plants in South Asia, Middle East and Africa. Ajay holds a Bachelor's degree in Electrical Engineering from Delhi College of Engineering.



**AJAY KAPUR Chief Executive Officer - Aluminium & Power Business** 

Ajay Kapur was appointed as Chief Executive Officer, Aluminium & Power in March 2019. Ajay leads the Aluminium & Power business for Vedanta comprising of 2.3mtpa installed smelter capacity, 8GW of Power and 2mtpa of Alumina refinery. Prior to his appointment at Vedanta Limited, Ajay was Managing Director & Chief Executive Officer for Ambuja Cements. He started his career as an Executive Assistant to the founder & Managing Director. He went on to handle various strategic positions at Ambuja cements with his last position as Managing Director & Chief Executive Officer. He holds a graduate degree in Economics from St. Xavier's College, Mumbai, an MBA from KJ Somaiya Institute, Mumbai and is an alumnus of Wharton's Advanced Management



**MADHU SRIVASTAVA Chief Human Resources Officer** 

Madhu Srivastava was appointed as the Chief Human Resources Officer for Vedanta Group in December 2018. She has been associated with the Group for more than six years and in her earlier role, she was the CHRO for Cairn Oil & Gas business and led the Talent Acquisition and Diversity & Inclusion functions for the Group. Under her leadership, the Group has put in place the right HR policies, progressive people practices and frameworks for talent acquisition and talent management across Vedanta. Madhu has 20 years of experience across HR as well as Sales, Marketing and Operations, spanning the FMCG, telecom, ITES, BFSI and natural resources industries. Madhu started her professional journey in 1999 with Godrej where she handled sales in Gujarat and Maharashtra and later moved to the Corporate Sales & Marketing role. Post working with companies like GE Capital and Reliance in Operations & Marketing profiles, she started her Human Resources journey in 2006 by joining Genpact as Assistant Vice President, Talent Acquisition where she led middle management hiring. She then went on to lead the recruitments for Citibank's India operations as Vice President, HR before joining Vedanta in 2012. Madhu has completed her PGDM in marketing and sales, from the IIM, Ahmedabad.

### **Executive committee**

#### Continued



DILIP GOLANI Head - Management Assurance

Dilip Golani currently heads the Group's Management Assurance Services function. He previously headed the Sales and Marketing Division for HZL and the Group's performance management function.

Prior to joining the Group in April 2000, Dilip Golani was a member of the Unilever corporate audit team responsible for auditing the Unilever group companies in Central Asia, Middle East and Africa region. Prior to that, he was responsible for managing operations and marketing functions for one of the exports businesses of Unilever India. He has over 30 years of experience and has previously worked with organisations such as Union Carbide India Limited and Ranbaxy Laboratories Limited. Dilip holds a Bachelor's degree in Mechanical Engineering and has completed his postgraduate studies in Industrial Engineering and Management from the National Institute of Industrial Engineering, Mumbai, India



RAJAGOPAL KISHORE KUMAR Director – Strategy & Business Development

Rajagopal Kishore Kumar was appointed as the Director of Strategy and Business Development effective January 17, 2018. Prior to this, he was the Chief Executive Officer of our Iron Ore Business from February 2, 2015 and the Chief Executive Officer (Base metals) Africa with Konkola Copper Mines Plc, Zinc International business and CMT since August 2013. He was previously appointed as the Chief Executive Officer of our Zinc International Division with effect from February 2011. Prior to this, he headed our copper business at Konkola Copper Mines Plc from 2008 and Sterlite Copper India Limited from 2006. He has more than 34 years of experience in accounting, marketing, supply chain management, mergers and acquisitions and business turnaround. Rajagopal joined our Company in April 2003 as Vice President of Marketing for HZL and became Senior Vice President of Marketing for our Copper Division from June 2004 to December 2006, where he was responsible for copper marketing and concentrate procurement. Prior to joining our Company, he was employed by Hindustan Unilever Limited for 12 years. Rajagopal holds a Bachelor's degree in commerce, Kolkata University and is a member of the Institute of Chartered Accountants of



PHILLIP TURNER
Head – Health, Safety, Environment
and Sustainability

Phillip Turner was appointed as Head of Group Health, Safety, Environment and Sustainability with effect from July 2017. He joined us as Head of Group Health and Safety in September 2014. He has over 38 years of experience within mining, heavy engineering and manufacturing organisations. He was previously General Manager of Risk and Sustainability at JK Tech Pty Limited, Australia. He has also held a number of senior corporate and operational roles at Rio Tinto Group, Australia, Canada and United Kingdom including responsibility for health, safety, environment and sustainability assurance. He has held senior roles at mining companies, North Limited and at BHP Petroleum's offshore operations. He has a Master of Applied Science in Risk Engineering from Ballarat University, Australia, a Bachelor's degree in Science from Deakin University, Australia, a graduate Diploma in Occupational Hygiene from Deakin University, Australia and a graduate Diploma in Occupational Hazard Management from Ballarat C.A.E.



M SIDDIQI **Head - Projects** 

Mansoor Siddiqi was appointed as the Group Director incharge of projects in September 2011 and has been with Vedanta in a contracting capacity since February 2017. He was formerly Chief Executive Officer, Aluminium and led the establishment of the Group's large aluminium and power projects including BALCO smelters and captive power plants. He also played a key role in setting up the Group's copper smelter at Tuticorin and copper refinery at Silvassa. Mansoor joined our Group in 1991. Prior to joining us, he held senior positions at Hindustan Copper Limited and has 43 years of experience in various areas of operations and project management. Mansoor holds a Bachelor's degree in Technology from the Indian Institute of Technology, Delhi, and a postgraduate Diploma in Management from the All India Management Association, Delhi.



**SURESH BOSE** Director - Chairman & CEO Office

Suresh Bose was appointed as the Director -Chairman & CEO Office in December 2018. Prior to this role, he headed the Human Resources function of Vedanta Group from September 2015. Suresh Bose has 27 years of extensive experience in human resources, 17 of which have been with the Vedanta Group where he has worked across different business units (including aluminium, copper and corporate) in human resource specialist roles. Prior to joining Vedanta Limited, Suresh was associated with HMT Limited, Larsen & Toubro Limited, Ford India Private Limited and Mahindra & Mahindra Limited. He also brings international human resource work experience of four years from Armenia Gold Recovery Company, Armenia. Suresh has a dual Master's degree in Personnel Management and Industrial Relations from Tata Institute of Social Sciences, Mumbai and the Institute of Social Studies, Hague, Netherlands.



**SCOTT CAITHNESS Director - Exploration** 

Scott Caithness has over 35 years of experience within the exploration industry and was appointed Director of Exploration for Vedanta in September 2017. Prior to this, he was the Head of Exploration for HZL from November 2015. Immediately before joining the Group, he co-founded and was the Managing Director of Indian Pacific Resources Limited, an unlisted Australian exploration company. He spent 18 years with Rio Tinto Exploration in various senior corporate and operational roles in Australia, Papua New Guinea and India, which included the establishment of Rio Tinto's first exploration office in India. In addition, Scott has held senior roles at Indophil Resources NL and the Australian Trade Commission. He was previously Head of Exploration for Vedanta from September 2004 to November 2006. Scott has a Bachelor's degree of Applied Science in Geology from RMIT University in Melbourne, Australia.

### **Executive committee**

#### Continued



LAXMAN SHEKHAWAT Director – Operations, Hindustan Zinc Limited

Laxman Shekhawat was appointed as the Director – Operations of Hindustan Zinc Limited in February 2019. He holds a Bachelor's in Engineering in Mining and has been associated with HZL since 1990. Laxman brings 28 years of rich experience and has served in various leadership positions for more than a decade. He has been instrumental in developing and executing strategies to unlock the full potential of mines and bring the best practices to the mining portfolio. He has also been awarded with the prestigious "National Geoscience Award" by the Hon'ble President of India in 2017.



NAVEEN KUMAR SINGHAL Chief Executive Officer – Iron Ore Business

Naveen Kumar Singhal was appointed as the Chief Executive Officer of our Iron Ore Business effective February 6, 2018. Naveen Kumar Singhal has over three decades of experience, 22 years of which have been in the natural resources arena handling various portfolios in metals and mining and cement industry. He joined Vedanta in 2003 and has been instrumental in driving the growth projects in HZL from conceptualisation to commissioning through the best-inclass mining and smelting technologies, mechanisation and automation alongside effective stakeholder management. Prior to joining Vedanta, he had served in leadership roles at Swaraj Mazda Limited, Jay Engineering Company Limited and Andhra Cements Limited. Naveen Kumar Singhal has played a pivotal role in the areas of supply chain management, assets acquisition, business turnaround strategy, general management and project management. Naveen has a Bachelor's degree in Mechanical and Industrial Engineering from the Indian Institute of Technology, Roorkee, Uttarakhand and a Postgraduate Diploma in Industrial Engineering and Management from the National Institute of Industrial Engineering, Mumbai, Maharashtra.



DESHNEE NAIDOO
Chief Executive Officer –
Zinc International

Deshnee Naidoo was appointed as Chief Executive Officer of Zinc International and Copper Mines of Tasmania (CMT) in February 2015. She also held the role of Chief Executive Officer of Africa Base Metals for a period in 2018-19. Deshnee Naidoo has over 21 years of experience in the resources industry including platinum, thermal coal and manganese. Prior to joining the Group, she was with Anglo American as Chief Financial Officer of Thermal Coal in South Africa. She had previously held various technical and commercial positions across Anglo American. She was awarded the JCI/ Anglo Platinum bursary in 1994 to receive a Bachelor's degree in Science (Chemical Engineering) at the University of Natal, Durban, South Africa. She joined Anglo American in 1998 as a trainee metallurgist at the precious metals refinery and over a 16-year span she held various roles including process engineering (corporate office), process control, strategic longterm planning, corporate finance, Chief Executive Officer's office and Chief Financial Officer of thermal coal at Anglo American where her responsibilities included management of two commodity groupings (thermal coal and manganese) across three regions (South Africa, South America and Australia).



**PANKAJ KUMAR Chief Executive Officer -Sterlite Copper** 

Pankaj Kumar was appointed the Chief Executive Officer of our copper operations in Tuticorin, Silvassa and Fujairah Gold FZC and Director of MEL in March 2019. In his career span of over 26 years, Pankaj has worked with large conglomerates like Tata Steel, Mittal Steel, Adani ports, Gujarat Guardian Limited and United Breweries Limited. Prior to joining us, at Sterlite Copper as Chief Executive Officer, he was the Chief Operating Officer of Hindustan Zinc Limited. Pankaj holds a Bachelor's degree in Technology (Hons.) from IIT Kharagpur and a Postgraduate Diploma in Business Management specialising in Operations Management & IT from XLRI Jamshedpur.



**PANKAJ MALHAN Deputy Chief Executive Officer -Electrosteel Business** 

Pankaj Malhan is the Deputy Chief Executive Officer of ESL. Pankaj joined ESL from Tata Steel, where he was working as Head - Engineering & Project at Jamshedpur. In that role, he was responsible for leading Tata Steel's capital expansion programme in the area of iron making. He has been associated with Tata Group since 2000 and has held various senior management positions at Tata Steel, Tata Blue Scope Steel Limited and Tata power Limited. Prior to joining Tata Group, he worked with Indian Acrylics Limited and Fisher Rosemount Limited. Pankaj joined ESL in October, 2018 and holds a B.Tech in Instrumentation and Control from NIT, Jalandhar, and a Diploma in Business Management from XLRI, Jamshedpur.



**ABHIJIT PATI** Chief Executive Officer -Aluminium, Jharsuguda

Abhijit Pati was appointed as Chief Executive Officer of our Aluminium business, Jharsuguda in March 2015. Prior to this role, he was the President and Chief Operating Officer of our Aluminium and Power business at Odisha from April 2012. He has over 30 years of experience in the aluminium industry. Prior to joining us, he was the Vice President with Hindalco Industries Limited. He started his career as a budding engineer with Indian Aluminium Company in 1989. He was awarded with the 'Exceptional Contributor Award' from the Aditya Birla Group Chairman, Mr. Kumar Mangalam Birla for significant contribution to turnaround Hirakud Aluminium Smelter in the year 2006 and won the prestigious British Sword of Honor for the Hirakud Smelter in 1999. He is a member of the Bureau of Energy Efficiency under Ministry of Power, Gol. He also holds the position of Vice President at the Aluminium Association of India and a member of its governing body. He is a two-times gold medallist from prestigious institutes such as Calcutta University and International Management Institute, New Delhi. Abhijit Pati has a First class honours Bachelor's degree in Chemical Engineering from Calcutta University and a Master's in Business Administration from International Management Institute, New Delhi.

### **Executive committee**

#### Continued



VIKAS SHARMA Chief Executive Officer – BALCO

Vikas Sharma was appointed the Chief Executive Officer of BALCO in March 2017. Vikas Sharma has experience of over 30 years in various national and multi-national companies. He has experience of serving HMT Watches Limited, Su-Raj Diamonds India Private Limited, AMP India Private Limited (now Tyco Electronics), Praxair India Private Limited, Jindal Praxair Oxygen Company Limited and JSW Steel Limited in various key positions. Vikas Sharma joined Vedanta Group as Location Head of Chanderiya of Hindustan Zinc Ltd in 2012 and was gradually elevated to be the Chief Operating Officer of the Smelters Division of HZL in June 2014. During his tenure at HZL, he played an integral role in the growth of the Company and made significant contribution in smelter production. Vikas holds a Bachelor's degree with Honours in Mechanical
Engineering from the Engineering College Kota, University of Rajasthan and a Master's in Business Administration in Marketing from Sikkim Manipal University, Gangtok, India



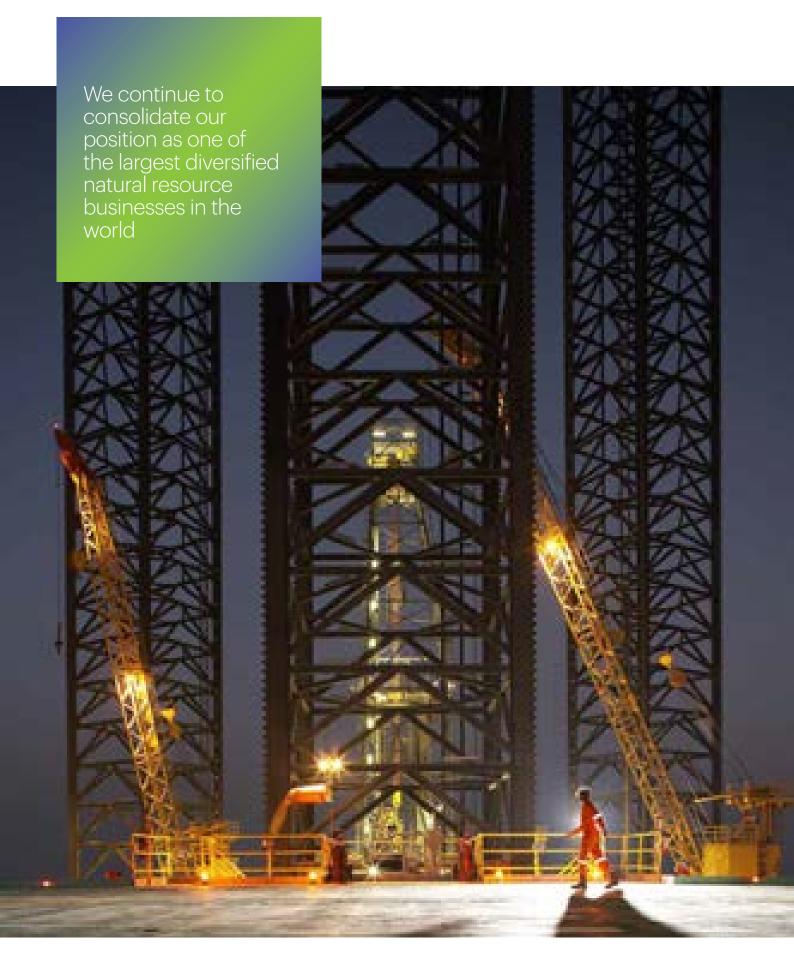
RAHUL TRIVEDI SHARMA
Chief Executive Officer (Acting) –
Alumina

Rahul Sharma joined the Vedanta Group in 1998, and is currently the Chief Executive Officer of Alumina Business, effective April, 2019, prior to which he was working as Director of Corporate Strategy (Aluminium & Power). Rahul is leading the growth and expansion of the Lanjigarh refinery in Odisha to 6mtpa.

He has a varied experience of over 25 years and has held various leadership positions at Vedanta Limited and Sterlite Technologies Ltd. Prior to joining Vedanta, he was the Chief Marketing Officer (Domestic & International) and Business Head-Integrated Management System at Sterlite Technologies Ltd.

He has played a significant role in driving various policies and creating a strategic framework for various government reforms for development of exploration, mining and non-ferrous metal sector in the country in the most sustainable manner.

Rahul is an alumnus of IIM-A's Executive General Management program, and has an MBA in Marketing and a B.E. in Electronics & Communication.



### **Market review**

# Channelling market opportunities for growth

## GLOBAL ECONOMY AND COMMODITY MARKETS

After a strong growth in 2017 and early 2018, global economic activity slowed notably in the second half of last year, reflecting a confluence of factors affecting major economies. China's growth declined following a combination of required regulatory tightening to rein in shadow banking and due to an increase in trade tensions with the United States. The Eurozone economy lost more momentum than expected as consumer and business confidence weakened. Trade tensions increasingly took a toll on business confidence with financial conditions tightening for both emerging and advanced economies, weighing on global demand

As a result, global growth is now projected to slow from 3.6% in 2018 to 3.3% in 2019 as per the International Monetary Fund (IMF).. The current forecast envisages that global growth will level off in the first half of 2019 and then firm up after that. The projected pickup in the second half is predicted due to an ongoing build-up of policy stimulus in China, recent improvements in global financial market sentiment and a gradual stabilisation of conditions in the stressed emerging markets.

Commodity prices rebounded in the first quarter of 2019 from a decline in the fourth quarter of 2018, which had followed an even steeper decline in the preceding quarters. The price increase reflected supply concerns, progress in trade negotiations between US and China and fiscal stimulus in China. Metal prices are expected to continue rebounding from 2018 troughs. Most base metals prices face upside risks from the possibility of tighter than expected environmental policies and slower than expected easing of commodity -specific supply bottlenecks. Oil prices have risen significantly since the start of the year amid a production cut by OPEC and other producers and supply disruptions elsewhere.

#### **OPPORTUNITIES FOR VEDANTA**

Improved momentum for emerging and developed economies is projected to continue into 2020, primarily reflecting developments in economies currently experiencing macroeconomic distress. Growth prospects for advanced economies are likely to plateau somewhat over the medium term, sustained by an increase in the relative size of economies such as China and India, which are projected to enjoy robust growth. This stable global growth is expected to lead to higher demand for metals and oil.

At the same time, supply-side dynamics on zinc are expected to keep its price stable to higher. The zinc market is going through a cyclical shortage with refined metal expected to stay in short supply over the next two to three years as smelters are at full capacity and Chinese smelting capacities are restrained. With no new projects coming online, the market could possibly see concentrate supply issues in the medium term. All this provides Vedanta, a large zinc producer, with a favourable market as we ramp up production.

Recent developments for the alumina refinery companies, bringing the price of alumina down, provide Vedanta with a cost advantage in its aluminium business. As we ramp up our refinery, in the interim period where we remain dependent on imported alumina supply, lower alumina costs will help us keep our aluminium costs under control.

Thus, Vedanta's diversified portfolio and attractive basket of commodities position us well to take advantage of this projected uplift in demand, and the resulting improvement in price outlook.

"The backdrop of positive Indian economic growth, combined with supportive government policies, will strengthen commodity demand in India going forward and support domestic production."

**Below:** We focus on implementing new technologies at our site locations



#### THE INDIAN ECONOMY

India is Vedanta's main market and we believe it has a huge growth potential.

According to the latest IMF Report, India's growth is projected to rise to 7.3% in 2019 and 7.5% in 2020, supported by the continued recovery of investment, and robust consumption amid a more expansionary stance of monetary policy and some expected impetus from fiscal policy. Over the medium term, the IMF expects growth to stabilise at just under 7.75%, based on continued implementation of structural reforms and easing of the infrastructure bottleneck.

The Government has been proactive in introducing major policy reforms for the technology and manufacturing sectors, and in our specific areas of operation we have seen the introduction of the National Mineral Policy 2019, Hydrocarbon Exploration and Licensing Policy (HELP) and the Open Acreage Licensing Policy (OALP). The Government's focus on rural development and job creation, well supported by initiatives such as Make in India and Digital India, have also provided impetus to the economic growth of the country. External confidence in the Indian economy has also been boosted by structural reforms to improve the ease of doing business, strengthen the banking system and improve the capital markets.



#### **OPPORTUNITIES FOR VEDANTA** India-focused growth agenda

The Indian economy remains one of the fastest growing in the world, supported by strong macroeconomic fundamentals and policy changes. This growth could be attributed to the sustained rise in consumption and a gradual revival in investments, especially with a greater focus on infrastructure development. Together with economic reforms, these augur well for a healthy growth path for the economy.

Positive demographic factors such as an increasing workforce and urbanisation are driving a greater need for infrastructure development. Looking ahead, we expect to see continued focus in the infrastructure. transportation and power sectors. This will lead to a rising demand for domestically produced metals. Additionally, there is huge scope of growth in India's significantly low per-capita consumption of all metals including zinc, aluminium, steel and copper when compared to the global average. Indeed, oil consumption in India is less than one-third that of the global per capita figure, providing immense opportunities for growth to the domestic producers.

#### **POLICY SUPPORT**

The Indian Government has recently announced various policy measures to support the metals, mining and oil sectors. The Union Cabinet approved the National Mineral Policy (NMP) 2019, which aims to bring more effective regulation while addressing the issues of those affected by mining. The policy is progressive and seeks to liberalise the sector by opening up opportunities to the private sector that were previously reserved for state-owned enterprises. The policy measures envisage that mineral production in India will grow by 200% and the trade deficit in minerals will reduce by 50% in the next seven years. Furthermore, efforts will be made to benchmark royalties and taxes (which are high in India) with mining jurisdictions elsewhere in the world in order to attract more investment and guarantees that statutory clearances are granted in a timely manner.

In the oil sector, the Hydrocarbon Exploration and Licensing Policy (HELP), aimed at enhancing domestic oil & gas production, has brought substantial investment into the sector and generated sizeable employment opportunities since its implementation. The Open Acreage Licensing Policy (OALP), a critical part of the HELP, enables contractors to explore conventional as well as unconventional oil & gas resources on a revenue-sharing basis with marketing and pricing freedom for the crude oil and natural gas produced. Vedanta Limited won 41 out of 55 oil & gas exploration blocks offered in OALP-1 bidding in 2018.

Foreign direct investment (FDI) in the mining sector, the exploration of metal and non-metal ores and the approval of the MMDR Bill (2011) will provide a more supportive legislative environment for investment and technology going forward. In addition, in the Union Budget 2018/19, the Government added a surcharge of 10% on aggregate duties of customs on imported goods to strengthen the domestic mining industry.

This backdrop of positive Indian economic growth, combined with supportive government policies, will strengthen commodity demand in India going forward and support domestic production. Vedanta, as one of the country's largest natural resources companies, is uniquely positioned to leverage India's growth potential by catering to that demand across its diversified portfolio of commodities. With such a large domestic market, everything we produce in India, we would like to sell in India.

## **Market review**

### Continued







#### Investments in infrastructure drive zinc demand

In a year of volatility, zinc prices fell by approximately 17% to end the year at US\$2,922 per tonne, after peaking at US\$3,540 per tonne in February 2018. Macro-economic factors including fears of a trade war and a slowdown in global economic growth contributed to this fall. However, in Q4, the apparent easing of trade tensions, and production disruptions as a result of floods in Australia accompanied by steep drawdowns in inventories, helped prop up zinc prices. Price increases since then have largely reflected robust demand from China, which accounts for half of global consumption. Against the backdrop of rapidly growing zinc ore production, smelter capacity constraints have driven refining fees (zinc concentrate treatment charges) to near record highs.

### **Products & customers**

Vedanta is the largest zinc producer in India, with a 79% market share in FY2019. Between 70-74% of the refined zinc produced is sold in the Indian market, primarily to steel companies, with the rest being exported to mainly Asian countries and the Middle East to increase the customer portfolio in special high-grade and value-added products. Over 70% of Indian zinc consumption is used for galvanising steel, predominantly in the construction and infrastructure sectors. We also produce zinc for use in die-casting alloys, brass oxides and chemicals. This year we have successfully launched and supplied EPG (electro-plating galvanising) and HZDA (Hindustan Zinc die-casting alloy). Our focus is on increasing the supply of value-added products to 25% of total zinc sales in FY2020, from 16% in FY2019.

Vedanta Zinc's international operations produce refined zinc, which is sold within Africa and exported to Europe and China and concentrate which is exported to traders and refiners internationally.

### Market drivers & opportunities

Zinc market fundamentals remain robust with global zinc consumption expected to grow by 1.5% to 14.5 million tonnes in 2019, while smelter supply will increase to 14 million tonnes and mine supply will likely be 13.9 million tonnes. The growth in consumption in 2019 will mainly come from China and India, as the consumption rate is expected to be low in the US, Europe and Japan due to weak demand, trade tensions and a slowdown in the automotive sector. International trade talks will also have a significant bearing on investor sentiment and consequently on zinc prices going forward. Despite a fundamentally tight zinc metal market, prices may struggle if trade tensions continue.

Primary zinc consumption in India has been steady for the last two years and we may see a rise in consumption of 3-4% going forward. Steel demand in India is forecast to increase at 6.5% CAGR until 2030. Indian zinc demand is expected to mirror this growth trajectory on the back of growth in its major end-use sectors, i.e. automotive, construction, infrastructure and railways. The Government's plan to spend US\$1.5 trillion on infrastructure over the next decade, in the form of new and upgraded railway stations, new airports, road projects, smart cities, electrification projects, renewable energy installations and investment in transmission corridors, will provide a long-term boost to Indian zinc demand.

As most of our zinc is produced and sold in the Indian market, ongoing investment by the Indian government will be the main opportunity for Vedanta going forward. The International Zinc Association is working with government departments to increase zinc consumption in automobiles and railways, thereby bringing more safety and sustainability to the sectors.



#### Demand continues to grow but the outlook is less certain

In line with zinc and other base metals, the lead price was volatile during the year in response to developments in the trade dispute between the US and its trading partners. The price dropped from around US\$2,544 per tonne in early January 2018 and ended the calendar year at US\$2,009 per tonne. Fundamentally, the lead market was favourable with stocks dropping to record lows and limited supply. Lead prices are projected to gradually increase over the remainder of 2019. More stringent environmental regulations in China restricting the recycling of lead scrap materials, which accounts for more than two-fifths of total refined production, presents an upside risk to the forecast. Over the medium term, a shift towards electric vehicles is likely to depress demand for lead, which is heavily used in batteries for internal combustion engine vehicles but not in electric vehicles.

#### **Products & customers**

In India, Vedanta owns and operates a fully integrated zinc-lead production facility and is one of the world's largest integrated zinc-lead producers by volume of those producing only primary metals. The main use for our lead is in lead acid batteries, mainly serving the automotive and telecom sectors. India consumes around 1.1 million tonnes of lead annually, which includes both primary and secondary lead. HZL has a 57% market share of domestic primary lead consumption. HZL's domestic lead supplies increased by 12% in FY2019 against market growth of an estimated 3%.

### Market drivers & opportunities

Demand for lead is expected to increase by 2% this year primarily due to growth in Asia and especially China. HZL is poised to expand its supply base to more end-users, tapping the growth that will be driven by growing production in the automotive sector.







#### **Demand hit as China reduces** subsidies

In a challenging environment, the silver price averaged US\$15.7 per ounce in CY2018. Preliminary estimates point towards a slight increase in total supply in 2018 whereas demand contracted by 3%, primarily due to lower demand from investors. A slowing Chinese economy, coupled with rising US interest rates, an equity market bull run, and global trade tensions affected the price of many commodities, including gold and silver.

#### **Products & customers**

Hindustan Zinc is India's only primary silver producer and ranks 9th globally in terms of the top silver producing companies. We cater to markets including the industrial sector (electrical contacts, solder and alloys, and pharmaceuticals), and the jewellery and silverware manufacturing segment. Our focus is to improve penetration in the domestic market by increasing value-added products such as silver nitrate and silver powder.

### Market drivers & opportunities

Silver prices are projected to remain broadly unchanged in 2019 according to the World Bank's commodity outlook. Jewellery demand and silverware fabrication are rising moderately whereas industrial demand for silver, which accounts for more than half of total demand, remains weak. Tariffs on solar imports to the United States led to a reduced use of silver in solar panels in 2018, and this trend is expected to persist. The use of silver in photovoltaics is expected to decline as it is one of the most expensive components.



## OIL & GAS

#### Indian demand is projected to show robust growth

We saw a year marked by supply-demand fluctuations in 2018, leading to higher than usual volatility and uncertainty in the oil & gas markets. The year saw unprecedented production from the US, production cuts announced by the Organisation of the Petroleum Exporting Countries (OPEC) and US sanctions imposed on Iran and Venezuela. After peaking at US\$85 per bbl, Brent averaged US\$70.7 per bbl in CY2018.

### **Products & customers**

Vedanta is the largest private sector producer of crude oil in India. Our crude is sold to hydrocarbon refineries and our natural gas is used by the fertiliser industry and the power generation sector in India.

#### Market drivers & opportunities

The shale gas revolution will continue to disrupt the oil & gas sector. The US closed out 2018 as the world's largest producer of crude oil and is projected to become a net exporter by 2020. Robust shale growth will take US production to an average of 12.4 million bpd in 2019 and 13.2 million bpd in 2020, which will exert downward pressure on oil prices.

India currently meets 83% of its oil consumption and 46% of its gas consumption through imports. The Indian Government projects a 10% reduction in India's imports of oil & gas by 2022. India remains underexplored, with only seven of the 26 sedimentary basins currently producing oil & gas. Further, re-assessment of India's resource base has increased the country's total hydrocarbon resources (in place) by close to 50%, of which approximately 71% remain undiscovered, providing significant growth opportunities.

In 2018, we saw an increase in the pace of implementation of the Open Acreage Licensing Policy (OALP) in the Indian oil & gas sector, with the launch of the second and third rounds offering 14 and 23 blocks, respectively. In addition, to boost domestic production and provide greater energy security, the Government has introduced a range of new policies aimed at facilitating business and attracting investment.

While global demand is expected to stagnate due to the global economic slowdown and mounting trade tensions, Indian demand is projected to show robust growth, thereby presenting opportunities in the oil & gas value chain.

As a result of the 2018 award of 41 OALP blocks, Vedanta has expanded its footprint to all the major sedimentary basins of India. With a strengthened growth pipeline in exploration and development, the Company is well positioned to meet this increased Indian demand by producing half of the country's crude oil in the coming years.

## **Market review**

### Continued





## **ALUMINIUM**

## **Expanding capacities in smelters and**

2018 was an eventful year in the global aluminium industry, with the imposition of US tariffs on imported aluminium, sanctions on Rusal, production disruptions at Alunorte's Brazil operations and weaker domestic demand growth in China. As a result, aluminium prices were extremely volatile. Prices on the London Metal Exchange fell 23% in the second half to US\$1,800 per tonne from US\$2,290 per tonne in May 2018.

Sanctions imposed on the Russian aluminium producer Rusal in April 2018 were lifted in January 2019. A production embargo on the world's largest alumina refinery, Alunorte in Brazil (which accounts for 10% of global alumina supply excluding China), due to alleged environmental breaches was lifted although the resumption of full production is still awaiting federal court approval. Aluminium production and smelter capacity is expanding cautiously in China where environmental curbs are a little less stringent than expected. Aluminium prices may remain range bound in 2019, depending on the utilisation of capacities in China.

#### **Products and consumers**

Vedanta has the largest integrated smelter in India with 2.3mtpa proposed capacity and is the market leader in primary aluminium with a 37% market share. Our product range includes ingots, primary foundry alloys, wire rods, billets and rolled products.

In FY2019, 30% of our sales were to the Indian market, specifically for use in the construction, electrical and transportation industries. This was lower than in previous years as India saw a surge in imported aluminium in 2018.

Vedanta boosted its sales to Japan and South-East Asia in 2018. International sales to our established customer base in other key Asian, European and North and South American markets also grew, increasing by 30% to 1.3 million tonnes this year.

### Market drivers and opportunities

The domestic demand for aluminium in India is expected to benefit from the infrastructure projects prioritised by the Government. The automotive and food packaging industries are also expected to stoke aluminium growth. Furthermore, rapid urbanisation should augment consumer demand; yet another positive for the sector. Moreover, the per capita aluminium consumption is far below the global average. This offers huge potential, given our demographic and economic outlook.

With a production capacity of 2.3 million tonnes, Vedanta is in pole position to take advantage of these opportunities.





## **POWER**

#### **Growth in Indian demand driving** capacity increases

Vedanta operates a 9GW diversified power portfolio in India consisting of 96% thermal power and 4% from renewable energy

India is the third largest electricity producer in the world. The electricity generation target for conventional sources for the FY2019 has been fixed at 1265 billion units (BU) which represents growth of 4.87% over the previous year FY2018. Between 2010 and 2018 electricity production in India grew at a CAGR of 5.69%, driven by government initiatives and schemes to increase electrification across rural India. Since last April all villages in India have had an electricity connection.

#### **Products and consumers**

Of Vedanta's power portfolio, 37% is used for commercial power while 63% is for captive use. Nearly 95% of the power generated for commercial purposes is backed by long-term Power Purchase Agreements with local Indian distribution companies.

### Market drivers and opportunities

Demand for power in India is expected to grow rapidly from 691TWh in 2007 to 1894.7TWh by 2022, at a CAGR of 7%, driven predominantly by the expansion in industrial activities, a growing population, rising per capita incomes, policy support and increasing electricity penetration. The Government has also been supportive of



growth in the power sector, delicensing the electrical machinery industry and allowing 100% Foreign Direct Investment (FDI). From April 2000 to June 2018, total FDI in the sector was US\$14.18 billion of which US\$6.84 billion was invested in nonconventional sources. In the wake of surging domestic coal production, the country's power sector is becoming increasingly stable. In addition, in February 2018 the Government permitted commercial mining for thermal coal, which will improve India's self-sufficiency and reduce coal and logistics costs.

As of December 2018, India had total installed capacity of 349GW, of which thermal constituted 223GW, nuclear 7GW, hydro 45GW and renewables 74GW. Total captive power installed capacity stood at 84GW India currently has a demand/supply gap of around 7.5% and is targeting an additional 58GW of conventional power by 2022. The target for renewable energy has also been increased to 175GW by 2022, of which 100GW will be produced through solar power. Vedanta's power portfolio is well positioned to capitalise on India's growing demand for power.

## IRON ORE

## Iron ore prices lift in the last quarter of 2018

The Platts 62% Fe CFR North China Index – the price at which most iron ore across the globe is sold – rallied by 9% y-o-y in Q4 to average US\$71.4 per tonne. The price, which was sluggish over 2018 compared to rising steel and high-grade iron ore prices, has increased owing to various factors including a delay in implementing China's winter production cuts, temporary weather-related disruptions in Australia and safety outages in Brazil. The price was also supported by falling steel margins, which reduced the incentive to use high-grade ores in steel production.

#### **Products and consumers**

Iron ore is a key ingredient in steel, which is ultimately used in the construction, infrastructure and automotive sectors.

Our iron ore mining operations ceased in Goa from March 2018, pursuant to the Supreme Court order. Meanwhile, the permitted mining capacity at Karnataka has recently been increased to 4.5 million tonnes from the previous 2.29 million tonnes

#### Market drivers and opportunities

Unexpected events impacted the sector during the year. The major tropical cyclone 'Veronica' hit Australia, knocking six to eight million tonnes off BHP Group's production, while Rio Tinto is expected to lose about 14 million tonnes of output. The loss of these exports came at a time when the market was having to reassess the longer-term impact of Vale's safety issues. The tailings dam breach is expected to have a major impact on the use of tailings dams in Brazil, with tighter restrictions on wet beneficiation and prolonged licensing processes as a result. Weather-related disruptions may cause a short price spike, but Vale's safety issues appear to be almost structural. This means the supply gap will have to be met by other producers. India's exports almost doubled in March, but only to 1.3 million tonnes. This provides a huge opportunity to players who can step in and ramp up quickly.

In addition, world steel production is forecast to continue increasing by 1.8% annually from 1,689 million tonnes in 2017 to 1,780 million tonnes in 2020, led by growth in India and other emerging markets. Production in China – which represents half of world production – is expected to taper in 2020, driven by an expected slowdown in economic growth, which will offset higher infrastructure investment. This growth in steel production in India represents an opportunity for Vedanta to grow its domestic iron ore sales.

## **Market review**

### Continued





## Construction sector boosting steel demand

Global crude steel production reached 1,808.6 million tonnes for the year 2018, up by 4.6% compared to 2017. India's crude steel production was 106.5 million tonnes, up by 4.9% in 2017, meaning that India has replaced Japan as the world's second largest steel producing country. While the steel demand recovery seen in 2017 continued in 2018, risks have increased. Rising trade tensions and volatile currency movements are increasing uncertainty. As a result, steel prices are expected to experience volatility in 2019. But India's steel demand is expected to move back to a higher growth track, supported by improving investment and infrastructure programmes.

India's steel use per capita for finished steel products stood at 66.2kg, way below the world average of 212.3kg, suggesting a huge unrealised potential for steel demand growth. Recently, India has been trying to unleash this through an extensive reform agenda and an ongoing push for infrastructure development. These factors, along with favourable demographics, are improving the macroeconomic fundamentals.

India was a net exporter of steel in the last two financial years. However, the country witnessed a change in the current financial year with imports exceeding exports during the period April to December 2018.

### **Products and consumers**

Vedanta Limited completed the acquisition of Electrosteel Steels Limited (ESL), an integrated steel plant, on 4 June 2018. ESL saw production increase by approximately 17% in FY2019 compared to FY2018. Wire rod, TMT and DI pipe products were sold in India, mainly to the construction, infrastructure and automotive sectors.

### Market drivers and opportunities

The construction sector has been identified as a pan-India steel demand driver, on the back of strong infrastructure development and housing demand; in particular, for affordable housing. Projects such as industrial corridors (connecting existing industrial cities and developing manufacturing sectors) and Sagarmala (connecting states through waterways) will increase India's connectivity, reducing the costs of transportation across Indian states. The Smart Cities initiatives will further boost urban infrastructure investment. There are currently 99 smart cities planned across India.

In addition, the outlook for India's manufacturing sector, which has been lagging behind the service sector as a growth driver, should improve. Firstly, the Make in India initiative, which aims to transform India into a global design and manufacturing hub, will support the further development of steel. Secondly, many states are expected to develop automotive and ancillary industries, to be a global auto hub for small cars with a focus on exports. Finally, some states are also expected to strengthen their mechanical machinery sectors.

All these factors point to a high potential for steel demand growth in India. The speed with which this potential can be realised will depend on whether India can successfully implement both its reform agenda and infrastructure plans.





## **Consumption in India and China fuelling demand**

Refined copper consumption grew by 2.9% in 2018 while demand in China, the largest consumer of copper increased by 4.9%. However, the tariff dispute between China and the US, and the falling GDP in China, led to increased market uncertainty and falling copper prices during the year.

On the supply side, India faced a crunch in the availability of refined copper due to Vedanta's Tuticorin smelter closure. Chinese smelter output increased by 4.2% in 2018, despite the closure of some smelters for maintenance during Q4. In Chile, new environmental regulations led to smelters closing for maintenance, resulting in a further supply crunch.

### **Products and consumers**

Refined copper is predominantly used in manufacturing cables, transformers and motors as well as castings and alloy-based products.

The Tuticorin smelter closure affected our production in India. In FY2019, we produced approximately 90kt of cathode.

### Market drivers and opportunities

In the coming year, copper consumption in India and China is expected to increase by 11.8% and 1.6% respectively. This rise is driven by population growth, urbanisation, the rise of the middle class and the evolution of electric vehicles (EVs) and is supported by government measures and initiatives. Another major driver of Chinese demand is the ban on Category 7 scrap imports.

On the supply side, there could be further disruptions in copper production due to the smelter upgrades in Chile following the introduction of new environmental regulations.

Our ability to take advantage of these opportunities is largely dependent on the re-opening of our smelter at Tuticorin.







We believe that with our thrust and focus on sustainability, we can advance both our business outcomes and those of the people, host communities and the environments surrounding us.

Note: Due to its recent acquisition, numbers from Electrosteel Steels Limited (ESL) have not been included in the HSE & Sustainability numbers for FY2018-19. They will be included from next year's reporting cycle.

Over the years, Vedanta has grown to become one of the largest diversified natural resources companies in the world. Our Group has interests in zinc-lead-silver, oil & gas, aluminium, power, iron ore, steel and copper. All are mature, high-performing businesses in their own right with well-developed governance, HSE and community relations management systems.

Throughout our growth journey, we have remained focused on safety and sustainability, alongside our commercial goals of increasing volumes, becoming the lowest-cost producer, and improving margins. As a Group, we have sought to embed a standardised, high-performance sustainability culture across all our businesses while giving each the autonomy to make day-to-day decisions. Against this backdrop, we introduced the Vedanta Sustainability Framework (VSF) in 2011. Its goal has always been to ensure that each business integrates our sustainability principles into their operational and decision-making structures.

Main picture: Green cover at Cairn operations Inset: Project Samadhan at HZL: Promoting integrated farming systems and livestock development

**KEY STATISTICS:** 

.1 million

mmunity beneficiaries of Vedanta's cial activities

58.6 million mt Carbon footprint (2018: 52 million mt)

Water recycling rate 2018: 30%)

2.3 million m<sup>3</sup> of water saved (target: 1.5 million m<sup>3</sup>)

1.4 million GJ of energy conserved (Target: 2 million GJ)

₹309 crore



## **Sustainability & CSR**

# Growing responsibly

To enhance our governance on sustainability, the Company has recently constituted a Board-level committee for sustainability, which sits alongside the existing CSR committee. The Charter for the committee requires it to ensure that the Group performance is in alignment with the polices, standards, and guidelines drafted in the Vedanta Sustainability Framework. It is also expected to advise the Board on emerging sustainability trends so that the Company can strategically address the issues in its long-term planning.

Our central oversight bodies, including the Board and Group executive committees, set performance expectations that include sustainability metrics, and ensure that we comply with global environmental social governance (ESG) considerations. Based on this guidance, the individual businesses set their own strategy, technology deliverables, production outcomes, sustainability measures and other goals.

We are driven to achieve world-class ESG performance and this ensures that sustainability issues are central to Group-level decision-making.

During the year, we have continued to make progress against our priorities and achieve positive results in some areas, while reviewing how we operate in others and taking steps to improve outcomes for our stakeholders.

## RESPONDING TO MATERIAL CONCERNS

Our continuous engagement with internal and external stakeholders enables us to keep a finger on the pulse of the expectations they have. Their views serve as valuable input to our management group and help it to define the material issues for the Company.

While we continue our efforts to improve our systems and their performance in all the key issues identified, based on the external and internal stakeholder feedback, the following areas have emerged as being the most material in the last year demanding either management or stakeholder attention:

- · the safety of our workforce;
- environmental management;
- retaining our social licence to operate

- (including community engagement & development initiatives, and human rights); and
- people management for talent retention, diversity of our workforce and providing equal opportunities to all.

Our sustainability roadmap sets out our targets and tracks performance on the key material issues.

We will be updating our materiality matrix at the beginning of FY2020.





Objectives and targets FY2019	Status	Performance	Target FY2020
The safety of our workforce			
Achieve score >75% in six safety performance standards	(N)	Average score achieved was 61%	Achieve score >75% in 10 safety performance standards
Zero fatal accidents and an LTIFR of 0.30	M	Nine fatalities; 0.46 LTIFR	Zero fatal accidents and an LTIFR of 0.30
Environment management			
Achieve water saving of 1.5 million m <sup>3</sup>	×	2.3 million m <sup>3</sup>	Achieve water savings of 2.5 million m <sup>3</sup>
Achieve fly ash utilisation of 75%	<b>*</b>	111% 1	Achieve fly ash utilisation of 80%
Continue our reduction in GHG intensity and formalise our target	(*)	14.6% reduction; on-track to achieve the target	Reduce our GHG emissions intensity by 16% from a 2012 baseline by 2020
Achieve 2 million GJ in energy savings	$\overline{\bigcirc}$	1.4 million GJ	Achieve energy savings of 1.75 million GJ
Develop our capability and strengthen tailing management practices across the Group	•	Audits completed; recommendations under consideration	Third-party review of tailings/ ash dyke management system and development of site specific improvement plan (India operations)
Retaining our social license to operate			
Complete the baseline and social impact assessments in all businesses	<b>(*)</b>	Completed	Ensure alignment of all BU plans with issues identified during baseline surveys
250 Nand Ghars to be constructed in FY2019, and planning for additional 1,000 to be completed	<b>(</b>	358 Nand Ghars constructed. Planning for additional 1,287 completed.	1,200 Nand Ghars to be constructed in FY2020
Develop a standard policy on employee engagement for the Group	$\overline{\bigcirc}$	Under progress	Roll out of employee engagement platform across the Group
			A standard on-line community grievance record/redressal software (NIVARAN) across the Group
People and diversity			
Continue to focus on Code of Conduct training for all professional employees, including new hires	(*)	100% of new employees trained; existing employees are given online training annually	Continue to focus on COC training for all professional employees including new hires
Achieve 33% female representation at Vedanta Board level by 2020	<u> </u>	Work in progress. 20% of the Vedanta Board is female.	Achieve 33% female representation at Vedanta Board level by 2020
Focus on anchoring and engagement of high-potential	$\overline{}$	Under progress	Diversity % improvement in
employees through our flagship programme V-Connect		Initiative is directly anchored by the business leadership team through their respective HR teams. It ensures that our professional population is anchored by senior leaders across the BUs.	our campus hiring programme by 5%
Focus on Right Management-in-Place in each SBU	$\overline{}$	There are 41 SBUs in place, each led by a SBU president. SBU Management-in-place is regularly reviewed by the Group Chairman and Group ExCo	Ensuring the right ExCo & succession for each business

<sup>&</sup>lt;sup>1</sup> The number exceeds 100% as we were able to utilise our legacy fly-ash waste for internal infrastructural development projects.

## **Sustainability & CSR**

#### Continued

## A STRUCTURED APPROACH TO SUSTAINABILITY

The Vedanta Sustainability Framework is central to our sustainability agenda, and is focused on our four strategic pillars:

### 1. Responsible stewardship

We are committed to safeguarding our resources by monitoring, managing and improving the Group's health, safety and environmental performance. Our vision for 'Zero Harm, Zero Waste, Zero Discharge' is the desired outcome of this approach.

Focus areas: Code of Conduct, ethics, health, safety & environment

#### 2. Building strong relationships

We maintain an open and continuous dialogue with our stakeholders. Our goal is to ensure that we align our business planning, community relations and CSR programmes with stakeholders' needs, maintaining and strengthening our social licence to operate.

Focus areas: stakeholder engagement and management; human rights, neighbourhood dialogue

#### 3. Adding and sharing value

We drive economic empowerment and generate shared value through significant and relevant investment in local communities and national economies.

Focus areas: employees, communities, business investments

#### 4. Strategic communications

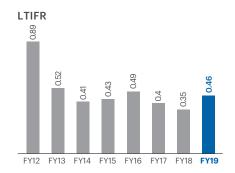
We are committed to transparent and timely disclosure that builds trust. We\_believe that clear and regular communication and dialogue with all our stakeholders helps to create a positive environment for successful operations.

#### **RESPONSIBLE STEWARDSHIP**

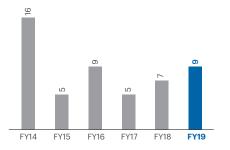
It is critically important to us that we take care of the health and safety of our workforce. We also seek to tread as lightly as we can to minimise the environmental impacts on those who live around us, and to protect natural resources.

#### The safety of our workforce

Despite our continued efforts to improve the safety systems across the Group, this year saw the tragic loss of nine of our colleagues in work-related accidents. Alongside identifying root causes, plugging existing gaps, training the workforce and management in identifying safety hazards and making better risk decisions, our leadership team has put its own roles and responsibility under a microscope. A key area of focus has been the practice of Visible Felt Leadership on safety, which requires all leaders to spend more time on the shop floor, identifying and correcting unsafe acts. In addition, the team will shift its attention to monitoring leading indicators, such as time-spent-on-field, safety interactions, checking and managing critical safety risks, and proactively engaging with long-term business partners on their safety performance.



#### **FATALITIES**



Below: Safety is paramount at each step

We are driven to achieve world-class ESG performance and this ensures that sustainability issues are central to Group-level decision making.



#### Chetna - a programme to raise safety consciousness

We are determined that if any safety incident occurs, we learn from it and use its lessons to prevent any repetition.

An analysis of past incidents revealed that many could have been avoided if workers had been more aware of their surroundings and practised safe behaviours. BALCO launched 'Project Chetna' (Project Awareness) to coach, assist and train the workforce in recognising warning signals, remaining focused on their task, and applying known, safe behaviours that can help prevent accidents.

The programme has trained over 1,600 employees and 1,100 contract workers, and made safe actions and safe behaviours clearer. As a result of this focus, the LTI frequency rates have nearly halved from the previous year.

#### Daily 'visual management' making issues visible

At the Lanjigarh refinery, the team has adopted a concept from the automotive industry. They now have a visual management system, with the idea of making key business processes literally visible.

This approach helps management teams to identify any bottlenecks that need to be resolved and eliminated in order to run a successful refinery. A key part of this approach is to resolve problems and barriers in a structured manner.

All sections in the plant area are assigned boards that detail:

- · the safety measures required;
- · focus areas for safety interactions;
- places where housekeeping inspections will occur; and
- the high-risk tasks for the day and their corresponding control measures.

The boards also cover all the actions being undertaken during the day, with a specific focus on identifying any unplanned activities and/or risks in the operational area that may impact the refinery. They also flag any maintenance activities that may need to be performed over the next 24

The final assessment involves identifying risks that the section may generate due to its activities at the 'one-week-out' stage, enabling advance planning to mitigate

This has allowed the plant managers to systematically identify and address risks to the plant and eliminate safety hazards.

This approach underlines the overall philosophy of the Group when it comes to running safe operations. While our safety performance standards outline the expectations and help set out guidelines to prepare standard operating procedures, it is practices such as these above that are helping businesses implement safe working conditions.

Additional practices such as Visible Felt Leadership, improving the management of safety critical tasks as well as increasing the awareness, training, and accountability of our business partners will help the Group to deliver on its commitment of 'zero harm'.

## Statistics for health and safety

- 1.5 million man-hours of HSE training delivered
- 94 LTIs and nine fatalities in FY2019

#### Managing our environmental performance

Vedanta is committed to minimising the Group's environmental footprint. To do this we have embedded efficiency goals across the organisation focused on lowering our airborne emissions, reducing our waste and effluent volumes, and optimising the use of energy and water. We have also taken measures to protect the biodiversity of our operational regions.

The Vedanta Sustainability Framework (VSF) comprises comprehensive policies and standards on water, energy and carbon, waste and biodiversity. The framework, combined with objectives and targets on energy, GHG, and waste & water

businesses follows the same high standards of environmental management.

#### **Tailings dam management**

Tailings dams and ash ponds are inherent in mining operations. However, as the recent Vale disaster in Brazil has demonstrated, if breached they can pose a significant threat to neighbouring communities as well as damage the environment.

At Vedanta, our principal concern is the safety of the people who live downstream from our dams. Over the last 18 months, the Company has taken active measures to improve the management of our dams and ponds. These started with an independent assessment, and over the last year we have brought on board the global experts Golder Associates to review the integrity of our dam structures and their associated management practices. The review has been completed at all our dam locations and we are now reviewing the recommendations for implementation.

The Company has also introduced a Tailings Dam Management Standard to ensure that all our Group companies follow consistent international best practices.

Findings from the review were also supplemented by measures to prepare the dams for the monsoon season, which could experience overflow conditions in the event of heavy rainfall.

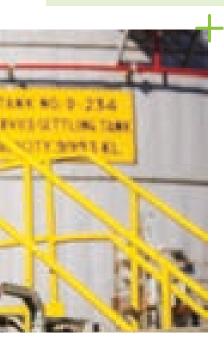
Other steps we have taken to improve oversight include daily/weekly checks (as required); revising the risk matrix; introducing online surveillance systems; conducting liquefaction analysis; enhanced training for all key personnel; improved documentation; quarterly dam-state reviews by senior management; and developing a closure plan for all facilities.

Although there is still much to do, we believe we have initiated a structured management approach that will minimise the risk of a future dam breach.

#### Water management

Managing water effectively is critical, both for our operations and for the communities who live near us. By understanding how we source and use this resource, our businesses can de-risk their operations from unplanned stoppages caused by supplies drying up.

Last year, we performed a water risk assessment at 25 of our most significant business locations. This determined the risk based on water-stress information available in global and public databases and from site-specific measurements. The



## **Sustainability & CSR**

### Continued

As a responsible corporate citizen, besides the many environmental initiatives, we continue to positively impact the local communities in the areas where we operate. Women and children remain our focus and our efforts benefitted 3.1 million people across 1,169 villages in FY2019.

approach evaluated physical, social/ regulatory, economic and business risks related to water. In addition to understanding each location's risk, our goal is to standardise this risk assessment across our Group companies.

Our findings confirmed how our operations in the high water-stress regions of India (Rajasthan, Punjab, Tamil Nadu) had a greater risk of shortages over a period of time than our businesses in other locations. This is because of competitive pressures for water usage in those regions. Each of our businesses has started to put in place appropriate mitigation measures to counter these risks.

	FY2019	FY2018	FY2017
Total water consumption (million m³)	243.44	241.66	241.56
Water recycled/reused (million m³)	66.99	71.70	64.65
Water recycled (%)	27.52	29.67	26.76

#### **Energy and carbon management**

Our energy and carbon management adopts a two-pronged approach: improving energy and process efficiency, and diversifying our energy portfolio to include renewable energy. We are committed to invest in new technologies and processes to enhance our energy efficiency.

Energy consumption (million GJ)	FY2019	FY2018	FY2017
Direct energy consumption	483.90	424.94	411.95
Indirect energy consumption	62.59	14.34	9.07
Total energy consumption	546.49	439.28	421.02

#### Climate-related business risk

Climate change continues to pose an even-greater risk to the planet. India, which has set ambitious targets to reduce its carbon intensity by 33-35% by 2030, and to source 40% of its electricity from non-fossil sources, continues to push ahead to meet those targets. Vedanta's continuing commitment to decrease our climate change impact is delivering measurable results. Last year we said we expected to reduce our GHG intensity by about 16%, from a 2012 baseline, by 2020. We are on-track to meeting this target. By FY2019 we had achieved a reduction of 14.6%.

GHG emissions (million tCO₂e)	FY2019	FY2018	FY2017
Scope 1 (direct)	55	51	51.7
Scope 2 (indirect)	3.5	1.2	1.4
Total	58.5	52.2	53.1

#### Improving efficiencies in the aluminium potline at Jharsuguda

The smelting process to produce aluminium is executed in pots. In Smelter 1 there are 600 pots in the pot room. Smelting is a continuous process and cannot be stopped and started frequently. The rectifier, which provides DC power to the potline for the electrolysis process, is therefore key to the smelting process.

The rectifier converts AC current to DC. During the project initiation phase the rectifier conversion ratio was measured at 98.32% efficiency. The target set by the team was to drive efficiency up to 98.50% as this could result in substantial cost and energy savings.

Through observation, data and experience, the team identified that some initial quick-wins could be achieved by modifying specific processes, such as cleaning of the heat exchanger in the rectifier units, optimisation of the de-mineralised water-flow, and the cooler slot.

#### **Outcome**

These operational and process improvements, such as scheduled calibrations, changing nuts and bolts during overhaul, and dismantling electrolysis plates, led to enhanced efficiency of 98.5%, and savings of:

Energy saving 6.9 million units per annum

Coal consumption reduction 4800 tonnes Carbon dioxide reduction 7040 tonnes

#### Air quality

We are committed to identifying and managing our airborne emissions. We monitor particulate matter (PM) and SOX as part of our ambient air quality process. We also monitor as applicable lead and fluoride emissions from our operations.

Stack emissions (in MT)	2018-19	2017-18	2016-17
Particulate matter	8,862	8,414	9,296
SOX	242,234	189,823	174,340

#### Waste

To comply with our 'Resource Use and Waste Management' technical standard, we first reduce our waste, in quantity as well as quality (reducing the toxicity), and then recover and recycle where possible (either in-house or through authorised recyclers). The final stage is disposal in landfill or by incineration, using authorised, licensed and secured landfills.

Non-hazardous, High-Volume and Low-Effect wastes such fly ash, red mud and phosphogypsum are the predominant wastes generated from our operations. Hazardous waste includes used/spent oil, waste refractories, aluminium dross, spent pot lining and residual sludge from smelters.



#### **HINDUSTAN ZINC: COMMITTED TO ACHIEVE ZERO WASTE**

Responsible waste management is a fundamental priority across all Vedanta businesses. At Hindustan Zinc this requires particular management focus since the refined metal represents only around 8% of the lead-zinc mineral ore.

The business applies the '4R' waste strategy - reduce, re-use, recycle, & reclaim - and disposes of any residual waste through most eco-friendly avenues available.

### Reduce - Fumer: preventing waste at source

In recent years Hindustan Zinc has been converting Jarosite, a major waste from zinc smelters, into a non-hazardous material by using state-of-the-art 'Jarofix' technology. We are now about to go a step further by adopting 'Fumer' technology, stopping the generation of jarosite at the source itself, and recovering metals from waste while generating slag to be used by cement industry.

The first zinc Fumer project, scheduled for FY2020 at Chanderiya, will have a waste treatment capacity of 160,000 MT per annum. The project will advance our goal of zero solid waste and will reduce our land requirement for Jarofix storage by one hectare annually. Fumer plants are also planned at other smelters in Chanderiya and Dariba.

### Re-use - Turning tailings into fillings

Tailings are the materials left over from separating the valuable fractions of ore from uneconomic waste. They are usually managed through surface disposal in lined pits, but these require huge land areas.

However, instead of disposing of tailings, we have started a unique trend in mining in India with the successful commissioning of 'paste-fill' plants at our Sindesar Khurd and Rampura Agucha mines. Mining operations require filling of stopes/voids to ensure stability and to control subsidence. Traditionally this has been executed by using hydraulic filling with cement, but a new concept is to use paste-fill technology in which the tailings are modified into a semi-solid paste which is then used to fill the empty underground voids. The paste filling process is fast and uses almost all the tailings, minimising the need for surface disposal.

With the successful commissioning of paste-fill plants at Sindesar Khurd and Rampura Agucha, along with the existing facility at Rajpura Dariba Mine, we will reuse more than 60% of our tailings and avoid surface disposal. This will increase the life of the tailing dams and save hectares of additional land required for expansion of these dams.

### Innovating to use smelter waste in cement and highway construction

For several years, we have also partnered with reputable R&D organisations and corporates to use slag in cement and highway construction. This has received approval by the Bureau of Indian Standards and the Indian Road Congress. In FY2019, over 300,000mt of slag was used in cement manufacturing and road construction. This freed up several hectares of land for alternative uses, replaced virgin red ochre and limestone and reduced CO2 emissions.

Below: Geotextile laid on dump slopes for dump stabilisation at Codli mine



## **Sustainability & CSR**

### Continued

Similarly, based on studies conducted by various government organisations, Jarosite and Jarofix have been determined to be commercially viable for usage in cement industry and road construction. In FY2019, over 13,000mt of Jarosite was used in the cement industry while over 70,000mt of Jarosite and Jarofix were used in road construction projects.

#### Recycle - Waste to wealth

Our ancillary product plant at the Dariba Smelting Complex is an important 'waste to wealth' initiative that generates value from certain recycling activities. The plant treats smelting residues to produce key consumables such as copper sulphate, zinc sulphate and potassium antimony tartarate, which will be recycled back into beneficiation and smelting processes.

Following its success, a new ancillary unit, expected in H1 FY2020, is under construction at the Chanderiya lead zinc smelter to treat all smelting process residue, including work-in-progress material such copper dross, purification cake, antimony dust and cadmium sponge.

## Reclaim - Wastelands hosting solar farms

Wherever we need to occupy land for mining and smelting waste, we are ensuring it is put to maximum use. We have used the Jarosite pond at the Debari smelter, the old tailing dam at the Dariba mine and the waste dump at Rampura Agucha to double up as solar farms. We have installed 38MW of solar generation there that would otherwise require an additional footprint of 190 acres.

In addition

- We have rehabilitated an old tailing dam after stabilising the tailings and then planted more than 150,000 trees over a 38 hectare area. This first of its kind project was undertaken jointly by HZL, Dept. of Bio Technology (GoI), NEERI and the Nagpur & Swedish International Development Agency.
- We also have initiated 'Zinc Football' a unique programme in India. At the heart of this initiative is the Zinc Football Academy at Zawar, a residential world-class football coaching facility. This facility was converted from old tailing dams, and today gives hand-picked kids, chosen from 4,000 aspiring footballers from all over Rajasthan, opportunities and guidance to be developed into professional footballers alongside their academic education.

## STATISTICS FOR ENVIRONMENT Successes:

- We recycled 94% of High-Volume and Low-Effect waste in sustainable applications.
- We saved 2.3 million m³ of water against targeted savings of 1.5 million m³.

#### Work in progress:

- We conserved 1.4 million GJ of energy against targeted savings of 2 million GJ.
- Our GHG intensity reduction target, from a 2012 baseline is 14.6% against an expectation of 16%, by 2020.

# **BUILDING STRONG RELATIONSHIPS Human Rights**

We regard upholding human rights as a fundamental responsibility, and this is brought into particularly sharp focus given that most of our operations are performed in developing countries. It is a material consideration across all our business decisions.

Our Human Rights Policy is aligned with the UN's Guiding Principles on Business and Human Rights, and includes strict prohibition of child or forced labour – either directly, or through contract labour. These are non-negotiable offences at Vedanta and we have mandatory systems in place to enforce this policy at all our operations. Further, we carry out periodic inspections of our remote mine locations and require proof of age for all contract workers.

Additionally, our Code of Business Conduct and Ethics underpins our approach to protect the fundamental rights of all our direct and indirect employees, communities and immediate supply chain.

We uphold our workers' right to freedom of association. The collective bargaining agreements are based on transparent and fair discussions between the management and union representatives. Vedanta's Suppliers' Code of Conduct is implemented as part of the terms and conditions of supplier contracts across the Group and all new suppliers are required to sign, endorse and practise this Code.

We also operate a Supplier & Contractor Sustainability Management Policy. Both the Code and the Policy clearly communicate our expectations of suppliers: to comply with all relevant legislation and follow our policies while executing work for Vedanta, or on our behalf.

# Adding and sharing value

Our operations are mainly located in the emerging economies of India, South Africa, Namibia and Zambia. We believe that we have an important role to play in developing societies and communities where we operate, enabling them to share in the value we collectively create.

Below: Captive Power Plant at Chanderiya Smelting Complex





**Above:** Nand Ghar: Supporting early childhood education

#### Our approach

We are committed to giving back to the stakeholders who play a vital role in powering our growth. Reducing the social and economic divide through generating economic value, distributing wealth, investing in employees and enhancing standards of living are all key elements of the Vedanta Sustainability Framework. We not only drive economic growth through taxes, royalties, wages and supplier contracts, but our operations also help to provide the products these communities need to further their development; for example, through infrastructure and housing.

#### **Communities**

Vedanta works towards a larger goal of creating enduring value for the communities from where it operates. Proactive engagement with communities helps to resolve concerns they may have about our operations. It also allows us to understand their expectations of the Company, and so help us develop a comprehensive engagement strategy. This strategy includes creating opportunities for employment, using the services of local vendors, and implementing focused CSR and community development activities. Collectively, these actions allow us to create a positive social impact. In some instances, like at Tuticorin, local stakeholders have sought to withdraw their social licence to operate, resulting in a stoppage of our operations. When we encounter such situations, our teams have taken a step back and sought to understand the root cause of the discontent. Steps have been taken to modify our response and engagement with the communities - with increased stakeholder interactions, review of our policies and procedures, and where required, steps to respond to stakeholder concerns.

The majority of our initiatives are identified, developed and carried out in collaboration with local government bodies and community organisations. They are also in alignment with the needs of the communities, and the Company has committed to align its CSR activities to the priorities of its neighbourhood communities & also national/international priorities including the Sustainable Development Goals. Almost all our programmes follow a bottom-up community engagement approach. This collaborative approach ensures community ownership, suitable project design, effective delivery and post-project sustainability. Apart from communities,

we also strongly believe in partnering with government agencies, corporates, civil society organisations & community-based organisations to carry out durable and meaningful interventions. This '4Ps' model (public-private-people-partnership) has inspired us to participate in ambitious long-term projects such as the Nand Ghar initiative.

All our CSR programmes are governed by the Vedanta CSR Policy, and Corporate Technical Standards that are part of the Vedanta Sustainability Framework. Further, in order to benefit from diverse perspectives, and in keeping with a culture of collective leadership, Vedanta has formed a CSR Council. The Council is led by a senior business leader and comprising CSR Heads & CSR executives from the different Business Units. The Council is responsible for governance, synergy and cross-learning across the Group CSR efforts. It meets every month and reviews the performance, spends and outcome of CSR programmes for all Business Units. The Council is instrumental in implementing improvement projects to create a seamless enabling eco-system for Business Units to carry out best-in-class community development programmes.

Vedanta has a strong Board CSR Committee, which includes senior Independent Directors. The Committee provides strategic direction for CSR activities, and approves its plans and budgets. It also reviews progress and guides the CSR Teams towards running well-governed and impactful community programmes.

In FY2019, Vedanta spent ₹309 crores on social investments and CSR activities. This is 26% more than the previous year's ₹244 crores. This money is spent across 1,169 villages, benefiting nearly 3.1 million people.

#### **Project updates**

#### 1. Nand Ghar and Children's Well-being Projects

The importance of education for social growth and upliftment is undisputable and for Vedanta this is a very important pillar of its work with communities. Our various education and childcare initiatives have reached over 145,000 children.

## **500 Nand Ghars: Preparing India's**

Vedanta's Nand Ghar 'anganwadis' have been designed to support the Indian Government's Integrated Child Development Services (ICDS), a flagship programme for child and maternal health.

These rural child-health centres provide a community social hub and access to services that every young child needs. They provide early years education, nutritious food, safe play areas and television for interactive learning, and are equipped with rooftop solar panels for 24x7 electricity, water purifiers and clean layatories

Healthcare services are also delivered by a visiting mobile health van, and importantly the centres also give local women access to a range of opportunities to learn new skills.

During FY2019, Vedanta opened its 500<sup>th</sup> centre, at Chaksu Block in Jaipur, and to date there are 502 operational Nand Ghars across Rajasthan, Uttar Pradesh and Madhya Pradesh, transforming the anganwadi landscape of India. The initiative is delivering impact at scale, with more than 17,000 children receiving pre-school learning with advanced teaching methods, and over 11,000 enjoying nutritious meals every day.

## **Sustainability & CSR**

### Continued

While this 500<sup>th</sup> is a major milestone, we have greater ambitions: Vedanta is working to open 4,000 Nand Ghars across India. The project ultimately aims to impact 85 million children and 20 million women across 1.37 million anganwadis in the country.

Our Founder and Chairman Anil Agarwal said: "We strongly believe that a nation can only progress by investing in the future of women and children. This initiative addresses issues relating to pre-primary education, healthcare, nutrition for children, and economic empowerment for women in rural India".

As part of the Khushi initiative, HZL, in partnership with Government of Rajasthan strengthens the functioning of 3,089 ICDS centres (called Anganwadis) in the five districts of Hindustan Zinc's presence, reaching over 60,000 children and caters to the health, nutrition and pre-school needs of children in the formative 0-6-year age group. The project also conducts periodic assessments to track developmental metrics of the children. This year an average increase of 11% in children's learning capability was identified through these standardised assessments. Attendance also saw an increase with the average attendance increasing from 44% two years ago to 60% now.

Vedanta Limited Jharsuguda initiated a project called 'Vedanta Vidyarthi Vikas Yojana (VVVY)' in the year 2009 to strengthen the education standards of secondary school students through remedial coaching classes. Since the beginning of the project, quality education has been provided to the students of standards 8 to 10. Significant work has been undertaken to improve the quality of education provided and this has improved the pass-percentage of children in their school exams. To date, 3,975 students have been enrolled under VVVY project. 1,346 students appeared in matriculation examinations and 1,130 students have successfully passed with good marks.

#### 2. Women's empowerment

Women's empowerment is all about equipping and enabling women to make life-determining decisions. Vedanta recognises the need to empower women and is running several projects to help communities take a step towards a more equitable future. The programmes



Above: Developing communities through women empowerment

are associated with around 35,000 women (up from 28,000 last year) and amongst them 3,600 women have started/revamped their own micro enterprises. One of our interventions in this area is the Subhalaxmi Cooperative Society in Jharsuguda, which has emerged as a model community-based organisation. The cooperative has successfully completed 10 years of empowering women since its inception and is currently touching the lives of 3,793 members in 71 villages. The cooperative, aided by this programme, has been able to generate funds of ₹2.52 crore and there has been a significant increase in the income of its members.

HZL is running a similar programme called Sakhi which started three years ago and now has 1,922 Self Help Groups (SHGs) connecting the Company with 23,954 women. The total savings accumulated through this project are now at ₹6.22 crores and the total loans disbursed amounts to ₹17.13 crores. This money is used by members for household consumption, agriculture and health & sanitation. 492 women have used the loans to create new enterprises or expand existing enterprises.

#### 3. Health Care

There is a great disparity in the quality and coverage of medical treatment in India. The majority of the rural population lack basic primary healthcare and given that most of our operations are also in rural areas enabling rural communities to have access to affordable and quality healthcare is an important focus for us.

The Vedanta Hospital at Lanjigarh continues to provide much needed healthcare to thousands in the District of Kalahandi, Odisha. This year, the hospital has seen a total footfall of 67,425 patients, of which nearly a third were new patients – a testament to the effectiveness of the services provided. A further 12,998 patients were treated through the Lanjigarh team's Mobile Health Van programme.

#### **VMRF**

BALCO has established the Vedanta Medical Research Foundation (VMRF), a voluntary, non-profit organisation to prevent, control and eradicate cancer and illnesses related to it. Balco Medical Centre, a state-of-the-art oncology facility in Naya Raipur, is its first flagship initiative. As the first super-specialty hospital with the capability to treat cancer, Balco Medical Centre's genuinely colossal impact is validated by the reception it received from the people and the milestones achieved - over 4,000 patients were served, more than 230 patients underwent radiation, 250 plus surgeries were performed and over 1,000 chemotherapies were carried out.

#### 4. Agriculture and Animal Husbandry

In much of rural India, the communities continue to rely heavily on agriculture and animal husbandry. We therefore follow a livelihood development approach of integrating agriculture, dairy, water management, technology, farmer's organisations and market outreach. To increase the income of farming community in Barmer through productivity enhancement of agriculture and livestock, project Unnati, a Cairn CSR

initiative, was set up. More than 10,000 farmers have benefited through various interventions like horticulture demonstrations, construction and renovation of traditional water harvesting structures like KHADIN. Project SAMADHAN by HZL aims to improve the returns from Agriculture & Livestock for about 30,000 families. By the end of this year, the project had successfully worked with 8,660 farmers on agriculture-related activities and 8,944 farmers on livestock-related activities.

In Jharsuguda, to secure economic prosperity among identified households of Siripali village, project Jeevika Samriddhi was launched. The project aims to augment irrigation infrastructure, promotion of advanced agriculture, application of bio-fertiliser and pesticides and making farming a profitable profession. 111 farmers are benefiting from this and because of this project, the irrigation potential of the village has increased by 21.34%.

#### 5. Skilling the youth

To maximise the output from the immense demographic dividend India has, it is imperative that the youth are trained in skills suited for the current economic scenario. With the aim of channelling this untapped potential the Company is running a lot of skill development initiatives providing training to more than 3,000 youths. Balco in partnership with IL&FS is providing training to young people in five different potentially high employment positions - Hospitality, Welding assistant, Industrial stitching, Fitter fabrication and Electrician. The institute has provided assured employment opportunities to 7,800 students since the inception of its operations. In Thoothukudi, Sterlite Copper through its Tamira Muthukkal project has provided vocational training to 2,000 youth and currently covers 500 more beneficiaries helping them gain skills thus increasing their employability.

A few other programmes run by HZL, also aim to improve the skills of the youth of Rajasthan and increase their employability. HZL's Skilling and Entrepreneurship Centres provide training to young people to become Domestic electricians, Security guards, General duty assistants, Sales entry and Data entry operators and to work in

microfinance. Currently, 160 students are being trained and the plans are to train 700 youths each year. Through other initiatives like the Mining Academy, ITI training at Maruti and Business Process Outsourcing (BPO) training, the Company has been able to train 559 youths this year.

## 6. Environment protection & restoration

In our operations, we make it a priority to operate in harmony with the natural environment. The Company is committed to safeguarding the environment and makes extensive efforts to protect and restore nature. Pasumai Thoothukudi, an initiative by Sterlite, launched on World Forest Day with a vision of developing a green belt in Thoothukudi is an illustration of the significance of this commitment for the Company. The Company aims to plant one million trees by the culmination of the programme.

#### 7. Sports & Culture

Sport, at an individual level, helps build character, benefits health and for talented individuals becomes a source of livelihood. However, it is at a community level where sports can have a valuealtering effect which can lead to a more tolerant and inclusive society. Vedanta identifies this dual impact that can be achieved through sports and thus its sports initiatives are focused on two main objectives: Sports for all and Sports for excellence. Vedanta, through its football initiatives in Rajasthan by HZL

(Zinc Football Initiative (ZF)), and in Goa by the Iron Ore Business (Sesa Football Academy (SFA)), established on a reclaimed mine, has taken great strides in getting closer to reaching these objectives. Zinc Football trains around 2,000 young people, both girls and boys in its 64 Zinc Football Schools. Sesa Goa also has four similar centres training 500 children on a weekly basis. These centres enable the game to reach the masses and help create a culture of sports in the country. Both academies have their centres of excellence with state-of-the-art infrastructure that have not just developed players for their respective state teams but also contributed to the national setup with seven alumni of SFA playing for the Indian national team and eight playing in the elite Indian Super League. The second edition of 'Vedanta Women's Football League' saw the involvement of 160 female football professionals and provided a platform for them to showcase their talents.

#### 8. Community Infrastructure

Infrastructure development provides impetus for economic growth and it is no different for the villages in our operational areas. It not only helps elevate the quality of life in the villages, but also forms the foundation for socio-economical uplitment. The Company recognises this need and therefore is aiding the operational villages in developing basic infrastructure, such as school toilets, drinking water projects, sports facilities, local drains and community centres as per local needs.



Above: Zinc Football Academy: Building character and fueling excellence

## **Sustainability & CSR**

#### Continued

### Statistics for community projects

- In FY2019, we invested ₹309 crores in social investment programmes.
- 1,169 villages are benefiting from our CSR programmes.
- There are 3.1 million beneficiaries of our community development programmes.

#### **People and Culture**

Vedanta has always aspired to build a culture that demonstrates world-class standards in safety, environment and sustainability. People are our most valuable asset and we are committed to providing all our employees with a safe and healthy work environment.

Our culture exemplifies our core values and nurtures innovation, creativity and diversity. We align our business goals with individual goals and enable our employees to grow on a personal as well as professional front.

The Vedanta values that drive the organisational culture are:

#### Trust

We actively foster a culture of transparency in our interactions and encourage an open dialogue which ensures mutual trust and respect.

#### Care

We are committed to our triple bottom line of 'People, Planet and Prosperity' to create a sustainable future in a 'zero-harm, zero waste and zero discharge' environment for our communities.

#### Integrity

We engage ethically and transparently with all our stakeholders, taking accountability for our actions. We maintain the highest standards of professionalism and stringently comply with all international policies and procedures.

#### Innovation

We encourage innovation that leads to zero harm, zero waste and zero discharge, and we are committed to optimising the use of our natural resources, improving efficiencies and maximising recoveries of by-products.

#### · Entrepreneurship

People are at the heart of everything we do. We create an enabling environment to support them in pursuing their goals.

#### Respect

We place an emphasis on human rights and respect the principle of free, prior, informed consent, while our engagements with stakeholders give local communities the opportunity to voice their opinions and concerns.

#### Excellence

Our primary focus is on delivering performance of the highest standard. We are constantly looking at ways to reduce costs and increase production in our businesses through benchmarking best practices and employee participation.

#### Diversity

Diversity remains a strong focus for us at Vedanta. We are committed to providing equal opportunities to our employees regardless of their race, nationality, religion, gender, orientation or age. We are pleased with our progress to date on gender diversity, and women now represent 10.5% of our total workforce and 20% of our Board. We have set ourselves a target to reach over 33% women at senior levels by 2020 and aim to achieve 20% female representation among our employees.

We are also focused on increasing the mix of geographies and nationalities in our workforce. Since most of our operations are in remote areas, we place a strong emphasis on recruiting employees from the local population.

We are an equal opportunity employer, and a meritocracy – all our decisions regarding employees are based on their contribution, attitude and potential.

#### RECRUITMENT

Our recruitment programme includes a wide range of initiatives to support us in hiring skilled professionals across different functions and businesses.

#### Right management in place (RMIP)

To re-emphasise the Group's philosophy of empowering the SBUs, we have reviewed our existing Business and SBU structures, and followed a rigorous assessment process to ensure we have right talent in the right positions. The RMIP process also ensures that we have filled all the critical roles within our structures and any gaps in the management team are supported by strategic plans to fill vacancies. Our approach to recruitment is focused on hiring diverse, high-quality talent. We operate our businesses with global best practices and are benchmarked to global standards. Therefore, where needed, we also hire expats and specialists with global experiences to manage such operations.

## Vedanta Leadership Development Programme (VLDP)

VLDP is our flagship programme which aims to build organisational capability through developing talented individuals from premier management and technology institutes. It is a tailored programme which focuses on nurturing these bright young minds to act as catalysts to steer our business to the next level of growth by implementing transformational new age ideas. The programme includes induction sessions, cross-functional projects in significant roles, job rotation, development opportunities, and the right mentoring to ensure these individuals get an in-depth knowledge of our operations and recognise their areas of interest for a suitable role.





## TALENT MANAGEMENT AND DEVELOPMENT

### **Internal Growth Workshops**

We have always aimed to design an organisation which is spearheaded by our 'leaders from within'. Recognising internal talents and promoting them to leadership roles has been the driving factor in our journey of rapid growth. Aligned with this philosophy, the Group conducts 'Chairman's Internal Growth Workshops' which enable our young leaders to fulfil their potential through development opportunities and provide us with a talent pipeline enabled to fill critical roles across the Group. These workshops have resulted in the development of 600+ high-potential new leaders across the Group's businesses who are given significantly elevated roles and responsibilities.

#### Leadership and talent analytics

We have partnered with experts to evaluate our existing talent management practices and implement best-in-class new initiatives for talent development. We are focusing on employing digital channels to run accelerated growth drives, workshops, in-house learning modules and other development opportunities.

#### 360° feedback

At Vedanta, we promote growth and nurturing of our internal talent pool by encouraging internal dialogue between senior leaders and their young mentees and peers. For this reason, we have launched 360° feedback for our ExCo leaders in collaboration with an external partner. We believe that this will help to fast-track the assessment and development of leaders and we aim to extend this to cover all our professionals in due course



Above: Nurturing young talent for future leaders

## PERFORMANCE MANAGEMENT & TOTAL REWARDS

## V-Perform: One performance system for one Vedanta

Our focus is to constantly improve the level of automation in all our operations. V-Perform is a pan-Vedanta initiative to standardise the Performance Management System (PMS) and process across all Vedanta Group companies by leveraging technology. This enables functions, teams and individuals to track performance on a regular basis, evaluate efficiency through advanced analytics and implement proactive decisions towards achieving Vedanta's objectives. We foster a culture of safety and sustainability to achieve our ultimate vision of 'Zero Harm, Zero Waste & Zero Discharge'. To enhance our safety performance in the workplace and strengthen our existing Safety Management System, a safety competency assessment process was completed mid-year by all employees.

## Employee Stock Option Scheme (ESOS) 2018

Employee stock options are a significant component of our long-term incentives. They enable our employees to share in the success of the Company, encouraging high-growth performance and reinforcing employee pride with a focus on ownership. The scheme was launched after obtaining statutory approvals, including shareholders' approval in 2016. In 2018, 35% of the workforce participated in this scheme with a focus on our young and senior leaders, employees driving strategic projects and high-impact task force members.

## Management discussion and analysis



Above: Ravva off shore rig

Vedanta Limited is a diversified natural resource company with a portfolio of large, world-class, low-cost, scalable assets, operating in high growth markets. The Company is a leading player in the zinc, oil & gas, iron ore, lead, silver, steel, copper, aluminium and commercial power sectors.

#### Zinc sector

The Company's Zinc business in India is owned and operated by Hindustan Zinc Limited (HZL), with the Company holding a 64.9% interest and the Government of India 29.54%. HZL's operations include five zinc-lead mines, one rock phosphate mine, four hydro metallurgical zinc smelters, two lead smelters, one pyrometallurgical zinc-lead smelter, eight sulphuric acid plants, and six captive power plants in the state of Rajasthan. It also owns processing and refining facilities for zinc at Haridwar, and processing and refining facilities for zinc and lead, together with a silver refinery at Pantnagar, both in the state of Uttarakhand in Northern India. The Company has wind power plants in the states of Rajasthan, Gujarat, Karnataka, Tamil Nadu and Maharashtra.

The Company's Zinc International business comprises the Skorpion mine and refinery in Namibia, operated through THL Zinc Namibia Holdings (Proprietary) Limited (Skorpion). It also owns Black Mountain Mining (Proprietary) Limited (BMM), whose assets include the Black Mountain mine and the Gamsberg mine located in South Africa. The Company has 100% ownership in Skorpion and 74% ownership in BMM. Gamsberg operation was commissioned during the middle of FY2019 with trial production starting in November 2018 followed by first shipment of concentrate in December 2018. The Gamsberg project represents one of the largest zinc deposits in the world with reserves and resources (R&R) of 185 million tonnes (14.3 million tonnes of metal), and a mine life in excess of 30 years.

#### Oil & gas sector

The Company's Oil & Gas business, Cairn India, is owned and operated by Vedanta Limited. It is one of India's largest independent oil & gas exploration and production companies, and indeed is the country's largest private producer of crude oil. It has a world-class resource base, with interest in five blocks in India and one in South Africa.

Cairn India's resource base is located in four strategically focused areas: one block in Rajasthan, one on the west coast of India, three on the east coast of India and one in South Africa. The Government of India has granted its approval for a 10-year extension of the PSC for the Rajasthan block, RJ-ON-90/1, subject to certain conditions.

The Company has secured 41 exploration blocks under the Open Acreage Licensing Policy (OALP). Revenue-sharing contracts have been signed and applications for petroleum exploration licences have been submitted for all 41 blocks. The contractual process has been initiated for end-to-end services in all 41 blocks.

#### **Aluminium sector**

The Company's Aluminium business is owned and operated by Vedanta Limited and Bharat Aluminium Company Limited (BALCO), in which Vedanta has a 51% interest with the balance owned by the Government of India. Vedanta's aluminium operations include an Alumina refinery and a 90MW captive power plant (CPP) at Lanjigarh, and two smelters (500kt & 1,250kt) and two CPPs (1,215MW & 1,800MW) at Jharsuguda, both at Odisha in Eastern India. BALCO's operations include two bauxite mines, four CPPs (270MW, 540MW, 600MW and 300MW), and refining, smelting and fabrication (570kt) facilities in Central India.

#### Commercial power sector

The Company's Power business is owned and operated by Vedanta Limited and Talwandi Sabo Power Limited (TSPL), a wholly owned subsidiary of Vedanta. TSPL has signed a power purchase agreement with the Punjab State Power Corporation Limited (PSPCL) for the establishment of thermal coal-based commercial power facilities generating 1,980MW (three units of 660MW each).

Further assets operated by the Group in the power sector include:

- Vedanta Limited's 600MW thermal coal-based commercial power facility at Jharsuguda;
- a 300MW thermal coal-based commercial power facility at BALCO; during the year 300MW IPP was converted to CPP based on an order received from Chhattisgarh State Electricity Regulatory Commission (CSERC) dated 1 January 2019;
- 274MW of wind power plants commissioned by HZL; and
- a 100MW power plant at MALCO Energy Limited (MEL), situated at Mettur Dam in Tamil Nadu in Southern India. This plant was put under care and maintenance, effective 26 May 2017.

#### Iron ore sector

The Company's Iron Ore Business is wholly owned by Vedanta Limited and Sesa Resources Limited and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke, and power generation.

The mining operations are located in the states of Goa and Karnataka. The annual mining allocation for Karnataka has increased to 4.5 million tonnes during FY2019. On 7 February 2018, the Supreme Court of India passed its final order, setting aside the second renewal of the mining leases granted by the state of Goa. The Court directed all leaseholders under the second renewal to stop all mining operations with effect from 16 March 2018 until fresh mining leases and fresh environment clearances are granted. We continue to engage with the Government for the resumption of mining operations.

#### **Steel sector**

Vedanta Limited completed the acquisition of 90% of the share capital of Electrosteel Steels Limited (ESL) on 4 June 2018, following which we have consolidated the financials of ESL for a 10-month period in FY2019. ESL has a design capacity of 2.5mtpa in Bokaro, Jharkhand with blast furnace/basic-oxygen-furnace technology. ESL's current operating capacity is 1.5mtpa with a diversified product mix of wire rod, rebar, DI pipe and pig iron.

#### **Copper sector**

The Company's copper business is owned and operated by Vedanta Limited, Copper mines of Tasmania Pty Ltd (CMT) Australia, and Fujairah Gold FZE in the UAE. Its custom smelting assets include a copper smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant, a copper rod plant and two captive power plants at Tuticorin in Southern India, and a refinery and two copper rod plants at Silvassa in Western India.

Smelting operations at Tuticorin have been halted since April 2018. Through an order dated 9 April 2018, the Tamil Nadu Pollution Control Board (TNPCB) rejected the Consent to Operate (CTO) of the Tuticorin Plant and issued a direction for the closure and disconnection of the power supply at the plant. In May 2018, the Government of Tamil Nadu issued orders with a direction to permanently seal the existing copper smelter plant. In December 2018, in response to Vedanta Limited's appeal to the National Green Tribunal (NGT) against these orders, NGT set aside the Tamil Nadu Government's order and directed TNPCB to renew the CTO, directing that the impugned orders were unsustainable and closure of the unit unjustifiable.

However, in February 2019, the Hon'ble Supreme Court set aside NGT's order on the grounds of maintainability and directed the Company to file a writ petition before the Madras High Court, challenging the impugned orders and to seek interim relief considering that Vedanta Limited's plant had been shut since the end of March 2018. The Company has duly filed a writ petition before Madras High Court challenging the various orders passed against the Company in 2018 and 2013. The Madras High Court has directed the State of Tamil Nadu and TNPCB to file their counter to the Company's petition for interim relief and has posted the matter for hearing on 11 June 2019.

The Company also owns and operates, through its subsidiary CMT, the Mt. Lyell copper mine in Tasmania, Australia (currently suspended and under care & maintenance since July 2014), and a precious metal refinery and copper rod plant in Fujairah, UAE, through its subsidiary Fujairah Gold FZE.

#### Other interests

The Company's other activities include a 100% interest in the Vizag General Cargo Berth Private Limited (VGCB). This port business includes coal handling facilities and general cargo at the outer harbour of Visakhapatnam Port on India's east coast. The Company also owns a 100% interest in Avanstrate Inc (ASI), which manufactures LCD glass substrate.



**Above right:** A loading and unloading facility **Above left:** Electrosteel Steel Plant

## **Finance review**

# Growth projects on track, strong base for future



"We recorded a strong operational and financial performance in FY2019"

**Arun Kumar GR**Whole-Time Director &
Chief Financial Officer

Executive summary: We had a strong operational and financial performance in FY2019. During the year we completed the acquisition of ESL which will complements our Iron Ore Business through vertical integration. Our ramp up plans for growth projects are all on track and with that we have a firm base for an even stronger performance next year.

In FY2019 we recorded an EBITDA of ₹24,012 crore, 4% lower y-o-y and a robust adjusted EBITDA margin of 30%. (FY2018: ₹24,900 crore, margin 35%).

Production volumes contributed to an increase in EBITDA of ₹955 crore, which was primarily on account of ramp up of volumes at aluminium and volume addition from ESL acquisition. However, this was partially offset by lower volumes at Zinc India and at Zinc International.

Market factors resulted in net incremental EBITDA of ₹632 crore compared to FY2018. The increase was primarily driven by rupee depreciation but was partially offset by input raw material inflation and lower commodity prices.

Gross debt as on 31 March 2019 was ₹66,226, crore, an increase of ₹8,067 crore from March 31, 2018, primarily due to the acquisition debt for Electrosteel Steels and temporary borrowings at Zinc India.

Net debt increased to ₹26,958 crore at 31 March 2019 from ₹21,969 crore at 31 March 2018, primarily due to the acquisition debt for ESL in FY2019.

The balance sheet of Vedanta Limited continues to remain strong with cash equivalents, liquid investments and structured investment, net of the deferred consideration payable for such investment of ₹39,268 crore and Net Debt to EBITDA ratio at 1.1x, which is the lowest among Indian peers.

#### **CONSOLIDATED EBITDA**

EBITDA decreased by 4% in FY2019 to ₹24,012 crore. This was mainly on account of shutdown of the Tuticorin smelter, input commodity inflation, lower metal prices, and higher cost of production. This was partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition, improved oil prices and rupee depreciation.

#### **CONSOLIDATED EBITDA**

(₹ crore, unless stated)

Consolidated EBITDA	FY2019	FY2018	% change
Zinc	11,298	13,669	(17)%
-India	10,600	12,254	(13)%
-International	698	1,415	(51)%
Oil & Gas	7,656	5,429	41%
Aluminium	2,202	2,654	(17)%
Power	1,527	1,665	(8)%
Iron Ore	584	400	46%
Steel	791	_	_
Copper India	(235)	1,055	_
Others	189	28	-
Total EBITDA	24,012	24,900	(4)%

#### **CONSOLIDATED EBITDA BRIDGE**

(₹ crore)

	,
EBITDA for FY2018	24,900
Market and regulatory: ₹632 crore	
a) Prices, premium / discount	(523)
b) Direct raw material inflation	(2,236)
c) Foreign exchange movement	3,203
d) Profit petroleum to GOI at Oil & Gas	87
e) Regulatory changes	101
Operational: ₹(66) crore	
f) Volume	955
g) Cost and marketing	(1,021)
h) Others	(1,454)
EBITDA for FY2019	24,012

#### A) PRICES, PREMIUM/DISCOUNT

Commodity price fluctuations have a significant impact on the Group's business. During FY2019, we saw a net negative impact on EBITDA of ₹523 crore due to commodity price fluctuations.

#### Zinc, lead and silver

Average zinc LME prices during FY2019 dropped to US\$2,743 per tonne, down 10% y-o-y; lead LME prices decreased to US\$2,121 per tonne, down 11% y-o-y; and silver prices decreased to US\$15.4 per ounce, down 9% y-o-y. The collective impact of these price fluctuations lowered EBITDA by ₹1,864 crore.

#### **Aluminium**

Average aluminium LME prices decreased to US\$2,035 per tonne in FY2019, down 1% y-o-y; this had a negative impact of ₹212 crore on EBITDA.

#### Oil & Gas

The average Brent price for the year was US\$70.4 per barrel, higher by 22% compared with US\$57.5 per barrel during FY2018, this was further supported by a lower discount to Brent during the year (FY2019: 6.1%; FY2018: 12.3%). These positively impacted EBITDA by  $\ref{1}$ ,553 crore.

### **B) DIRECT RAW MATERIAL INFLATION**

Prices of key raw materials such as imported alumina, thermal coal, carbon and caustic have increased significantly in FY2019 and this had an adverse impact on EBITDA of ₹2,236 crore.

#### C) FOREIGN EXCHANGE **FLUCTUATION**

Our operating currencies (the Indian rupee and South African rand) both depreciated against the US dollar during FY2019. Depreciation of currencies are favourable to the Group's EBITDA, given the local cost base and predominantly US dollar-linked

Favourable currency movements increased EBITDA by ₹3,203 crore compared to FY2018.

#### D) PROFIT PETROLEUM TO GOI AT OIL & GAS

The profit petroleum outflow to the Government of India (GOI), as per the production sharing contract (PSC), reduced by ₹87 crore. The reduction was primarily due to the higher recovery of capital expenditure over the previous year.

#### **E) REGULATORY**

During FY2019, regulatory changes had a cumulative positive impact on the Group FBITDA of ₹101 crore

Information regarding key exchange rates against the US dollar:

	Average year ended 31 March 2019	Average year ended 31 March 2018	% change	As at 31 March 2019	As at 31 March 2018
Indian rupee	69.89	64.45	8%	69.17	65.04
South African rand	13.76	13.00	6%	14.48	11.83

#### F) VOLUMES

Higher volumes contributed to an increase in EBITDA of ₹955 crore, generated through these key Group businesses:

#### Aluminium (positive ₹454 crore)

In FY2019, the Aluminium business achieved record production of 1.96 million tonnes, up 17% y-o-y due to the ramp up of the Jharsuguda smelters. This volume increase had a positive impact on EBITDA of ₹454 crore

### **Electrosteel (positive ₹791 crore)**

Vedanta Limited completed the acquisition of 90% of the share capital of ESL on 4 June 2018. This acquisition had a positive impact on EBITDA of ₹792 crore.

### Power (positive ₹186 crore)

The power business contributed positively to EBITDA by ₹186 crore. This was mainly due to TSPL, which was impacted by a fire incident in the coal conveyor in Q1 FY2018.

### Zinc India (negative ₹473 crore)

The integrated zinc metal production stood at 696kt, lower by 12%, although this was offset by record lead and silver production of 198kt and 679 tonnes respectively. This had a cumulative negative impact on EBITDA of ₹473 crore.

#### **G) COST AND MARKETING**

Higher costs resulted in a fall in EBITDA by ₹1,021 crore over FY2018, primarily due to volume-led absorption at Zinc India and Zinc International and purchase of power from external sources in aluminium due to coal supply disruption during FY2019.

#### H) OTHERS

This primarily includes the reduction in EBITDA due to the shutdown of the Tuticorin smelter.



Above right: Lab Activities at Gamsberg Above left: Integrated facility at Jharsuguda

## **Finance review**

## Continued

#### **INCOME STATEMENT**

(₹ crore, unless stated)

		(Corore, ar	ness statea)
Particulars	FY2019	FY2018	% Change
Net Sales/Income from Operations	90,901	92,011	(1)%
Other Operating Income	1,147	912	26%
EBITDA	24,012	24,900	(4)%
Adjusted EBITDA margin¹ (%)	30%	35%	-
Finance Cost	5,689	5,112	11%
Investment Income	3,618	3,205	13%
Exchange Gain /(Loss)	(509)	(38)	
Profit before Depreciation and Taxes	21,432	22,955	(7)%
Depreciation and Amortisation	8,192	6,283	30%
Profit before exceptional items	13,240	16,672	(21)%
Exceptional items <sup>2</sup> : credit/(expense)	320	2,897	(89)%
Taxes <sup>3</sup>	3,862	5,877	(34)%
Profit after taxes after exceptional items	9,698	13,692	(29)%
Profit after taxes (before exceptional items)	9,490	12,869	(26)%
Profit after taxes (before exceptional items & DDT)	9,490	11,333	(16)%
Minority interest	2,633	3,350	(21)%
Attributable PAT after exceptional items	7,065	10,342	(32)%
Attributable PAT (before exceptional items)	6,857	9,561	(28)%
Attributable PAT (before exceptional items & DDT)	6,857	8,025	(15)%
Basic earnings per share (₹ per share)	19.07	28.30	(33)%
Basic EPS before exceptional items (₹ per share)	18.50	26.17	(29)%
Basic EPS before exceptional items & DDT (₹ per share)	18.50	21.96	(16)%
Exchange Rate (₹/\$) – Average	69.89	64.45	8%
Exchange Rate (₹/\$) – Closing	69.17	65.04	6%

- Excludes custom smelting at Copper India and Zinc India Operations.
   Exceptional items gross of tax.
   Tax includes tax charge on exceptional items of ₹112 crore on special items in FY2019 (FY2018: charge of ₹2,074 crore); DDT included in Tax Expense in FY2019 is ₹Nil crore (FY2018: credit of ₹1,536 crore).
   Previous period figures have been regrouped/rearranged wherever necessary to conform to current period presentation.

**Below:** Leveraging technology for growth



#### **REVENUE**

Revenue for the year was ₹90,901 crore, 1% lower y-o-y. This was mainly on account of shutdown of Tuticorin smelter, lower zinc volumes and lower metal prices. This was partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition, improved oil prices and rupee depreciation.

#### **EBITDA AND ADJUSTED EBITDA MARGIN**

EBITDA for the year was ₹24,012 crore, 4% lower y-o-y. This was mainly on account of shutdown of Tuticorin smelter, input commodity inflation, lower metal prices and higher cost of production partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition, improved oil prices and rupee depreciation.

We maintained a robust adjusted EBITDA margin of 30% for the year (FY2018: 35%)

#### **DEPRECIATION AND AMORTISATIONS**

Depreciation for the year was ₹8,192 crore compared to ₹6,283 crore in FY2018, this was mainly due to change in reserves estimates and reversal of previously recorded impairment at Oil & Gas business in Q4 FY2018; a higher charge at Zinc India due to higher ore production; a higher charge at Zinc International due to start of Gamsberg and higher ore production at Skorpion and acquisitions of ESL and ASI.

#### **NET INTEREST**

The blended cost of borrowings was 8.1% for FY2019 compared to with 7.8% in FY2018.

The finance cost for FY2019 was ₹5,689 crore, 11% higher y-o-y compared to ₹5,112 crore in FY2018 mainly because of higher gross debt due to ESL acquisition, temporary borrowings at Zinc India and higher average borrowing cost in line with market trends partially offset by higher capitalisation during the year.

Investment income for FY2019 stood at ₹3,618 crore, 13% higher y-o-y compared to ₹3,205 crore in FY2018. This was mainly due to mark to market gains on a treasury investment made by Vedanta's overseas subsidiary through a purchase of an economic interest in a structured investment in Anglo American Plc from its ultimate parent, Volcan Investments Limited and a one-time reclassification from other comprehensive income to profit and loss account at Zinc India. This was partially offset by a lower investment corpus.



Above: Employees during a tree plantation exercise

### **EXCEPTIONAL ITEMS**

The exceptional gains for FY2019 was at ₹320 crore mainly on account of reversal of previously recorded impairment of ₹261 crore in Oil & Gas business's KG ONN block and the reversal of a ₹59 crore charge relating to arbitration of a historical vendor claim pursuant to a Supreme Court Order, in the Aluminium business.

#### **TAXATION**

Effective tax rate (before exceptional items & DDT) for FY2019 was 28%, compared to 32% in FY2018.

The effective tax rate was lower on account of change in profit mix across businesses.

#### ATTRIBUTABLE PROFIT AFTER TAX (BEFORE EXCEPTIONAL ITEMS AND DDT)

Attributable PAT before exceptional items & DDT was ₹6,857 crore in FY2019 compared to ₹8,025 in FY2018 (down 15% y-o-y).

#### **EARNINGS PER SHARE**

Earnings per share before exceptional items & DDT for FY2019 were ₹18.50 per share as compared to ₹21.96 per share in FY2018.

#### DIVIDEND

Considering the total interim dividend of ₹18.85 per share, the Board has decided not to declare a final dividend in FY2019.

#### SHAREHOLDERS FUND

Total shareholders fund as on 31 March, 2019 aggregated to ₹62,297 crore as compared to ₹63,312 crore as at 31 March 2018. This was primarily on account of dividends paid during the year partially offset by net profits attributable to equity holders earned during the year.

#### **NET FIXED ASSETS**

The net fixed assets as on 31 March, 2019 were ₹121,356. This comprises of ₹22,236 crore as capital work-in-progress as on 31 March 2019.

### **BALANCE SHEET**

Our financial position remains strong with cash and liquid investments of ₹39,268

The Company follows a Board-approved investment policy and invests in highquality debt instruments with mutual funds, bonds and fixed deposits with banks. The portfolio is rated by CRISIL which has assigned a rating of "Tier I" (meaning highest safety) to our portfolio. Further, the Company has undrawn fund-based committed facilities of c.₹6,400 crore as on 31 March 2019

Gross debt as on 31 March 2019 was ₹66,226 crore, an increase of ₹8,067 crore from March 31, 2018. This was mainly due to the ESL acquisition and temporary borrowing at Zinc India. Gross Debt comprises term debt of c.₹43,200 crore and short-term working capital loans of c.₹23,000 crore. The loan in INR currency is 92% and the balance 8% in foreign currency. Average debt maturity is of term debt is c. 3.2 years as at 31 March 2019.

CRISIL and India Ratings revised the outlook on Vedanta's Rating from AA/ Positive to AA/Stable.





#### THE YEAR IN SUMMARY

The year witnessed a continued ramp up of our underground mines, which delivered mined metal production at 936kt. This was 29% higher y-o-y; virtually overcoming the closure of open-cast operations in the previous year. Lead and silver metal production reached new records of 198kt and 679 tonnes, respectively. Hindustan Zinc was ranked 9th in the elite club of the top 10 silver producers globally published by the Washington-based Silver Institute for the calendar year 2018.

The ramp up to 1.2 million tonnes per annum (mtpa) mined metal capacity by FY2020 is on track as capital projects approach completion.

#### **SAFETY**

However, we were deeply saddened to report seven fatalities at our Rajapura Dariba, Zawar mines, Chanderia Smelter and Debari smelting complex during the year. The root causes of these tragic incidents have been thoroughly investigated and the resulting findings, which include, among others making better risk decisions and providing better supervision during all activities have been

shared and implemented across the Zinc India businesses to prevent such tragedies in the future.

Our business had seen improving safety performance in the last five years, where our LTIFR had decreased by 24%. However, this year has run counter to that trend and during FY2019, the lost time injury frequency rate increased to 0.63 (FY2018:

Specific initiatives have been introduced to instil a culture of safety. These include forming a Safety Innovation Cell and a Fatality and Serious Injury Prevention Programme subcommittee, as well as themed drives on reducing man-machine interactions; mine fire safety; a miningmate competency assessment; a safety maturity assessment; and a second party safety audit.

We also collaborated with global safety and protection experts Du Pont on our 'Aarohan' journey to excel in our process safety management. Together we have developed a structured programme aimed at mitigating the risks of serious injuries and fatalities in our processes.

"Successful transition to underground mining, with record production from underground mines. Continued momentum in silver production led to 9th rank globally."

**Sunil Duggal** CEO, Hindustan Zinc Limited



- Debari smelter Chanderiya smelters Rampura Agucha mine Rajpura Dariba mine and smelters and Sindesar Khurd mine Zawar mine Pantnagar silver refinery





#### **ENVIRONMENT**

Over the reporting year, the business improved its hazardous waste recycling, which rose to 52% from 42% in FY2018. Our water recycling rate remained consistent at 35% (FY2018: 35%).

With the success of implementing the 20 million litres per day (MLD) sewage treatment plant (STP), Phase 2 of 40MLD STP is under commissioning, of which 25MLD will be commissioned in Q1 FY2020. On completion, it will reduce our fresh water intake at our operational sites.

Solar power projects of 22MW were commissioned during the year, and we intend to further enhance our solar energy footprint in the coming year.

We are also committed to the Science Based Target initiative, to reduce by 2026 our absolute Scope 1 and 2 GHG emissions by 14%, and absolute Scope 3 GHG emissions by 20%, measured against the 2016 base-year.

Our sustainability activities received several endorsements during the year, including the CII-ITC Sustainability Award ('Outstanding Accomplishment'), as well as awards for Sustainable Business of the Year and the Sustainability Disclosure Leadership Award from the World CSR Day. Zinc India's sustainability performance was ranked No.5 in the Dow Jones Sustainability Index (Metal and Mining) globally, and No. 1 globally in the Environment category. We were also selected as an Index Constituent of the Emerging Index 'FTSE4Good' series 2018.

#### PRODUCTION PERFORMANCE

Production (kt)	FY2019	FY2018	% change
Total mined metal	936	947	(1%)
Underground mines	936	724	29%
Open cast mines	_	223	_
Refinery metal production	894	960	(7%)
Refined zinc - integrated	696	791	(12%)
Refined lead - integrated <sup>1</sup>	198	168	18%
Production – silver (in tonnes) <sup>2</sup>	679	558	22%

- Excluding captive consumption of 6,534 tonnes in FY2019 vs. 6,946 tonnes in FY2018. Excluding captive consumption of 34.2 tonnes in FY2019 vs. 36.4 tonnes in FY2018.

#### **PRICES**

	FY2019	FY2018	% change
Average zinc LME cash settlement prices US\$/tonne	2,743	3,057	(10)%
Average lead LME cash settlement prices US\$/tonne	2,121	2,379	(11)%
Average silver prices US\$/ounce	15.4	16.9	(9)%

#### **UNIT COSTS**

	FY2019	FY2018	% change
Unit costs (US\$ per tonne)	1.001	1.005	40/
Zinc (including royalty)	1,381	1,365	1%
Zinc (excluding royalty)	1,008	976	3%

### **FINANCIAL PERFORMANCE**

(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	20,656	22,050	(6)%
EBITDA	10,600	12,254	(13)%
EBITDA margin (%)	51%	56%	-

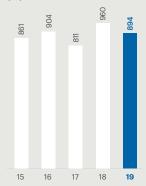
First dry tailing plant to be commissioned in FY2020 at Zawar Mines



Below: Employees working in HZL **Underground Mine** 

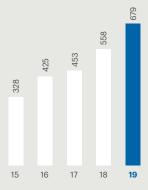






#### **PRODUCTION** SALEABLE SILVER

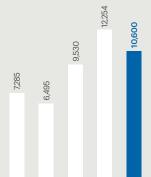
(tonnes)



#### **EBITDA** (₹ crore)

15

16



17

18

#### **OPERATIONS**

Mined metal production for FY2019 was 936,000 tonnes compared to 947,000 tonnes in the prior year. The FY2019 production was entirely from underground mines, which ramped up strongly by 29%, driven by a 27% increase in ore production and better grades. Therefore, despite the closure of open-cast operations, total mined metal production declined only marginally from the year before.

Integrated metal production was 894,000 tonnes in line with mined metal production, 7% lower than the previous year's record production of 960,000 tonnes. Integrated zinc production was lower by 12%, in line with the availability of zinc mined metal and the higher lead ratio in ore. Integrated lead and silver production stood at a record 198,000 tonnes and 679 tonnes, higher by 18% and 22%, respectively. This was driven by higher lead mined metal production and retrofitting of a pyro-metallurgical smelter to produce more lead and better silver grades. This smelter was retrofitted during the year to produce more lead metal, in the light of the higher availability of lead mined metal, leading to higher lead production.

Hindustan Zinc was ranked 9th in the elite club of top 10 silver producers globally published by the Washington-based Silver Institute for the calendar year 2018. Further, during the year we received environment clearance to increase silver production from 600 tonnes per annum to 800 tonnes per annum at the Pantnagar plant.

FY2019 was a turbulent year for base metals, caused by uncertainty from international trade disputes, a slowdown in manufacturing activity and the negative impact of a stronger dollar. The average zinc price during the year was US\$2,743 per tonne, 10% lower than the previous year's average of US\$3,057.

Zinc market fundamentals remain robust with global zinc consumption expected to grow by 1.5% to 14.5 million tonnes in the calendar year 2019, with smelter supply increasing to 14 million tonnes and mine supply likely to be 13.9 million tonnes (source: Wood Mackenzie). According to demand-supply fundamentals, the zinc price should improve since metal stocks are at an all-time low and may continue to remain so.

In a similar story to zinc and other base metals, the lead price was volatile during the year, rising and falling in response to developments in international trade disputes between the US and its trading partners. Lead averaged US\$2,121 per tonne in FY2019, down 11% y-o-y.

In a challenging environment, silver prices declined by 9% against the prior year, slipping to US\$15.4 per ounce in FY2019. A slowing Chinese economy, coupled with rising US interest rates, an equity market bull run and global trade tensions all took their toll on the price performance.

Zinc's cost of production (excluding royalty) for FY2019 was US\$1,008 per tonne, higher by 3% y-o-y. Production cost was impacted by higher mine development, input commodity inflation and long-term wage settlement (LTS) related expense but was partly offset by higher acid credits and rupee depreciation. Including royalties, the total cost of zinc production increased to US\$1,381 per tonne, 1% higher y-o-y.

Of this figure, government levies amounted to US\$389 per tonne (FY2018: US\$423 per tonne). This comprised mainly of royalty payments, the Clean Energy Cess, electricity duty and other taxes.

#### FINANCIAL PERFORMANCE

Revenue for the year was ₹20,656 crore, down 6% y-o-y, primarily on account of lower zinc metal production and lower LME prices, partially offset by record lead and silver volumes and rupee depreciation. EBITDA in FY2019 decreased to ₹10,600 crore, down 13 % y-o-y. The decrease was primarily driven by lower volumes and higher cost of production partially offset by rupee depreciation.

#### **Projects**

The mining projects we announced are progressing in line with the expectation of reaching 1.2 million tonnes per annum of mined metal capacity in FY2020. Capital mine development increased by 12% to 43km in FY2019.

At the Rampura Agucha underground mine, the ventilation system was commissioned earlier in the year, liberating the mine from ventilation issues for its lifetime. The commissioning of the mid-shaft loading system in October 2018 allowed waste hoisting to be carried out through the shaft ahead of schedule, leading to improved ore production. The second paste-fill plant was completed ahead of schedule in Q4 FY2019. The full shaft commissioning is expected to complete by Q2 FY2020, synchronising with the completion of the crusher and convevor system.



During the year, Sindesar Khurd received environment clearance to produce 6.0 million tonnes of ore and 6.5 million tonnes of ore beneficiation. The new 1.5mtpa mill was commissioned smoothly and began production in Q3 FY2019, taking the total milling capacity to 6.2mtpa. The underground crusher and production shaft were commissioned during Q4 FY2019 and ore hoisting from the shaft is expected to start in Q1 FY2020. The second paste-fill plant is under mechanical completion and expected to commission in Q1 FY2020.

With a substantial improvement in infrastructure, Zawar has reached a run-rate of c.3.5mtpa. The new 2.0mtpa mill was commissioned in Q4 FY2019, taking the total milling capacity at Zawar to 4.7mtpa. Meanwhile, the dry tailing plant is under execution and expected to commission in Q2 FY2020

The Rajpura Dariba mine has received environmental clearance to increase ore production from 0.9 to 1.08mtpa and is seeking regulatory approval for further expansion to 2.0mtpa. The ore production run-rate is already at 1.2mtpa following the major infrastructure enhancement. During the year, orders were placed for a new 1.5mtpa mill and paste-fill plant; these are expected to complete in FY2020.

#### OTHER PROJECTS

The Fumer project at Chanderiya is expected to commission in Q1 FY2020.

The 22MW solar plant was completed during Q3 FY2019 at Rampura Agucha taking the total solar capacity there to 38MW

The 25MLD Sewage Treatment Project at Udaipur will be commissioned in Q1 FY2020, taking the total capacity to 45MLD. This will play a key role in improving water availability at Dariba and treat over half of Udaipur's sewage.

#### **EXPLORATION**

Successful exploration in FY2019 added to reserves and resources (R&R), providing opportunities for extended mine life and production growth. Across all the sites, surface drilling increased to 181km and underground drilling of 26km was achieved during the year.

In comparison with the previous year's mineral resource and ore reserve statements:

There is an overall net depletion of 13.1 million tonnes of ore reserves to 92.6 million tonnes, and a net 4.8 million tonnes increase of exclusive mineral resources to 310.4 million tonnes.

Total contained metal in ore reserves is 7.2 million tonnes of zinc, 2.1 million tonnes of lead and 280 million ounces of silver.

The exclusive mineral resource contains 18.5 million tonnes of zinc, 6.8 million tonnes of lead and 685 million ounces of

At current mining rates, the R&R underpins a mining life of more than 25 years.

#### **OUTLOOK**

Mined metal production, and finished metal production is expected to be around 1 million tonnes. The cost of production excluding royalty is expected to be < US\$1000 per tonne. The project capex for the year will be in the range of US\$350 to US\$400 million.

Further in line with the structural growth in mined metal production and with improved silver grades, we can expect to deliver significant growth in silver volumes. The silver volumes for FY2020 are in the range of 750 tonnes to 800 tonnes.

#### STRATEGIC PRIORITIES

Our focus and priorities will be to:

- ramp up underground mines to 1.2mtpa design capacity;
- de-bottleneck and expand smelting capacity to maintain mines/smelter synergies at higher levels of production;
- use advanced technology, automation and digitalisation to structurally reduce cost of production by improving equipment productivity, metal recoveries and operational efficiency; and
- increase R&R through higher exploration activity and new mining tenements.





#### THE YEAR IN SUMMARY

FY2019 was a milestone year for Zinc International. We ramped up production from Pit 112 at Skorpion and completed our flagship Phase I Gamsberg project.

As per the mine plan, we have substantially completed pre-stripping of Pit 112 and will be able to access the ore body and fully ramp up production in FY2020.

The Gamsberg operation was commissioned during the middle of FY2019 with trial production starting in November 2018, followed by the first shipment of concentrate in December 2018. Gamsberg was formally inaugurated by the President of South Africa, Mr. Cyril Ramaphosa, and Vedanta Chairman, Mr. Anil Agarwal, on 28 February 2019. Ramp up to full capacity of 4mtpa of ore is expected in 3-6 months.

With further ramp up of Gamsberg Phase I and the Skorpion Zinc Pit 112 expansion, Zinc International is expected to produce more than 350,000 tonnes next year.

#### **SAFETY**

With deep sorrow, we reported a fatality at Gamsberg project during the year, which occurred during the construction phase at the concentrator plant. The lessons

learned, following a thorough investigation, have been shared across the business and our control of critical risks related to equipment selection and business partner on-boarding have been strengthened. Lost time injuries have shown an increase from 16 to 23 for the year, with the frequency rate also showing an increase to 1.89 (FY2018: 1.36). This is largely due to an increase in activity at Gamsberg. Injury severity rates continue to decrease year on year.

The business has taken steps in driving Safety as the Number One Value across the business. The value will strengthen partnerships with our employees and Business Partners in achieving Zero Harm. Dust control remains a main focus area in order to reduce lead and silica dust exposures of employees, which will also further sustain the number of employees withdrawn over the last few years (from 25 in FY2016 to 7, 8 and 8 over the last three years). Participation in the VCT drive for HIV/Aids programmes for both employees and business partners was well attended, with 2,767 tests conducted during FY2019.

"Gamsberg is now ramping up to its target ore throughput capacity of 4mtpa to produce 250ktpa metal. . With Gamsberg Phase Il mega pit production, we are expected to produce combined 450ktpa metal."

#### **Deshnee Naidoo** CEO, Zinc International and CMT





- Gamsberg, South Africa (under development) Skorpion mine, Namibia Black Mountain mine, South Africa





#### **ENVIRONMENT**

During the period, Skorpion Zinc reported one category 3 environmental incident involving tailings overflow from one pond due to a failed pump. The incident had a limited environmental impact and is being consistently and closely monitored. Remedial actions include drilling of 4 - 6 boreholes for the recovery of contaminants and monitoring purposes. The pond is also being rehabilitated.

Gamsberg complied with the Biodiversity Offset Agreement requirement on total hectares of sensitive plant communities impacted by securing four properties measuring 21,900ha. The proclamation of Gamsberg Nature reserve was also announced on 26 November 2018.

#### PRODUCTION PERFORMANCE

Production (kt)	FY2019	FY2018	% change
Total production (kt)	148	157	(5%)
Production – mined metal (kt) BMM	65	72	(10)%
Gamsberg <sup>1</sup>	17	-	-
Refined metal Skorpion	66	84	(22)%

<sup>&</sup>lt;sup>1</sup> Includes trial run production of 10 KT

#### **UNIT COSTS**

	FY2019	FY2018	% change
Zinc (US\$ per tonne) unit cost	1,912	1,603	19%

#### **FINANCIAL PERFORMANCE**

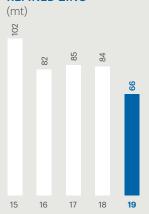
(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	2,738	3,446	(21)%
EBITDA	698	1,415	(51)%
EBITDA margin (%)	25%	41%	-

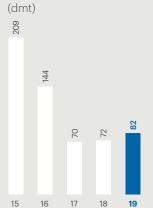
Proclamation of Gamsberg Nature Reserve gazetted on 26 November 2018



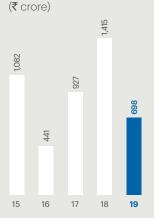
Below: Lab activities at BMM Plant



#### **PRODUCTION** ZINC/LEAD MINED METAL



## **EBITDA**



#### **OPERATIONS**

During FY2019, total production stood at 148,000 tonnes, 5% lower y-o-y. This was due to lower production at Skorpion because of a two-week strike in March 2019, as well as lower zinc grades at Skorpion (7.6% vs 8.2%) and lower production at BMM due to lower than planned grades and hence lower recoveries. This was partially offset by the commencement of production from Gamsberg.

Skorpion's production was 66,000 tonnes, down 22% y-o-y, due to the planned shutdown of the acid plant during Q1 FY2019, and lower than planned zinc grades. Furthermore, the mining business partner's employees embarked on an illegal strike from 22 February to 6 March 2019. The employees cited unresolved labour matters with their employer. The strike action lasted 14 days and had a severe negative impact on mining activities and the lead time to re-establish mining operations. This resulted in the depletion of run of mine ore inventory, with the consequent effect of a temporary closure of the refinery while re-establishing mining buffers. Skorpion took this opportunity to bring forward the annual shutdown previously scheduled in Q2 FY2020. The operations restarted in the second half of April 2019.

At BMM, production was 10% lower than the previous year. This decrease was primarily due to lower than planned grades and hence lower recoveries.

### **UNIT COSTS**

The unit cost of production increased by 19% to US\$1,912 per tonne, up from US\$1,603 in the previous year. This was mainly driven by lower production at both Skorpion Zinc and BMM, higher amortisation of stripping costs of Pit 112 at Skorpion Zinc, higher TCRCs and annual inflation partially offset by local currency depreciation, sulphur efficiencies, lower oxide consumption at Skorpion Zinc and higher copper credit at BMM.

#### **FINANCIAL PERFORMANCE**

During the year, revenue decreased by 21% to ₹2,738 crore, driven by lower sales volumes compared to FY2018 and lower price realisations. The same factors along with higher cost of production resulted in a decrease in EBITDA to ₹698 crore, down 51% from ₹1,415 crore in FY2018.

#### **PROJECTS**

Gamsberg mining is continuing as per plan. During the year, 41mt waste and ore has been moved including pre-stripping and a healthy stockpile of 1.0mt has been built up for smooth feed to plant. Post-trial production, the concentrator plant has been progressively ramping up.

The focus for Gamsberg has been to fully commission the plant, including all automation and achieve an 80% plant runtime which has been successfully achieved in March 2019. This was despite the stoppage of work and retraining of all employees and business partners following the fatality at Gamsberg in May 2018 as well as commissioning issues which have since been resolved.

In the case of Pit 112 at Skorpion Zinc over 75% of waste pre-stripping has been completed and mining will come to end by Q3 FY2020 with a stockpile built up to feed plant for next 12 months.

We are at an advanced stage in concluding feasibility for Gamsberg Phase 2 to increase Gamsberg production capacity from its existing 250,000 tonnes per annum (ktpa) to 450ktpa. Investments in this project are expected to be around US\$300 million.

#### **EXPLORATION**

During the year, we made gross additions of 130.36 million tonnes of ore and 4 million tonnes of metal to reserves and resources (R&R), after depletion.

As at 31 March 2019, Zinc International's combined mineral resources and ore reserves were estimated at 434 million tonnes, containing 24.4 million tonnes of metal. The reserves and resources support a mine life of more than 30 years.

Zinc International is further pleased to announce the declaration of a maiden resource at its Big Syncline project, located on its Black Mountain mining license in South Africa. Resource estimation was carried out by SRK Consulting (UK) and resulted in an inferred resource of 151.7 million tonnes grading 3.6% (zinc and lead). The majority of the resource is accessible through open-cast operations at low stripping ratios.



#### **OUTLOOK**

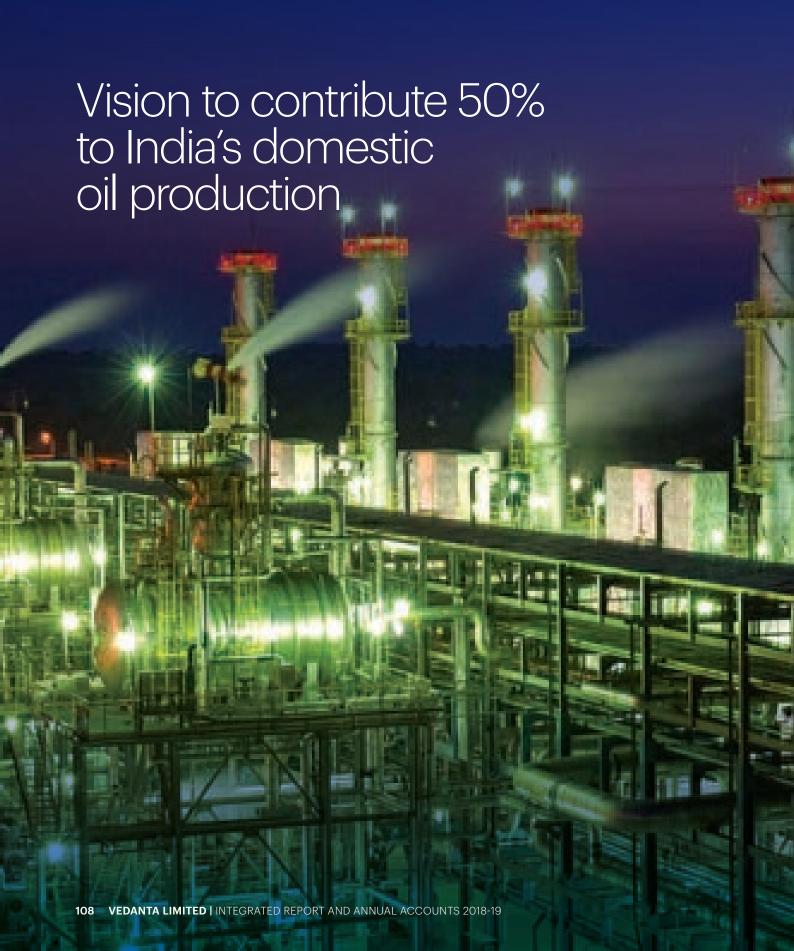
In FY2020, we expect production volumes to be in the range of 180-200kt from Gamsberg, while the volumes from Skorpion and BMM will be greater than 170kt. The cost of production excluding Gamsberg is expected to be around US\$1,400 per tonne due to Skorpion's Zinc production ramp up due to access to high grade ore from Pit 112, while the cost of production Gamsberg is forecasted to be around US\$1000 per tonne.

#### **STRATEGIC PRIORITIES**

- ramp up of Gamsberg Phase I production in H1 of FY2020;
- complete the approval of Gamsberg Phase 2; and
- complete the feasibility study for an integrated smelter-refinery with 250ktpa metal production.







During FY2019, we delivered a strong operational and financial performance in addition to execution of key contracts across our portfolio of development opportunities which are expected to add significant volumes going forward.

In pursuit of our vision to contribute 50% of India's domestic crude oil production, we continue to invest in growth projects in order to monetise the resource base. The Oil & Gas business has a rich project portfolio comprising enhanced oil recovery, tight oil, tight gas, satellite field development, facility upgradation and exploration and appraisal prospects. Most of the projects are being executed under an Integrated Development strategy involving leading global oilfield service companies and are on track to deliver expected volume additions. 11 development drilling rigs are currently deployed; 99 wells were drilled & 33 wells hooked up during FY2019 in Rajasthan. We are ramping up well drilling and hook up to add volumes.

Further, in order to add additional resource base, we entered into a Revenue-Sharing Contract signed for 41 exploration blocks through OALP-1 and also secured two

#### SAFETY

There were 11 lost time injuries (LTIs) in FY2019. The frequency rate stood at 0.30 (FY2018: 0.19), amid a significant increase in activity due to development projects.

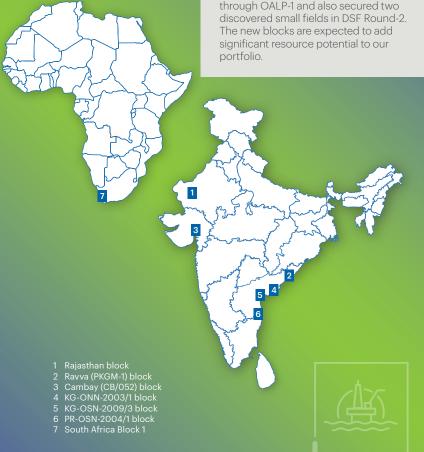
At the same time, we were proud that our safety philosophy and management systems were recognised with awards conferred by a number of external bodies:

- Cairn Oil & Gas was recognised in the CII-ITC Sustainability Awards 2018.
- Raageshwari Gas Terminal has been awarded 'Sword of Honour' from the British Safety Council for excellence in HSE management
- · Bhagyam field received the Platinum prize in the seventh FICCI Safety Systems Excellence Awards 2018 (large-scale mining sector category).
- Cairn Oil & Gas won three awards in the International Fire and Security Exhibition and Conference (IFSEC) India.
- Raageshwari Gas Terminal and CB/OS-2 asset were certified for '5S' by the Quality Circle Forum of India (QCFI).
- Ravva asset achieved a Five Star Rating in the CII-Southern Region Award for HSE Excellence.

"Revenue sharing contract signed for 41 exploration blocks through OALP-1 and these new blocks are expected to add significant resource potential to our portfolio"

**Ajay Kumar Dixit** CEO, Oil & Gas







#### **ENVIRONMENT**

Our Oil & Gas business is committed to protecting the environment, minimising resource consumption and driving towards our goal of 'zero discharge'. Our progress was recognised in the fifth CII Environmental Best Practices Award 2018 for Natural Gas Recovery, for zero flaring during frack well milling in gas operations.

At the Rajasthan asset, our operations at the Mangala, Bhagyam and Aishwarya fields were recognised as 'Noteworthy Water Efficient Units', in the 'within fence category' of the National Award for Excellence in Water Management 2018 by CII.

#### PRODUCTION PERFORMANCE

	Unit	FY2019	FY2018	% change
Gross Operated production	Boepd	188,784	185,587	2%
Rajasthan	Boepd	155,903	157,983	(1)%
Ravva	Boepd	14,890	17,195	(13)%
Cambay	Boepd	17,991	10,408	73%
Oil	Bopd	178,207	177,678	0%
Gas	Mmscfd	63.5	47.4	34%
Net production – working interest <sup>1</sup>	Boepd	119,798	118,620	1%
Oil	Bopd	114,214	114,774	0%
Gas	Mmscfd	33.5	23.1	45%
Gross production	Mmboe	68.9	67.7	2%
Working interest production	Mmboe	43.7	43.3	1%

Includes net production of 119boepd from the KG-ONN block, which is operated by ONGC. Cairn holds a 49% stake.

#### **PRICES**

	FY2019	FY2018	% change
Average Brent prices - US\$ per barrel	70.4	57.5	22%

#### **FINANCIAL PERFORMANCE**

(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	13,223	9,536	39%
EBITDA	7,656	5,429	41%
EBITDA margin (%)	58%	57%	-

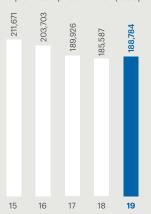
11 development, drilling rigs are currently deployed; 99 wells drilled & 33 wells hooked up during FY2019 in Rajasthan



**Below:** Employees at the Mangala Processing

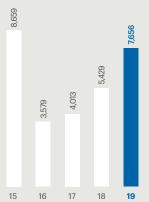
#### **PRODUCTION -AVERAGE DAILY GROSS**

Operated production(boepd)



### **EBITDA**

(₹ crore)





#### **OPERATIONS**

Average gross production across our assets was 2% higher y-o-y at 188,784boepd. Production from the Rajasthan block was 155,903boepd, 1% lower y-o-y. The natural reservoir decline has been managed with gains accruing from the new wells brought online. Production from the offshore assets stood at a combined 32,881boepd, higher by 19% y-o-y, due to the gains from the Cambay infill campaign.

#### **RAJASTHAN BLOCK**

Gross production from the Rajasthan block averaged 155,903boepd in FY2019, 1% lower y-o-y. This decrease was primarily due to natural decline from the fields but was partially offset by the gain realised from new wells brought online as part of Mangala infill, the Bhagyam & Aishwariya EOR campaign, production optimisation activities and augmentation of liquid handling capacity at the Mangala Processing Terminal (MPT).

At Rajasthan, 99 wells have been drilled as part of the growth projects; of these 33 wells have been brought online during FY2019.

Gas production from Raageshwari Deep Gas (RDG) averaged 51.3 million standard cubic feet per day (mmscfd) in FY2019, with gas sales, post captive consumption, at 35.6mmscfd.

The Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas, has granted its approval for a 10-year extension of the PSC for the Rajasthan block RJ-ON-90/1, subject to certain conditions, with effect from 15 May 2020. The applicability of the Pre-NELP extension policy to the RJ Block PSC is currently sub-judice.

#### **RAVVA BLOCK**

The Ravva block produced at an average rate of 14,890boepd, lower by 13% y-o-y. This was primarily due to natural field decline, although this was partially offset by production optimisation measures. The Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas, has granted its approval for a 10-year extension of the PSC for the Ravva block, subject to certain conditions.

#### CAMBAY BLOCK

The Cambay block produced at an average rate of 17,991boepd in FY2019, up by 73% y-o-y, supported by the gains realised from the infill wells campaign completed in Q1 FY2019.

#### **PRICES**

Brent crude oil averaged US\$70.4 per barrel, compared to US\$57.5 per barrel in the previous financial year. The oil price rallied in the first half, owing to the high compliance on the production cut by OPEC and other producers, as well as sanctions on Iran imposed by the US and a steep decline in production from Venezuela. This rally saw crude oil hitting a four-year high in early October to touch US\$86.29 per barrel.

In the latter half of the year oil prices declined due to the US Government's waivers to eight major importers of Iranian crude, leading to an oversupply in the market. However, the oil price started to rebound in last quarter owing to the production cut by OPEC and other producer countries.

#### FINANCIAL PERFORMANCE

Revenue for FY2019 was 39% higher y-o-y at ₹13,223 crore (after profit and royalty sharing with the Government of India), supported by a recovery in oil price realisation. EBITDA for FY2019 was higher at ₹7,656 crore, up 41% y-o-y in line with the higher revenue.

The Rajasthan water flood operating cost was US\$5.1 per barrel in FY2019 compared to US\$4.6 per barrel in the previous year, primarily driven by increased interventions and production enhancement initiatives. Overall, the blended Rajasthan operating costs increased to US\$7.6 per barrel compared to US\$6.6 per barrel in the previous year, due to the ramp up in polymer injection volumes and the increase in commodity prices.

#### A. GROWTH PROJECTS **DEVELOPMENT**

The Oil & Gas business has a robust portfolio of development opportunities with the potential to deliver incremental volumes. In order to execute these projects on time and within budget, we have devised an integrated project development strategy, with an in-built risk and reward mechanism. This new strategy is being delivered in partnership with leading global oilfield service companies. Major contracts have been awarded and execution has started



#### I) MANGALA INFILL, ENHANCED OIL RECOVERY (EOR) AND ALKALINE SURFACTANT POLYMER (ASP)

The field is currently under full field polymer injection. In addition, to increase the ultimate oil recovery and support production volumes, we are executing a 45-well infill drilling campaign in the field.

The valuable lessons gained from the successful implementation of the Mangala polymer EOR project, are being leveraged to enhance production from the Bhagyam and Aishwariya fields. Till March 2019, 73 wells have been drilled under enhanced oil recovery projects across Mangala, Bhagyam and Aishwariya, of which 33 are online.

Going forward, the Alkaline surfactant polymer (ASP) project at Mangala will enable incremental recovery from the prolific Mangala field. The project entails drilling wells and developing infrastructure facilities at the Mangala Processing Terminal. The contract for drilling has already been awarded, while the contract for the surface facility will be awarded by Q1 FY2020.

# II) TIGHT OIL & GAS PROJECTS a) Tight oil: Aishwariya Barmer Hill (ABH)

Aishwariya Barmer Hill (ABH) is the first tight oil project to monetise the Barmer Hill potential, and drilling started in Q1 FY2019. Currently, three rigs are operational, and 20 wells had been drilled by March 2019. Initial deliverability from the two wells is in line with expectations. We have successfully drilled the longest lateral well of 1,355m using advanced geo-steering technology.

### b) Tight gas: Raageshwari deep gas (RDG) development

The RDG project is being executed through an integrated development approach to ramp up overall Rajasthan gas production to ~150mmscfd, and condensate production of 5kboepd. The project entails developing surface facilities and the drilling and completion of 42 wells. The early production facility is under commissioning and the construction of the terminal is progressing to plan. Up to March 2019, six wells had been drilled.

#### **III) OTHER PROJECTS**

#### a) Satellite field development

An integrated contract for the development of satellite fields is under award.

#### b) Surface facility upgradation

The Mangala Processing Terminal (MPT) facility upgradation is progressing as per plan to handle incremental liquids. Phase 1 of the intra-field pipeline augmentation project was commissioned in Q4 FY2019 and the balance scope of Phase 1 to be commissioned by Q1 FY2020.

#### IV) RAVVA DEVELOPMENT

An integrated contract for drilling development wells is under award.

#### **B. EXPLORATION AND APPRAISAL**

#### RAJASTHAN - (BLOCK RJ-ON-90/1) RAJASTHAN EXPLORATION

The Group is reactivating its oil & gas exploration efforts in the prolific Barmer Basin, which provides access to multiple play types with oil in high permeability reservoirs, tight oil and tight gas. We have engaged global partners to reveal the full potential of the basin and establish >1 billion boe of prospective resources.

We have awarded an integrated contract for a drilling campaign of 7-18 exploration and appraisal wells to build on the resource portfolio, with well-spud expected by Q1 FY2020.

#### TIGHT OIL APPRAISAL

The contract for the appraisal of four fields (Vijaya & Vandana, Mangala Barmer Hill, DP and Shakti) has been awarded, and will include the drilling of 10 new wells. This will also involve multi-stage hydraulic fracturing and extended testing. Rigs are under mobilisation and drilling is expected to begin in Q1 FY2020.

#### KRISHNA-GODAVARI BASIN OFFSHORE

Oil discovery was notified in the second exploratory well (H2), and a further appraisal will now be required to establish its size and the commerciality of the oil discovery.

The first exploration well drilled in the block (A3-2) was a gas discovery. Evaluations are ongoing.

#### **RAVVA**

In order to increase the reserve and resource base, an integrated contract for drilling exploratory wells is under award.

### OPEN ACREAGE LICENSING POLICY (OALP)

Under the Open Acreage Licensing Policy (OALP), revenue-sharing contracts have been signed for 41 blocks. These comprise 33 onshore and 8 offshore blocks with a potential of ~1.4 to 4.2 billion boe of resource, and are located primarily in established basins, including some optimally close to existing infrastructure. We have issued a global tender, inviting bids for an end-to-end integrated contract.

#### **DISCOVERED SMALL FIELDS (DSF2)**

Discovered small fields (DSF2) provide synergy with existing oil & gas blocks in the vicinity. These blocks were assessed based on the resource potential and proximity to infrastructure in prioritised sedimentary basins across India. Two discovered small fields named as Hazarigaon and Kaza gas fields, located in Assam and Krishna Godavari basins respectively, have been awarded under DSF2.

#### **OUTLOOK**

Vedanta's Oil & Gas business now has a robust portfolio comprising a number of exploration blocks with promising prospects, a large pool of development projects and prolific producing fields. Our energies are focused across these opportunities, and as we execute our development projects we expect to deliver a progressive increase in production volumes.

The closure of growth projects contracts with global vendors took longer than envisaged impacting near term volumes. We have however locked in contracts at attractive prices and returns. For FY2020, with the increase in drilling activities and wells hook up, we expect the production volumes to be in the range of 200-220 kboepd. Opex during the year is expected to be c.-US\$7.5/boe.

#### **STRATEGIC PRIORITIES**

- continue to progress towards 'zero harm, zero waste and zero discharge';
- continue to operate at a low cost-base and generate free cash flow post-capex;
- execute growth projects within schedule and cost;
- continue progress on execution of projects to achieve targeted production of 270-300kboepd; and
- evaluate further opportunities to expand the exploration portfolio through OALP and other opportunities.





In FY2019, the aluminium smelters achieved an all-time-high production of 1.96 million tonnes (including trial run). Despite some headwinds facing cost of production - mainly input commodity inflation, global disruptions in alumina supply and temporary coal disruptions in the domestic market - we were supported by higher alumina production volumes at Lanjigarh and rupee depreciation. We are focusing on optimising our controllable costs and improving our price realisation to improve profitability in a sustainable way.

The cost of production for Q4 FY2019 was US\$1,776 per tonne, on account of structural improvements in the cost due to increased local bauxite supply, ramped up alumina volume and improved coal materialisations

We also achieved record production of 1.5 million tonnes at the Alumina refinery through debottlenecking. We continue to explore the feasibility of expanding the refinery's capacity, growing through a phased programme and subject to bauxite

#### SAFETY

We experienced 15 lost time injuries during the year (FY2018: 22), and the frequency rate decreased to 0.23 from 0.39. We have delivered specialist skill and competency training in areas such as crane and lifting operations, vehicles and driving. Root cause analysis training was also given to the heads of department and maintenance heads, in order to investigate the injuries and high-potential incidents in order to avoid these lapses in the future.

Focusing on building a culture of care, a programme of 'Visible Felt Leadership' has been launched, with management at plants spending more time on the shop-floor to pre-empt and address safety issues.

At BALCO, in order to increase safety awareness and to interact with business partners, workers and their families, programmes such as care-drives (seven in number) and 'Suraksha ki goth' have been organised within the plant. Additionally, the Company has kick-started a training programme on practising life-saving behaviours. About 8,000 employees and business partners have received this

In a significant achievement, the Lanjigarh refinery achieved zero-LTIs for the third consecutive year, and we seek to replicate its success across the business.



"In FY2019, we achieved record production of Alumina and India's highest production of Aluminium"

**Ajay Kapur** CEO - Aluminium & Power





#### **ENVIRONMENT**

The review of our tailings dam structures was completed by Golder Associates and we are studying recommendations to increase the structures' stability.

Separately, we recycled 14% of the water we used in the year (FY2018: 11%) and our BALCO operations saw a marginal improvement in their specific water consumption of 0.72 m³/MT (FY2018: 0.74 m³/MT). In Lanjigarh, as part of waste management, 101% of fly ash and 97% of lime grit was recycled.

#### PRODUCTION PERFORMANCE

Production (kt)	FY2019	FY2018	% change
Alumina – Lanjigarh	1,501	1,209	24%
Total aluminium production	1,959	1,675	17%
Jharsuguda I	545	440	24%
Jharsuguda II¹	843	666	27%
BALCOI	260	259	_
BALCO II <sup>2</sup>	311	310	-

- 1. Including trial run production of 60.5kt in FY2019 vs. 61.8kt in FY2018.
- 2. Including trial run production of nil in FY2019 vs. 16.1kt in FY2018.

#### **PRICES**

	FY2019	FY2018	% change
Average LME cash settlement prices (US\$ per tonne)	2,035	2,046	(1)%

#### **UNIT COSTS**

(US\$ per tonne)

	FY2019	FY2018	% change
Alumina cost (ex-Lanjigarh)	322	326	(1)%
Aluminium hot metal production cost	1,940	1,887	3%
Jharsuguda CoP	1,938	1,867	4%
BALCO CoP	1,945	1,923	1%

#### **FINANCIAL PERFORMANCE**

(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	29,229	23,156	26%
EBITDA	2,202	2,654	(17)%
EBITDA margin (%)	8%	11%	-

First full-scope implementation of SAP S/4HANA in the Metals & Mining sector in the world, enabling the organisation to be ready for the next level of digitisation



Below: Smelter at Jharsuguda



17

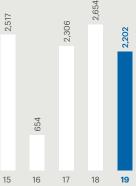
18

#### **EBITDA**

16

15

(₹ crore)





#### **OPERATIONS ALUMINA REFINERY: LANJIGARH**

At Lanjigarh, production was 24% higher y-o-y at 1.5 million tonnes, primarily through plant debottlenecking. We continue to evaluate the possible expansion of the refinery, subject to bauxite availability.

#### **Aluminium smelters**

We ended the year with record production of 1.96 million tonnes (including trial run).

Production from the Jharsuguda I smelter was 24% higher y-o-y. This was primarily due to lower volumes in 2018 due to a pot outage incident in Q1 that affected 228 pots of the Jharsuguda-I smelter. These pots were fully restored by Q3 FY2018.

Production from the Jharsuguda II smelter was 27% higher y-o-y. This was mainly driven by production stabilisation from the ramp ups in the previous year. We continue to evaluate Line 4 of Jharsuguda II smelter.

The BALCO I & II smelters continued to show consistent performance.

#### **Coal linkages**

We continue to focus on ensuring the long-term security of our coal supply, and at competitive prices. We added 3.2 million tonnes of coal linkages during FY2019 from Tranche IV auctions. The materialisation of Tranche IV began in March 2019. We have also operationalised the captive coal block, Chotia, at our BALCO operations. This takes our coal security to 72% of our requirements.

#### **PRICES**

Average LME prices for aluminium in FY2019 stood at US\$2,035 per tonne, which was almost flat y-o-y. Prices were volatile throughout the year driven by global uncertainties, fuelled by sanctions against Rusal and US-China trade war concerns.

#### **UNIT COSTS**

During FY2019, the cost of production (CoP) of alumina was flat y-o-y at US\$322 per tonne. Benefits from an increase in locally sourced bauxite from Odisha Mining Corporation (OMC), improved plant operating parameters and rupee depreciation were offset by input commodity inflation (mainly caustic soda and imported bauxite).

In FY2019, the total bauxite requirement of about 4.4 million tonnes was met by captive mines (10%), OMC (31%), domestic sources (20%) and imports (39%). In the previous year, the bauxite supply mix was captive mines (29%), domestic sources (41%) and imports (30%).

In FY2019, the CoP of hot metal at Jharsuguda was US\$1,938 per tonne, up by 4% from US\$1,867 in FY2018. The equivalent CoP figure at BALCO increased to US\$1,945 per tonne, up by 1% from US\$1,923 in FY2018.

This was primarily driven by volatility in global alumina prices due to supply disruptions and input commodity inflation (mainly carbon). The global alumina price indices generally traded higher than prices in the past years. The power cost was higher due to disruptions in domestic coal supply from Coal India, resulting in procurement of coal from alternative sources at higher prices and power import from the grid. CoP was partially offset by higher Lanjigarh alumina production and currency depreciation.

The cost of production for Q4 FY2019 was US\$1,776 per tonne, significantly lower compared to previous quarters on account of structural improvements in the cost due to increased local bauxite supply from OMC meeting over 50% of our Q4 FY2019 requirements, increase captive alumina production from the Lanjigarh refinery. The peak run rate at Lanjigarh refinery during the year was 1.8mtpa.

Coal materialisation improved significantly in Q4 FY2019, resulting in no power imports from the grid in last four months of FY2019. We have further secured 3.2 million tonnes of coal in the Tranche IV auction and materialisation started in March 2019. This will further improve coal availability and therefore help drive costs

#### FINANCIAL PERFORMANCE

During the year, revenue increased by 26% to ₹29,229 crore, driven by volume ramp up at Jharsuguda and rupee depreciation. EBITDA was lower at ₹2,202 crore (FY2018: ₹2,654 crore), mainly due to an increase in cost of production partially offset by a write back of liability pursuant to a settlement agreement with a contractor at BALCO.



#### OUTLOOK VOLUME AND COST

In FY2020, we expect production at our Lanjigarh refinery of around 1.7-1.8 million tonnes, with aluminium production at smelters remaining stable.

As input commodity prices continue to be volatile, we are looking at ways to optimise our controllable costs, while also increasing the price realisation in order to improve profitability in a sustainable way.

The global alumina price indices remained volatile during FY2019 and peaked in the middle of the year but have since lowered in recent months. We expect the global alumina supply to improve as new refinery volumes enter production and expect prices to remain stable for the forthcoming year.

At our power plants, we are also working towards reducing GCV losses as well as improving plant operating parameters which should deliver higher plant load factors (PLFs) and a reduction in non-coal costs.

The hot metal cost of production for FY2020 is expected to be in the range of US\$1,725 – 1,775 per tonne.

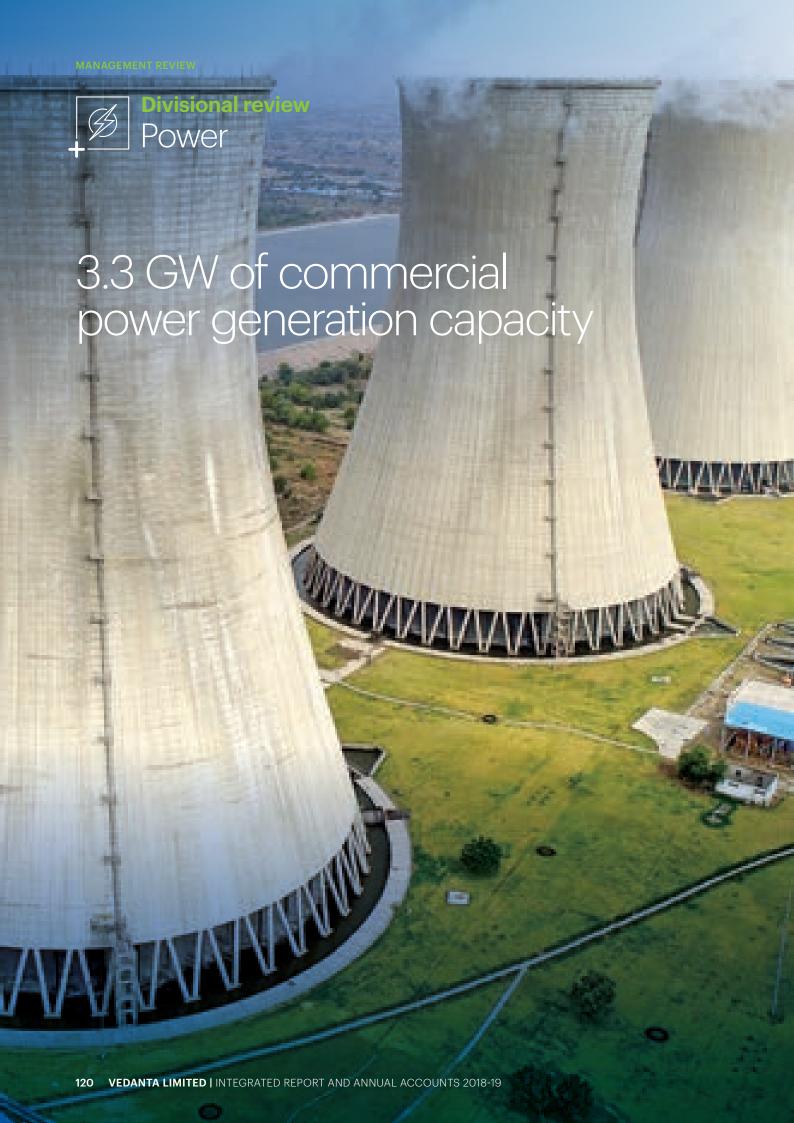
We aim to increase our value-added production to 60% of our total sales for FY2020.

#### **STRATEGIC PRIORITIES**

- deliver Lanjigarh refinery production at 1.7-1.8 million tonnes and stable aluminium production;
- enhance our raw material security of bauxite & alumina;
- improve coal linkage security, better materialisation and continued production at our Chotia mines;
- improve our plant operating parameters across locations; and
- improve realisations by improving our value-added product portfolio.



Above: Employees at integrated facility, Jharsuguda





FY2019 was a significant year for the Talwandi Saboo (TSPL) power plant, where we achieved plant availability of c.88%. However, the plant load factors for the Jharsuguda and Balco IPP were impacted by domestic coal shortages.

#### **SAFETY**

We report with deep regret a fatality during the year, as the result of a vehicle accident at our BALCO IPP. After a thorough investigation, the lessons learned were shared for implementation across all our businesses. To enhance safety, a segregated pedestrian pathway has been completed throughout the coal truck movement area, designed to reduce the risk of accidents to passing pedestrians.



# "Record plant availability of 88% at TSPL in FY2019"

**Ajay Kapur** CEO - Aluminium & Power



- Jharsuguda power plant Korba power plant Talwandi Sabo Power plant Captive thermal power plant



#### **ENVIRONMENT**

One of the main environmental challenges for power plants is the management and recycling of fly ash. At our BALCO IPP, 100% of the fly ash was utilised at both the power plants, up from 62% and 58% respectively in the previous year. The plant also saw a significant reduction in auxiliary power consumption at 7.82% (FY2018: 8.14%). A similar downward trend was achieved in BALCO IPP's specific water consumption at 2.20 m<sup>3</sup>/MwH (FY2018: 2.8 m<sup>3</sup>/MwH).

#### PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Total power sales (MU)	13,515	11,041	22%
Jharsuguda 600MW	1,039	1,172	(11%)
BALCO 600MW <sup>1</sup>	2,168	1,536	41%
MALCO <sup>2</sup>	_	4	_
HZL wind power	449	414	9%
TSPL	9,858	7,915	25%
TSPL – availability	88%	74%	-

#### **UNIT SALES AND COSTS**

	FY2019	FY2018	% change
Sales realisation (₹/kWh)¹	3.4	2.9	17%
Cost of production (₹/kWh)1	2.9	2.3	24%
TSPL sales realisation (₹/kWh) <sup>2</sup>	4.1	3.5	16%
TSPL cost of production (₹/kWh) <sup>2</sup>	3.1	2.5	21%

#### FINANCIAL PERFORMANCE

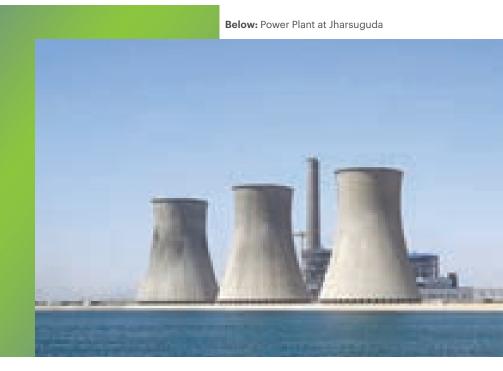
(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	6,524	5,652	15%
EBITDA	1,527	1,665	(8)%
EBITDA margin (%)	23%	25%1	-

<sup>&</sup>lt;sup>1</sup> Excluding one-offs

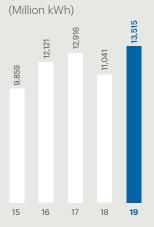
100% of fly ash utilised at both Balco IPPs



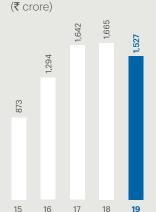


Continues to be under care and maintenance since 26 May 2017 due to low demand in Southern India. We have received an order dated 1 January 2019 from CSERC for Conversion of 300MW IPP to CPP. During Q4 FY2019, 184 units were sold externally from this plant.

Power generation excluding TSPL.
 TSPL sales realisation and cost of production is considered above, based on availability declared during the respective period.



#### **EBITDA**





#### **OPERATIONS**

During FY2019, power sales were 13,515 million units, 22% higher y-o-y. Power sales at TSPL were 9,858 million units with 88% availability. At TSPL, the Power Purchase Agreement with the Punjab State Electricity Board compensates us based on the availability of the plant.

The 600MW Jharsuguda power plant operated at a lower plant load factor (PLF) of 15% in FY2019.

The 600MW BALCO IPP operated at a PLF of 53% in FY2019. We have received an order dated 1 January 2019 from CSERC for the conversion of 300MW capacity from an Independent power plant (IPP) to a Captive power plant (CPP).

The MALCO plant continues to be under care and maintenance, effective from 26 May 2017, due to low demand in Southern India.

#### **UNIT SALES AND COSTS**

Average power sale prices, excluding TSPL, increased by 17% at ₹3.4 per kWh. This was mainly due to better prices in the open access market.

During the year, the average generation cost was higher at ₹2.9 per kWh (FY2018: ₹2.3 per kWh), driven by mainly increased coal prices.

TSPL's average sales price was higher at ₹4.1 per kWh (FY2018: ₹3.5 per kWh), and power generation cost was higher at ₹3.1 per kWh (FY2018: ₹2.5 per kWh) driven mainly by increased coal prices.

#### FINANCIAL PERFORMANCE

EBITDA for the year was 8% lower y-o-y at ₹1,527 crore mainly due to an increase in the cost of production due to higher coal prices owing to supply disruption in the domestic market. Further, the EBITDA for FY2018 included a one-off revenue recognition of ₹226 crore and ₹139 crore at BALCO and at Jharsuguda IPP's respectively.

#### OUTLOOK

During FY2020, we will remain focused on maintaining the plant availability of TSPL above 80% and achieving higher plant load factors at the BALCO and Jharsuguda IPP's.

#### STRATEGIC PRIORITIES

- · resolve pending legal issues and recover aged power debtors;
- achieve high PLFs for the Jharsuguda and BALCO IPP; and
- improve power plant operating parameters to deliver higher PLFs/ availability and reduce the non-coal cost.





Operations in Goa continued to be suspended in FY2019, and remain so, due to a state-wide directive from the Supreme Court. We continue to engage with the Government to secure a resumption of mining operations.

Production of saleable ore at Karnataka was 4.1 million tonnes, in line with the increase in the mining cap for the state of Karnataka.

#### **SAFETY**

In continuing our journey to 'zero harm', the lost time injury frequency rate (LTIFR) was 0.30 (FY2018: 0.12). During the year we initiated new safety practices in our organisations including 'one man, one lock'; deployment of trained rescue teams for work at height and confined space; training in making better risk decisions (MBRD); crane lifting and rigger training; and continuing a grid ownership concept for improving EHS culture on the ground.

We also launched a dedicated safety app for real-time reporting of safety issues as well as tracking business leaders' time on-field which has proved highly successful. Across all the sites, scores have improved against the Vedanta Sustainability Audit Programme (VSAP) and Vedanta Safety Standards (VSS).



"Looking forward to restart our Goa Mine operations positively with all support from Government"

**Naveen Singhal** CEO, Sesa Goa - Iron Ore Business



- Iron Ore operations, Karnataka



#### **ENVIRONMENT**

We recycle and reuse all of the wastewater we generate in the Iron Ore Business, with the exception of blow down from the power plant which is treated and discharged according to consent conditions. We have also installed five fog cannon systems for dust suppression and have installed a bag filter at the charging car of the coke oven.

Our Iron Ore Karnataka business has started biodiversity studies which are currently in the Phase 2 stage. We have planted around 32,000 plants and also desilted around 1.17 lac m³ in 29 check dams and village ponds round our business area.

#### PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Production(dmt)			
Saleable ore	4.4	7.1	(38%)
Goa	0.2	4.9	(95%)
Karnataka	4.1	2.2	89%
Pig iron (kt)	686	646	6%
Sales (dmt)			
Iron ore	3.8	7.6	(49)%
Goa	1.3	5.4	(77%)
Karnataka	2.6	2.2	19%
Pig iron (kt)	684	645	6%

#### **FINANCIAL PERFORMANCE**

(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	2,911	3,162	(8%)
EBITDA	584	400	46%
EBITDA margin (%)	20%	13%	_

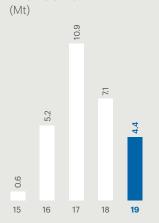
Planted 31,970 plants and desilted 1.06 lac m³ in check dams and village ponds around our business area



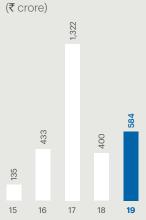
Below: Employees at operational site,



#### **PRODUCTION**



#### **EBITDA**



#### **OPERATIONS**

At Goa, production and sales volumes were lower than the prior year due to the mine closure. This was pursuant to the Supreme Court judgment dated 7 February 2018 directing all companies in Goa to stop mining operations with effect from 16 March 2018. We continue to engage with the Government for a resumption of mining operations.

At Karnataka, production was 4.1 million tonnes, 89% higher y-o-y due to an increase in the annual mining allocation. Sales in FY2019 were 2.6 million tonnes, 19% higher y-o-y due to an increase in production, but partially offset by muted e-auction sales.

Production of pig iron increased by 6% to 686,000 tonnes in FY2019, mainly owing to a lower metallurgical coke availability due to weather-related supply disruptions in Australia in Q1 FY2018, and a local contractors' strike in Q2 FY2018.

#### **FINANCIAL PERFORMANCE**

In FY2019, revenue decreased to ₹2,911 crore, 8% lower y-o-y mainly due to lower sales at Iron Ore Goa resulting from the mine closure partially offset by increase in sales volume at Karnataka and pig iron prices during the year. EBITDA increased to ₹584 crore compared with ₹400 crore in FY2018. This was mainly due to higher volumes at Karnataka.

#### OUTLOOK

The production from Iron ore Karnataka is expected to be 4.5 WMT (wet million tonnes).

#### **STRATEGIC PRIORITIES**

- bring about a resumption of mining operations in Goa through continuous engagement with the Government and the judiciary; and
- increase our footprint in iron ore by continuing to participate in auctions across the country, including Jharkhand.

MANAGEMENT REVIEW



FY2019, a transformational year for Electrosteel Steels Limited (ESL)



Vedanta Limited completed the acquisition of 90% of the share capital of ESL on 4 June 2018. ESL is an integrated steel plant (ISP) in Bokaro, Jharkhand, with a design capacity of 2.5mtpa. Its current operating capacity is 1.5mtpa with a diversified product mix of wire rod, rebar, DI pipe and

FY2019 was a transformational year for Electrosteel Steels Limited (ESL). The business achieved record production, sales volume, EBITDA, EBITDA margin and free cash flow generation. Indeed, FY2019 EBITDA margin of 19% was among the sector leaders in India.

#### **SAFETY**

Since the acquisition by Vedanta, we have started to implement the best safety practices of the Vedanta Group to work towards achieving 'zero harm'. These include:

- training and awareness programmes for making better risk decisions (MBRD);
- · implementation of eight Vedanta safety standards;
- · launch of Vedanta Sustainability Audit Programme (VSAP); and
- · focusing on Visual Felt Leadership (VFL).

We regard any safety incident as unacceptable and preventable and continue to work towards our zero harm goal.



### "Record production of 1.2 million tonnes during FY2019"

#### **PANKAJ MALHAN**

Deputy Chief Executive Officer -Electrosteel Business





#### **ENVIRONMENT**

Alongside 'zero harm', a main priority for ESL is to achieve 'zero waste and zero discharge' . In line with this, we have started on a journey to achieve no discharges of water.

#### PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Production (kt)	1,199	1,025	17%
Pig iron	142	179	(21%)
Billet	39	50	(21%)
TMT bar	441	300	47%
Wire rod	427	365	17%
Ductile iron pipes	150	130	15%

#### **PRICES**

(US\$ per tonne)

	FY2019	FY2018	% change
Pig iron	404	359	13%
Billet	486	447	9%
TMT	564	515	10%
Wire rod	638	558	14%
DI pipe	593	598	(1%)

#### **UNIT COSTS**

(US\$ per tonne)

	FY2019	FY2018	% change
Steel	457	456	1%

#### **FINANCIAL PERFORMANCE**

(₹ crore, unless stated)

	FY2019*
Revenue	4,195
EBITDA	791
EBITDA margin (%)	19%

<sup>1.</sup> Financial numbers are for a period of 10 months post acquisition

Doubled EBITDA margin during the year







#### **OPERATIONS**

ESL's manufacturing facility is a green field integrated steel plant located near Bokaro, Jharkhand, India, which has a current capacity of 1.5mtpa and the potential to increase to 2.5mtpa. It primarily consists of two sinter plant, a vertical coke oven plant, two blast furnaces, an oxygen plant, a lime calcination plant, a steel melting shop, a wire rod mill, a bar mill, a captive power plant and a ductile iron pipe plant.

Since June 2018, post Vedanta's acquisition of ESL, the business has seen significant improvements leading to a healthy financial position. There have been significant gains in operational efficiencies, such as a substantial reduction in the coke rate at blast furnaces 2 & 3 by about 3% and 7% respectively y-o-y; optimisation of the coal mix and iron ore blending; and improved yields of the finishing mill to 96.7% (from 95.9% in FY2018).

Prior to the acquisition, the saleable production for the business was about 1mtpa.This was mainly due to a sub-optimal use of assets, weak liquidity and limited working capital that resulted in an inadequate availability of resources. In FY2019, we achieved record saleable production of 1.2mtpa as a result of operational excellence and restarting of 350 m³ Blast Furnace 3 in August 2018. In line with our stated priorities to stabilize production and ramp up to 1.5mtpa, we achieved a hot metal production run-rate of c.1.5mtpa in FY2019.

The priority remains to enhance production of value-added products (VAPs), i.e. TMT bar, wire rod and Di pipe, and to minimize the production of non-value-added products (NVAPs) i.e. pig iron and billets. During the year, we shifted c.21% production of NVAPs to higher margin VAPs. TMT bar and wire rod production increased by 47% and 17% respectively y-o-y, driven mainly by improving yields at the steel melting shop, higher availability of hot metal and better efficiency at the mills.

Our Consent to Operate (CTO) for the steel plant at Bokaro, which was valid until December 2017, was not renewed by the State Pollution Control Board (PCB). This was followed by the Ministry of Environment, Forests and Climate Change revoking the Environmental Clearance (EC). Both the directions have since been stayed by the Hon'ble High Court of Jharkhand until the next hearing date, which is due on 16 May 2019.



Average sales realisation increased 12% y-o-y from US\$510 to US\$572 per tonne in FY2019. Prices of iron and steel are influenced by several macro-economic factors. These include government spend on infrastructure, the emphasis on developmental projects, demand-supply forces, the Purchasing Managers' Index (PMI) in India and production and inventory levels across the globe specially China.

#### **UNIT COSTS**

Coal prices and iron ore prices were higher by 15% and 50% respectively over FY2018 despite which, the cost of production stood flat at US\$457 per tonne in FY2019. This was managed through improvements in key operational metrics which include optimisation of lower grade iron ore fines, improvement in coke rate consumption, higher PCI consumption in blast furnaces, lower consumption of pellets, improvements in mill yields, commercial excellence and tight control over costs.

#### **FINANCIAL PERFORMANCE**

Since its acquisition by Vedanta with effect from June 2018, ESL has generated EBITDA of ₹791 crore. Prudent cost management and improvisation of key matrices played a pivotal role for this turnaround story.

#### OUTLOOK

Hot metal production is expected to be c.1.5mtpa in FY2020 and expected EBITDA margin is US\$130 to US\$140 per tonne.

#### STRATEGIC PRIORITIES

- obtain clean Consent to Operate and environmental clearance;
- · debottleneck the blast furnace, steel melting shop & roll capacity, improving production volume;
- gain raw material securitisation through long-term contracts;
- · re-brand value-added products and enter the retail market for TMT;
- embark on the expansion journey from 1.5 to 2.5mtpa;
- · ensure zero harm and zero discharge, fostering a safety-centric culture; and
- focus on waste-to-wealth through maximizing revenue from secondary products.





## **Divisional review**

Copper - India/Australia

Government and community engagement to restart smelter operations



The copper smelter plant at Tuticorin was under shutdown for the whole of FY2019.

We continue to engage with the Government and relevant authorities to enable the restart of operations at Copper

We continued to operate our refinery and rod plant at Silvassa, catering to the domestic market.

#### **SAFETY**

The lost time injury frequency rate (LTIFR) was 0.15 (FY2018: 0.08). The primary reason for the increase was the significant decline in man-hours due to plant closure.



"Our vision is to make Sterlite Copper, an integral part of the lives of the people in Thoothukudi and add value to the economic growth of our nation"

**PANKAJ KUMAR** Chief Executive Officer -Sterlite Copper





### **Divisional review**

# Copper - India/Australia

#### **ENVIRONMENT**

Copper Mines of Tasmania continued in care and maintenance awaiting a decision on restart. Meanwhile, a small dedicated team is maintaining the site and there were no significant safety or environmental incidents during the year. The site retained its ISO accreditation in safety, environment and quality management systems and the opportunity of a lull in production was used to review and further improve these systems.

#### **PRODUCTION PERFORMANCE**

	FY2019	FY2018	% change
Production (kt)			
India – cathode	90	403	(78)%

#### **PRICES**

	FY2019	FY2018	% change
Average LME cash settlement prices (US\$ per tonne)	6,337	6,451	(2)%

#### **FINANCIAL PERFORMANCE**

(₹ crore, unless stated)

	FY2019	FY2018	% change
Revenue	10,739	24,951	(57)%
EBITDA	(235)	1,055	_
EBITDA margin (%)	(2)%	4%	-

Silvassa refinery and rod plants helping us cater to the domestic market requirements



Sterlite Copper

Below: Employee at operational Site,

#### **OPERATIONS**

The Tamil Nadu Pollution Control Board (TNPCB) vide order, dated 9 April 2018, rejected the consent renewal application of Vedanta Limited for its copper smelter plant at Tuticorin. It directed Vedanta not to resume production operations without formal approval/consent (vide order dated 12 April 2018), and directed the closure of the plant and the disconnection of electricity (vide order dated 23 May 2018).

The Government of Tamil Nadu also issued an order dated 28 May 2018 directing the TNPCB to permanently close and seal the existing copper smelter at Tuticorin; this was followed by the TNPCB on 28 May 2018. Vedanta Limited filed a composite appeal before the National Green Tribunal (NGT) against all the above orders passed by the TNPCB and the Government of Tamil Nadu. In December 2018, NGT set aside the impugned orders and directed the TNPCB to renew the CTO.

However, in February 2019, the Hon'ble Supreme Court set aside NGT's order on the grounds of maintainability and left it open for Vedanta Limited to file a writ petition before the Madras High Court against all the above orders. The Hon'ble Supreme Court has further left it open for Vedanta Limited to apply for interim reliefs considering that the plant has been shut down since 09 April 2018, and to apply before the Chief Justice of the High Court for an expeditious hearing.

Vedanta Limited duly filed writ petitions before the Madras High Court on 22 February 2019, which heard our miscellaneous petitions seeking interim relief on 1 March 2019. The court directed the TNPCB and the Government of Tamil Nadu to file their counters and scheduled them for further hearing on 23 April 2019. On 23 April 2019, the matter was posted for further hearing on 11 June 2019.

Meanwhile, the Company's Silvassa refinery and rod plant continues to operate as usual, enabling us to cater to the domestic market.

Our copper mine in Australia has remained under extended care and maintenance since 2013. However, we continue to evaluate various options for its profitable restart, given the Government's current favourable support and prices.

#### **PRICES**

Data from the International Copper Study Group showed refined output and demand growth estimates for 2019 indicating a market deficit of 280kt. Wood Mackenzie reported that the world refined copper production for CY2019 will be 23.90 million tonnes against 23.54 million tonnes in CY2018, while refinery consumption is estimated to be around 24.18 million tonnes against 23.68 million tonnes in CY2018.

Average LME copper prices decreased by 2% compared with FY2018.

#### FINANCIAL PERFORMANCE

During the year, EBITDA was ₹(235) crore and revenue was ₹10,739 crore, a decrease of 57% on the previous year's revenue of ₹24,951 crore. The reduction in revenue and EBITDA was mainly due to the shutdown of the Tuticorin smelter.

#### OUTLOOK

To be advised following the restart of Tuticorin.

#### STRATEGIC PRIORITIES

Our focus and priorities will be to:

- · engage with the Government and relevant authorities to enable the restart of operations at Copper India;
- sustain operating efficiencies, reducing our cost profile; and
- · continuously upgrade technology to ensure high-quality products and services that sustain market leadership and surpass customer expectations.

#### PORT BUSINESS Vizag General Cargo Berth (VGCB)

During FY2019, VGCB operations showed a decrease of 8% in discharge and 5% in dispatch compared to FY2018. This was mainly driven by lower availability of railway rakes in the region.





The resources that we mine contribute to the growth of our communities and nations. The natural resource sector has the potential to generate millions of jobs and that is the key to accelerate the growth and development of India.

Our business strategy is about ensuring that growth is maximised in a way that is both sustainable and responsive. The four core pillars - Responsible stewardship, Building Strong Relationships, Adding & Sharing Values and Strategic Communication are designed to support the long-term development, ensuring long lasting relationship and providing superior returns to all our stakeholders.

Alongside delivering high-quality assets and low-cost operations, our Sustainable Development Framework is integral to Vedanta's core business strategy and helps us conduct our business in line with our values of Trust, Entrepreneurship, Innovation, Excellence, Integrity, Respect and Care. The details related to our framework are available in the sustainability section of the report.

In pursuance of its commitment to responsible business, the Company has prepared this Business Responsibility Report for its standalone divisions- Copper (Tuticorin, Silvassa), Aluminium (Jharsuguda, Lanjigarh), Iron Ore (Sesa Goa, VAB, IoK), and Oil & Gas. These include obligations on business to respect the environment, promote the well-being of employees and to respect the interests of all stakeholders, particularly the disadvantaged and vulnerable. The report complements the work we are already undertaking across the Group and should be read in conjunction with the Vedanta Sustainability report.



Above: Employees at operational site, Vedanta Limited Jharsugda

#### **SECTION A: GENERAL INFORMATION ABOUT THE COMPANY**

1	Corporate Identity Number (CIN) of the Company	L13209MH1965PLC291394					
2	Name of the Company	Vedanta Ltd.					
3	Registered address	1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai – 400 093					
4	Website	http://www.vedantalimited.com/					
5	E-mail id	ir@vedanta.co.in					
		sustainability@vedanta.co.in					
6	Financial Year reported	April 1, 2018 - March 31, 2019					
	<ol> <li>Sector(s) that the Company is engaged in (industrial activity code-wise)</li> </ol>	24201:Producer of Copper from ore, and Other copper products and alloys.					
		24202: Producer of Aluminum from alumina and by other methods and products of aluminum and alloys.					
		07100: Mining of iron ores					
		24101: Producer of pig iron and spiegeleisen in pigs, blocks or other primary forms					
	2 List three key products/services that the Company manufactures/provides (as in balance sheet)	Copper, Aluminum, Iron Ore, Crude Oil & Natural gas					
	3 Total number of locations where business activity is undertaken by the Company						
	a) Number of International Locations	a) O					
	b) Number of National Location	b) 4 (Goa, Tamil Nadu, Odisha, Rajasthan, Andhra Pradesh, Gujarat)					
	4 Markets served by the Company - Local/State/National/ International/	Our products are sold in both National and International market.					

### **Business Responsibility Report** continued

#### **SECTION B: FINANCIAL DETAILS OF THE COMPANY**

1	Paid up Capital (₹)	372 crore
2	Total Turnover	38,098 crore (revenue from operations)
3	Total profit after taxes (₹)	5,075 crore
4	Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%)	1%
5	List of activities in which expenditure in 4 above has been incurred:-	Our CSR programmes cover the following areas:  Children's Well-being & Education
		Healthcare
		Drinking Water & Sanitation
		Women's Empowerment
		Skilling the Youth for New Opportunities
		Sports & Culture
		Agriculture & Animal Husbandry
		Community Infrastructure
		Environment Protection & Restoration



Above: At Sterlite Copper, skill-building programs are a key component of our CSR activities.

#### **SECTION C: OTHER DETAILS**

1	Does the Company have any Subsidiary Company/ Companies?	Yes
2	Do the Subsidiary Company/Companies	Vedanta Ltd. has 8 subsidiaries – HZL, BALCO,
	participate in the BR Initiatives of the parent company? If yes, then indicate the number of	MEL, Cairn India, Western Clusters, Zinc International and CMT.
	such subsidiary company(s)	All these subsidiaries contribute towards
		Business Responsibility initiatives however their financials and non-financial numbers are reported separately and are not part of Vedanta Ltd. Business Responsibility Report.
3	Do any other entity/entities (e.g. suppliers, distributors, etc.) that the Company does business with participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities.  [Less than 30%, 30-60%, More than 60%]	Our suppliers are not directly involved with the 'Responsible Business' initiatives. However, our contracts address areas like HSE, Ethics, and Human Rights that our suppliers are obliged to adhere to strictly.

#### **SECTION D: BR INFORMATION**

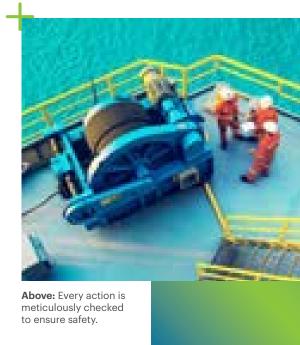
#### 1. Details of Director/Directors responsible for BR

SI. No. Particulars	Details
1 DIN Number (If applicable)	08364908
2 Name	Mr Srinivasan Venkatakrishnan
3 Designation	Chief Executive Officer
4 Telephone Number	+91 124 4593000
5 Email ID	wir@vedanta.co.in

#### 2(a). Principle-wise (as per NVGs) BR Policy/policies (Reply in Y/N)

#### Name of principles:

- P1 Businesses should conduct and govern themselves with Ethics, Transparency and Accountability
- P2 Businesses should provide goods and services that are safe and contribute to sustainability throughout their lifecycle
- P3 Businesses should promote the well-being of all employees
- P4 Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised
- P5 Businesses should respect and promote human rights
- P6 Businesses should respect, protect, and make efforts to restore the environment
- P7 Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner
- P8 Businesses should support inclusive growth and equitable development
- P9 Businesses should engage with and provide value to their customers and consumers in a responsible manner



S. No.	Questions	P1	P2	Р3	P4	P5	P6	P7	P8	P9
	Do you have a policy/policies for:	Υ	Ν	Υ	Υ	Υ	Υ	Υ	Υ	Υ
1	Has the policy been formulated in consultation with the relevant stakeholders?	Υ	NA	Υ	Υ	Υ	Υ	Υ	Υ	Υ
2	Does the policy conform to any national/ international standards? If yes, specify. (50 words)	Υ	NA	Υ	Υ	Υ	Υ	Υ	Υ	Υ
3	Has the policy been approved by the Board? Has it been signed by MD/ Owner/ CEO/ Appropriate Board Director?	Υ	NA	Υ	Υ	Υ	Υ	Υ	Υ	Y
4	Does the Company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy?	Υ	NA	Υ	Υ	Υ	Υ	Υ	Υ	Υ
5	Indicate the link for the policy to be viewed online?	https://www.vedantalimited.com/Pages/ CorporateGovernance.aspx?type=inv								
6	Has the policy been formally communicated to all relevant internal and external stakeholders?	Υ	NA	Υ	Υ	Υ	Υ	Υ	Υ	Υ
7	Does the Company have in-house structure to implement the policy/policies?	Υ	NA	Υ	Υ	Υ	Υ	Y	Υ	Υ
8	Does the Company have a grievance redressal mechanism related to the policy/ policies to address stakeholders' grievances related to the policy/ policies?	Y	NA	Y	Y	Y	Y	Y	Y	Υ
9	Has the Company carried out independent audit/evaluation of the working of this policy by an internal or external agency?	Each year, the Company undertakes an audit exercise, conducted by an external agency to evaluate the workings of these policies. This audit is known as the Vedanta Sustainability Assurance Protocol (VSAP) audit. The VSAP audit is conducted across all of our significant sites.								

#### NA = Not Applicable

The elements of all the above referred nine National Voluntary Guideline Principles are either enshrined in our Business Code of Conduct and Ethics or we also have separate Sustainability policies for them. Our Business Code of Conduct and Ethics is aligned to the UK Bribery Act.

All the sustainability policies of the Company are based on the Vedanta Sustainable Development Framework, which are aligned with the IFC guidelines, ICMM, OECD and UNGC principles. Further both Business Code of Conduct and Ethics and Sustainability Policies are available online for both internal and external stakeholders and have been approved by Board.

### **Business Responsibility Report** continued



#### 3. Governance related to BR

(a) Indicate the frequency with which the Board of Directors, Committee of the Board or CEO meet to assess the BR performance of the Company: Within 3 months, 3-6 months, Annually, More than 1 year)

The CSR committee of the board meets every three months to assess all aspects of the BR performance. Additionally, the Sustainability Committee of Vedanta Resources meets every quarter and is responsible on all aspects of sustainable development across the Group. Both committees are chaired by Senior Independent Directors. Post delisting in the London Stock Exchange, a Board-level Sustainability Committee has been constituted at Vedanta Limited. It has come into existence since April 1, 2019.

(b) Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

Sustainability and BRR performance is detailed out in the Vedanta Ltd. Annual Report. We also publish an annual Sustainability Report based on GRI Standards. Our sustainability reports can be found at: http://www.vedantalimited.com.

#### **SECTION - E**

#### Principle 1 - Conduct, Governance, Ethics, Transparency and Accountability

At Vedanta we have an established Code of Conduct and Business Ethics, Whistle-Blower Policy, and Supplier Code of Conduct. These documents are underpinned by a Vedanta Sustainable Development Framework - policies, management and technical standards. The Code, policies and standards communicate our zero tolerance approach to ethical violations, and communicate our commitment and requirement for legal compliance and ethical good practice.

To ensure that all employees are well-versed with our Code, a mandatory training is provided for new recruits, and refresher workshops on anti-corruption policies and procedures are conducted for all the employees at various levels.

1. Does the policy relating to ethics, bribery and corruption cover only the Company? Yes/No. Does it extend to the Group/ Joint Ventures/ Suppliers/ Contractors/ NGOs/ Others?

Our Business Code of Conduct and Ethics informs our approach to sustainability and how we conduct ourselves day-to-day - with each other, our customers, our shareholders, our competitors, our employees, our neighbouring communities, our host government and our suppliers and contractors.

The Code applies to all Directors, officers and employees of the Company and its subsidiaries.

The Code provides guidelines for our business to be consistent with the highest standards of business ethics and is intended to assist all employees in meeting the high standards of personal and professional integrity that the Group requires of them. It covers: Legal Compliance (including Human Rights), Health, Safety and Environment, Insider Trading, Competition & Fair Dealing, Conflicts of Interest, Gifts & Entertainment, Protection & Use of Company Assets, Information Management, External Communications and Corporate Social Responsibility.

2. How many stakeholder complaints have been received in the past financial year and what percentage was satisfactorily resolved by the management? If so, provide details thereof, in about 50 words or so.

We have a well-designed mechanism for all our stakeholders to communicate us of any inappropriate behaviour. Our exclusive Whistle-Blower Policy, has provisioned for a toll free number, email id and a reporting portal, which both our internal as well as external

stakeholders can make use of to report anonymously to the management. During the reporting period, a total of 25 Whistle-blowing cases were reported. Of the reported cases, only 1 was upheld and found correct, leading to appropriate disciplinary actions including warning, counselling, transfer and separation, against our employees, contract workforce and vendors. About 101 requests and correspondences (including complaints) were received from our shareholders and all of these have been successfully resolved or responded.

#### Principle 2 - Safety and Optimal Resource Utilisation across Product Lifecycle

As primary producers, we have limited oversight and involvement in the full lifecycle of base metal products, and the way in which downstream value-added products are produced and disposed.

Our operations have carried out significant test work on the physical and chemical characteristics of their products to ensure we understand their properties and potential impacts. Potential impacts on humans and the environment are considered when preparing MSDS updates. The MSDS information is made readily available to our customers enabling them to have a full, detailed understanding of our products and their composition.

With reference to our customers, the marketing team maintains a forward-looking approach in tandem with the global commodity pricing trends and customer demand assessment. Subsequently, the ISO 9001 guideline based feedback schedule is followed for obtaining feedback on a periodic basis. This feedback is accumulated for sharing in management review based approach on which response is generated. Customer satisfaction survey is conducted at periodic interval to understand customer feedback. The feedback accumulated through surveys is shared in management review meetings based on which appropriate response is generated to take appropriate corrective actions and to address the requirements of customers.

#### 1. List up to 3 of your products or services whose design has incorporated social or environmental concerns, risks and/or opportunities.

We make all efforts to ensure that we produce, in a safe and environmental friendly responsible manner. Over the years, we have constantly improved our recoveries, reduced hazardous waste generation, recycling and reuse of waste, improved specific water and energy consumption and reduced our tailings to optimally use available natural resources.

At our Oil & Gas business, we produce only processed Crude Oil and Natural Gas. While there is a limitation in being able to incorporate environmental and social design concerns in the composition of our products, we ensure that best-in-class practices are followed while designing and operating our processing facilities and transportation infrastructure. Some of these best practices include:

- · Recycling and reusing 95% of our produced water, thereby significantly reducing the amount of saline ground water that we extract for our operations.
- Recycling and reusing 100% of our treated domestic sewage water for horticulture purposes.

- Designing a crude oil transportation pipeline that is thermally insulated and heated with an electrical wire, thereby preventing the use of large amounts to energy to heat our waxy crude oil and transport it to our customers. Both these measures also help minimise the generation of greenhouse gas emissions that would have resulted because of the deployment of road transportation to move our product from source to destination and the use a large energy infrastructure to heat the pipeline.
- To our commitment for management of waste in sustainable manner, initiated a project for disposal of hazardous waste through Co-processing in Cement Kiln. The co-processing of hazardous waste (oil soaked waste with higher calorific value) has led to reductions in GHG emission due to equivalent replacement of coal in cement kiln.

In our Aluminium business, we have undertaken programmes to ensure that we operate our potlines at the high levels of efficiencies, reducing the amount of coal being used, which has resulted in a decline in our greenhouse gas emissions.

Finally, in our power operations, we have been able to utilise ~90% of the generated fly ash using it as road construction material and by selling them to local brick kilns.



## **Business Responsibility Report** continued

- 2. For each such product, provide the following details in respect of resource use (energy, water, raw material etc.) per unit of product(optional):
  - Reduction during sourcing/ production/ distribution achieved since the previous year throughout the value chain?

Being a natural resource company, there is intensive need for resources - water, energy and raw materials, in our operations. We therefore recognise the impact of our operations on the environment and adopt strategies to minimise our resource use in all our processes. To further channelise our endeavours, we

consciously track usage of these resources - water, energy and raw materials, throughout our operations.

We are also in continuous need for fuel and electricity, which places us amongst the energy intensive industries. Conforming to the global challenge of combatting Climate Change and Global Warming, we strengthen our Carbon Management processes and adopt efficient technologies. Through our Carbon Forum, we have developed our exclusive Vedanta Carbon Policy and Carbon Strategy. We have committed to reducing our GHG intensity reduction of 16% by 2020 from a 2012 baseline.

#### **ENERGY AND WATER CONSUMPTION**

Company Name		cific Water Consumptio Metre/tonne of Product		Specific Energy Consumption (Giga Joules/tonne of Production)		
	FY2019	FY2018	FY2017	FY2019	FY2018	FY2017
Sterlite Copper	0*	6.57	6.63	0*	8.33	8.35
Sesa Value Added Business	2.28	2.12	1.79	1.00	0.85	0.84
Aluminium – Lanjigarh	1.83	2.22	2.03	7.5	8.15	7.87
Aluminium – Jharsuguda	0.37	0.47	0.49	52.46	54.18	53.9
Oil & Gas	1.0	1.13	1.38	2.19	1.87	2.13

<sup>\*</sup> Sterlite Tuticorin remained shut during the course of the fiscal year.

ii. Reduction during usage by consumers (energy. water) has been achieved since the previous year?

As primary producers, we have limited control of the full lifecycle and the way in which products are produced and disposed. We are committed to ensure that the beginning of the lifecycle adheres to appropriate international commodity trading standards but the reduction and initiatives drive taken by our consumer is not tracked.

- 3. Does the Company have procedures in place for sustainable sourcing (including transportation)?
  - If yes, what percentage of your inputs was sourced sustainably? Also, provide details thereof, in about 50 words or so.

Yes. At Vedanta, our business partners and suppliers play a key role in our performance footprint. To retain a relationship with them in the long-term, we have established a dedicated accountability mechanism through our Supplier Code of Conduct, Supplier and Contractor Management Policies, and Supplier Screening Checklist that encourage business partners and suppliers to adopt principles and practices comparable to our own. Regular engagements

Vedanta adopts strategies to minimize our resource use and reduced our water and energy consumption.

Right: Safety is our priority -Employees ensuring safety truck movement at BALCO.



with Suppliers/vendors and contractors are also encouraged to ensure conformance to the policies.

Besides the environmental impacts during sourcing, transportation activities have also been assessed and adequate measures are taken to prevent dust emission during transit. Ore transport from the mines to the loading point is carried out through trucks covered with tarpaulin to ensure no spillage and dust generation. At material handling areas for coal and bauxite, dry fog systems are installed with proper water sprinklers, while bag filters installed are at alumina handling division. Additionally, Crude and Natural Gas from the Rajasthan operations of our Oil & Gas business are transported to our customers in Gujarat via a 600-km pipeline, preventing the use of trucks for transportation, thereby reducing pollution as well as the risk of road safety incidents.

4. Has the Company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve their capacity and capability of local and small vendors?

In view of retaining quality, the Company sources its major inputs from OEMs and large national and international manufacturers. Goods and services are procured by businesses locally is of consumable nature where feasible.

5. Does the Company have a mechanism to recycle products and waste? If yes what is the percentage of recycling of products and waste (separately as <5%, 5-10%, >10%). Also, provide details thereof, in about 50 words or so.

Yes, we have an exclusive Resource use and Waste Management Technical Standard and supporting guidance notes, which directs us to mitigate the environmental impacts of our products and process. Due to our recycling efforts, the waste generated in our various operational units is innovatively converted to resource material and we use these new products to further extend the supply

chain. In total, 93% of high volume and low potential waste generated was recycled/reused into gainful applications.

At Vedanta Limited-Sterlite Copper, Copper Slag - a by-product from our pyro metallurgical smelting operations is used in road construction, land levelling and in the abrasive and cement industries. During 2017-18, when the plant was in operation, 103% of the slag was successfully used rather than being deposited in landfill. Gypsum, from the same operation is also utilised in fertiliser industry and brick manufacturing. At Lanjigarh and Jhasuguda, 116% of fly ash from our operations is recycled.

At our Oil and Gas business all the by products resulting from our operations are recycled. The well-fluid from the sub-surface reservoir comprises of crude oil, water (produced water) and natural gas (associated gas). The produced water is the most significant liquid waste from Cairn's operations. It is treated and recycled back into the hydrocarbon reservoir to maintain the reservoir pressure. During FY2019, Cairn recycled 95% of the produced water.

#### Principle 3: Employee Well-being

Our employees are our key assets and our growth and success are attributable to them. Our people strategy is founded on this belief and is designed to recruit, develop and retain the talented workforce that run our businesses.

We are committed to providing our employees with a safe and healthy work environment. Through a high degree of engagement and empowerment we enable them to realise their full potential, creating a high-performance work culture.

We continue to attract talent from top engineering institutes, business schools and graduate colleges. This is an important step in sourcing a strong talent pipeline for the future. We also focus on effectively utilising and grooming talent by appropriately rotating them across businesses for experience in new roles and to prepare them to take up various key positions in the future.

1	Please indicate the total number of employees	• Full time Employees: 9,328
		• Contract: 28,056
		• Total: 37,384
2	Please indicate the total number of employees hired on temporary/ contractual/ casual basis	Full time Employees Hired: 1,035
3	Please indicate the number of permanent women employees	Full time Women Employees: 1,085
4	Please indicate the Number of permanent employees with disabilities	Not tracked
5	Do you have an employee association that is recognised by management?	• Yes
6	What percentage of your permanent employees is members of this recognised employee association?	We have recognised employee association at Sesa Iron business only. 73%, the employees are a part of association.
7	Please indicate the Number of complaints relating to child	Child labour/ forced labour /involuntary labour - Nil
	labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.	Sexual harassment cases – 8; 7 cases upheld and found correct; all 7 cases closed.
9	What number of your under mentioned employees were given safety & skill up-gradation training in the last year?	The total safety training given to employees, contract workers and third-party visitors are given as below:  Employees: 34,183 hours  Contract employees: 293,796 hours  Third party: 14,238 hours

## **Business Responsibility Report** continued

#### Principle 4: Engaging Stakeholders - Sustaining Value

Ours is an inclusive model where we value each and every stakeholder and their opinion matters to us. We believe in transparent dialogue where anyone should be able to voice their opinions; that they should be listened to; and that they can expect a considered and constructive response. The approach we take to connect with different stakeholders is guided by our Stakeholder Engagement Technical Standard. All of our operations run their own stakeholder identification and analysis process. As part of this, they identify potential stakeholder representatives who act as a channel for the receipt and dissemination of information.

In addition, our sites identify individuals and groups who may be additionally affected by operations due to their disadvantaged or otherwise vulnerable status. Ways in which stakeholders may be affected and the extent of both actual and perceived impacts are identified and recorded against each group. Using the information gathered, we then determine with the stakeholders themselves the level of communication and consultation that is appropriate. From this, Stakeholder Engagement Plans (SEPs) are developed and continuously updated as circumstances develop on-site.

#### 1. Has the Company mapped its internal and external stakeholders? Yes/No

Yes. The Company has conducted a mapping exercise, from which we have classified our stakeholders into the following categories (Employees, Shareholders, Lenders, Host Governments, Communities (including vulnerable groups such as indigenous communities, women and persons with disabilities), Civil society (including Non-Governmental Organisations) and Industry.

## 2. Out of the above, has the Company identified the disadvantaged, vulnerable & marginalised stakeholders?

Identification of the disadvantaged, vulnerable and marginalised stakeholders is an on-going process. However, we have emphasis on development of women in our nearby communities. We have initiated several programmes for women's education, skill development and providing entrepreneurial opportunities for women.

3. Are there any special initiatives taken by the Company to engage with the disadvantaged, vulnerable and marginalised stakeholders? If so, provide details thereof, in about 50 words or so.

Yes. We engage with the disadvantaged, vulnerable and marginalised stakeholders through our CSR projects.

Across the country, the Self-Help Group movement has successfully and systematically empowered marginalised and grass-root level women through awareness raising, capacity building, economic empowerment and solidarity. At Vedanta too, we are working with women's Self-Help Groups across several of our locations. Collectively, across the Group we have reached over 35,000 women through SHG & skill-development initiatives. Of these, more than 3,600 women have gone on to set up their own enterprises. Key initiatives across some of our Group companies include: Project Sakhi (Sterlite Copper), Project Shakti (Lanjigarh), and Subhalaxmi Cooperative Society (Jharsuguda)

## **Principle 5: Promoting Human Rights**

Our Human Rights Policy is aligned to the UN Guiding Principles on business and human rights and includes strict prohibition of child or forced labour - either directly or through contract labour. Additionally, our Code of Business Conduct and Ethics (Code) commits us to comply with all relevant national laws and regulations, underpinning our approach to protecting the fundamental rights of all our direct and indirect employees. Human rights training is an integral part of our Sustainable Development Framework implementation and is covered through training on Code of Business Conduct and Ethics.

1. Does the policy of the Company on human rights cover only the Company or extend to the Group/ Joint Ventures/ Suppliers/ Contractors/ NGOs/ Others?

Human Rights policy is aligned to the UN Guiding Principles on Business and Human Rights and is a mandate for all of its Group Company's employee's. Further it also encompasses all its suppliers, contractors and NGOs. We





All of our sites are ISO 14001 certified and committed to managing our environmental impact systematically.

Left: At Cairn's Ravva Terminal, impeccable housekeeping & adherence to 5S keeps our workplace productive & safe.

have rolled out the implementation of UK Modern Slavery Act, 2015 across our suppliers and vendors in order to mitigate risk of slavery (subset of Human Rights) across the supply chain.

2. How many stakeholder complaints have been received in the past financial year and what percent was satisfactorily resolved by the management?

No complaints with respect to Human Rights violations reported.

## **Principle 6: Nurturing the Environment**

We are conscious of negative environmental impacts, from gas and particulate emissions and hazardous waste to waste water generation and landscape modification. To this end, we manage our footprint in the most stringent global standards throughout the project life cycle.

Our Sustainable Development Framework includes an HSE Policy, Environmental Management Standard, and a number of topic specific policies and standards addressing key environmental aspects e.g. biodiversity, water, energy and carbon, waste and resources. All our operating sites are ISO 14001 certified.

ISO 14001 system implementation helps us to regularly review the environmental aspects and potential impact of our operation, contractors and suppliers (present at our site), and setting environment target, monitoring and communicating performance, conduct internal audit and develop corrective action plan, capability development and management review.

1. Does the policy related to Principle 6 cover only the Company or extends to the Group/ Joint Ventures/ Suppliers/ Contractors/ NGOs/ Others?

All our sustainability policies (HSE, Biodiversity, Energy & Carbon and Water Management) are applicable to Vedanta subsidiaries, operations and managed sites, including new acquisitions, corporate offices and research facilities and to all new and existing employees and contractor employees.

2. Does the Company have strategies/initiatives to address global environmental issues such as climate change, global warming, etc.? Y/N. If yes, please give hyperlink for webpage etc.

As a natural resources industry, we have a profound responsibility to address the planet's undisputed warming and adapt to the future impacts.

At Vedanta, we understand the implications of energy consumption, both in terms of its cost to our operations and the price environment pays for it. We are committed to invest in newer technologies and processes to enhance our energy efficiency.

11 of our operational sites are ISO 50001 certified.

Our energy management approach hinges on a two-pronged strategy: improving energy and process efficiency, while diversifying our energy portfolio at all locations. We already have our Sustainable Development Framework in place, which includes an Energy and Carbon Policy, and an Energy and Carbon Management Standard.

The energy and carbon scenario is a continuously evolving one. We are aware that regulatory changes, introduction of carbon taxes and the evolving behaviour of the environmentally aware consumer are some of the factors that can affect our business operations - positively as well as detrimentally.

Vedanta continues to remain committed to decrease our carbon footprint. We expect to reduce our GHG intensity by 16% from a 2012 baseline by 2020. The Company's Carbon Forum (a Chief Operating Officer led body), has been constituted to strategise about and provide governance on the risk to business from climate change.

Our businesses have made significant progress on our GHG reduction commitment. Companies like Cairn Oil & Gas business have committed to increase their

## **Business Responsibility Report** continued



Top: Our offshore well-pads are powered by renewable energy.

investment in solar power, while other businesses have made significant improvements in their process efficiencies, thereby reducing their GHG emissions. As of March 31, 2019, we had been able to achieve an 12.86% reduction in our GHG intensity from our baseline number. We will continue to focus on GHG emission reduction efforts to ensure that we are able to meet our commitment in FY2020.

3. Does the Company have any project related to Clean **Development Mechanism?** 

If so, provide details thereof, in about 50 words or so. Also, if Yes, whether any environmental compliance report is filed?

Currently CDM mechanism, as defined under Kyoto Protocol, is no more operational therefore CER monitoring and verification is not relevant in today's context. However, in view of COP-21 ratification and INDC commitments of India we are working on carbon policy and carbon strategy. A dedicated Carbon Forum with representation from Group businesses is working on carbon emission reduction and energy efficiency projects at a Group level.

4. Has the Company undertaken any other initiatives on clean technology, energy efficiency, renewable energy, etc. Y/N. If yes, please give hyperlink for web page etc.

In addition to optimising our consumption, we are also looking at diversifying our energy portfolio. Mindful of the long-term impact of traditional grid-energy, we are evaluating renewable energies like solar and wind.

At our Oil & Gas exploration and production Company, we have implemented one of India's largest solar operated community-based RO Plant at Sewniwala in Baytu Tehsil. The plant has MNRE certified panels and generating a power of 5KW and storing the same in batteries, which can be used for 8-10 hours of plant operations. The water

from this plant will be sold at 25 paise per litre to the local community.

5. Are the Emissions/Waste generated by the Company within the permissible limits given by CPCB / SPCB for the financial year being reported?

Yes, emissions/waste generated by the Company is monitored on monthly basis and are within the limits prescribed by CPCB / SPCB. All sites are regularly monitored for emission. Ambient air quality including noise is monitored monthly and meets the National Ambient Air Quality standards, November 2009.

6. Number of show cause/legal notices received from CPCB / SPCB which are pending (i.e. not resolved to satisfaction) as on end of Financial year.

No show cause/legal notices were issued to the Group companies all of these show cause are resolved.

## **Principle 7: Responsible Policy Advocacy**

At Vedanta, we believe we should proactively promote the development, public policies and regulatory frameworks that support a fair and competitive environment. Being a major contributor in the social and economic development of the communities in which we operate, we advocate policies that promote sustainability and value creation for all stakeholders.

Our engagement with host governments is multifaceted and incorporates all aspects of our business, from resource licensing rounds, contributions to debates around the mining and resources industry and development planning. We look to leverage and contribute our understanding of current business dynamics to anticipate the future needs of our stakeholders, and actively seek out measures that further interest the sector. Our Senior Leadership Team regularly contributes and communicates with their experience, perspectives, outlook and good practice expectations for the sector and sustainable development.

We have clearly established the good practice objectives that guide our collaboration and approach to policy advocacy. Those objectives include: building enduring and collaborative relationships with government to support shaping public policies for growth and sustainable development of natural resources, in particular for those in which we operate iron-ore, copper, oil & gas, aluminium & commercial power.

1. Is your Company a member of any trade and chamber or association? If Yes, Name only those major ones that your business deals with:

We are a member of the TERI, WBCSD, CII, IBBI, ASSOCHAM and others with whom we are working on various sustainable development programmes/ frameworks. Some of our business and subsidiary companies are members of trade and industry bodies like the Federation of Indian Mining Industries, Confederation of Indian Industries, Indian Institute of Metal, Federation of Indian Chambers of Commerce & Industry and The Energy Resources Institute, India, where they actively participate in their Management Committees.

2. Have you advocated/lobbied through above associations for the advancement or improvement of public good? Yes/No; if yes specify the broad areas (drop box: Governance and Administration, Economic Reforms, Inclusive Development Policies, Energy security, Water, Food Security, Sustainable Business Principles, Others)

Vedanta Ltd. believes in promoting public policies and regulatory framework that serve the common good of the society.

More specifically, in India, we believe the phenomenal geology, skilled workforce, simple and transparent progressive policies create significant opportunities for poverty eradication and employment creation, should

relevant stakeholders be willing to explore the full potential of the natural resources sector and open up the sector to attract investment. We are therefore working to directly and indirectly support government authorities to catalyse sustainable development of the sector. For example, in recent years, we have worked with the national authorities on various campaigns like "Make In India", Resumption of Mining in Goa, Reduction of Iron Ore and Export duty among others.

## **Principle 8: Support Inclusive Development**

Our philosophy is that wherever we operate we add value to the local stakeholders. This may be through employment, trade development, enhanced infrastructure, or greater well-being and empowerment.

Our community investment strategy focuses on health, education, livelihoods and environment. In FY2019, we invested 51.72 crore to supporting neighbourhood communities through various social development initiatives. Education, skilling, women's empowerment, water, health and agriculture/livestock continue to be our priority areas.

Consistent with our Sustainable Development Model of drawing on global best practice, our community investment approach is being aligned to the UN Sustainable Development Goals. We firmly believe in the power of partnerships and follow a Public-Private-People-Partnership (4P's) model. This is in keeping with our commitment towards co-creation, inclusion and community ownership of social initiatives

1. Does the Company have specified programmes/ initiatives/ projects in pursuit of the policy related to Principle 8? If yes details thereof.

As a responsible corporate citizen, the Company focusses on ethical and transparent business practices, with inclusive community development lying at the core of its social initiatives. The focus of our community investment initiatives is on poverty alleviation programmes, especially integrated development, which impacts the

Our philosophy is that wherever we operate we add value to the local stakeholders.





## **Business Responsibility Report** continued

overall socio-economic growth and empowerment of people, in keeping with the national and international development agendas.

## Children's Well-Being & Education

Our focus is on building capacities of the next generation to create a long-term sustainable impact. Educational programmes include wide range of activities covering preschool to higher education. The total outreach of all our education projects is over 50,000 children. Other programmes in the education space focus on science, math and English learning in secondary schools.

#### Women's Empowerment

Women's empowerment is all about equipping and enabling women to make life-determining decisions. Vedanta recognises this need for empowering women and is running several projects to help communities take a step towards a more equitable future. The programmes are associated with more than 7,400 women and amongst them more than 1,700 women have started/ revamped their own micro enterprises. One of our interventions in this space is the Subhalaxmi Cooperative Society in Jharsuguda, which has emerged as a model community-based organisation. The cooperative has successfully completed 10 years of empowering women since its inception and currently is touching the lives of 3,793 members in 71 villages. The cooperative, aided by this programme, has been able to generate funds of 2.52 crore and there has been a significant increase in the income of its members.

## **Drinking Water and Sanitation**

We focus on drinking water and sanitation considering both as basic requirement of healthy life. Jeevan Amrit Project is among the largest drinking water programmes undertaken by any Company in Rajasthan. Cairn's Memorandum of Understanding (MoU) with

As a responsible corporate citizen, the Company focusses on ethical business practices, with inclusive community development lying at the core of its social initiatives.

**Right:** Jeevan Amrit Project by Cairn Oil & Gas

the Government of Rajasthan is about setting up 330 community Reverse Osmosis (RO) water plants in the water stressed district of Barmer in Rajasthan. As part of the MoU, 114 RO plants have already been installed. During the year, these plants dispensed over 4 million litres of clean water, benefitting nearly 100,000 people.

## Agriculture and Animal Husbandry

Agriculture is the backbone of the economy in all of our surrounding villages as we mainly operate in remote, rural locations. Project Unnati of Cairn was set up to support the farmers of Barmer in enhancing incomes through sustainable farming. The project covers ~ 12,900 farmers across Barmer, Baytu, Gudamalani and Sanchore block. It has established ~1110 wadis by planting around 77,000 fruit saplings. The samplings have a 70% survival rate across three blocks in Barmer district. ~15 lakh cubic meter of water is harvested every year through the renovation of 15 community ponds (Nadis), construction of 681 Khadins and roof top water harvesting in 85 rural schools.

The efforts have seen an increase in the floral and faunal diversity of the region. Over 16 migratory bird species seen to frequent pond sites. There has been a significant rise in the population of fish, snakes, insects, algae, and fungi. The project has also helped recycled ~6,000 tonne of fertile soil.

## Skilling the Youth

Our skills programmes are focused on helping young people learn a trade and gain "hands on" experience and subsequently find a job. In FY2019, over 2,200 youths acquired diverse skills and were placed. For example, in Thoothukudi, Sterlite copper through its Tamira Muthukkal project has provided vocational training to 2,000 youth and currently covers more than 750 beneficiaries helping them gain skills thus increasing their employability.

#### Sports

Sports is the most powerful means to connect with the youth. Our Sesa Football Academy (an IOB CSR initiative) was established in 1999 on a reclaimed mine at Sanquelim, with a vision to become a premier academy in India. In FY2019, more than 470 students went through our training programme. This included 167 girls, who have



taken to the sport quite enthusiastically. In the past, seven alumni of SFA have played for the Indian national team and eight are playing in the elite Indian Super League 2018-19 season.

## 2. Are the programmes/projects undertaken through in-house team/ own foundation/ external NGO/ government structures/ any other organisation?

We implement our programmes through all the following modes - directly through our Corporate Social Responsibility team and in partnership with government and civil society organisations. We also actively encourage our own employees to contribute towards these social initiatives.

#### 3. Have you done any impact assessment of your initiative?

Yes, we assess the impact created by our projects by engaging external agencies at periodic intervals.

#### 4. What is your Company's direct contribution to community development projects- Amount in and the details of the projects undertaken?

The total amount spent on all CSR activities and projects during the FY2019 was ₹51.72 crore. The major thrust areas for our programmes are -

- a) Children's Well-being & Education
- b) Women's Empowerment
- c) Health Programmes for the Community
- d) Drinking Water & Sanitation
- e) Agriculture & Animal Husbandry
- f) Skilling the Youth for new opportunities
- g) Environment Protection & Restoration
- h) Sports & Culture
- i) Development of Community Infrastructure
- Participate in programmes of national importance including but not limited to disaster mitigation, rescue, relief and rehabilitation
- 5. Have you taken steps to ensure that this community development initiative is successfully adopted by the community? Please explain in 50 words, or so.

Most of our programmes emerge from a community needs assessment and are delivered in close partnership with them. Several of our initiatives, such as women's self-help groups, are now completely run and managed by the community members themselves. Our role is chiefly that of a catalyst in the whole process.

## **Principle 9: Providing Customer Value**

Our growth and success are directly linked to and co-dependent on the success of our customers, who are predominantly large industrial downstream producers with whom we deal directly. We understand that meeting customer expectations is crucial to the growth of our business, particularly when we have such a significant presence in the market. We are therefore committed to ensuring that our raw materials meet the required London Metal Exchange (LME) standards for entering the commodity market.

Our subsidiaries have defined systems and practices in place to understand and meet customer expectations. We constantly engage with customers through our marketing and customer service personnel.

All our activities are focussed on ensuring our customers' needs are met in an appropriate and timely manner.

Honouring our contract obligations on price, quality and quantity is crucial to building the business' credibility with customers. We sell our commodities on price circulars that are linked to the commodity index, ensuring a clear and transparent process. Alongside the timely delivery of our products, their quality must be assured and in compliance with agreed technical standards, with the certification of all deliveries vital for ensuring that customers trust the product and that its quality has been verified. Assistance is also provided to customers both by our internal experts and by international consultant visits, together with workshops and seminars on technical issues and product development for first use.

## 1. What percentage of customer complaints/consumer cases are pending as on the end of financial year?

NIL complaints pending at the end of FY2019.

### 2. Does the Company display product information on the product label, over and above what is mandated as per local laws? Yes/ No/ N.A./ Remarks (additional information)

Yes. Our copper cathodes, aluminium are all internationally known brands registered with the LME (London Metal Exchange). LME standards signify highest product quality, uniform physical characteristics and consistency of products. Our products meet all necessary and benchmark national and global regulations, standards and guidelines. This re-emphasises our capability and commitment to meet world-class standards. For continuous quality improvement, Quality Management Systems are in place, which comply with the ISO 9001:2008 standard requirements.

3. Is there any case filed by any stakeholder against the Company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last five years and pending as on end of financial year? If so, provide details thereof, in about 50 words or so

#### 4. Did your Company carry out any consumer survey/ consumer satisfaction trends?

Feedback is a continuous process at our operations, and we leverage feedback for continual improvement in product and service quality, for benchmarking ourselves with industry standards and identifying scope and future opportunities to increase customer value.

Various approaches are used for feedback process which include frequent meets, online feedback system and customers surveys. A robust customer complaint tracking system ensures quick resolution and undisrupted operations for customers. As such no major concerns were raised by any of our customer

## **Directors' Report**

#### Dear Shareholders,

Your Directors hereby presents the report on the business and operations of the Company, together with the audited Consolidated as well as Standalone financial statements for the financial year ended March 31, 2019.

## **COMPANY PERFORMANCE**

During the year, your Company saw setting of new production records across some of our businesses, commissioning of a new Zinc mine, significant and successful inroads in our Aluminium business and increase in our mineral and oil resources and reserves. Our three large businesses - Zinc, Aluminium and Oil & Gas achieved significant milestones at low cost and are strongly positioned for the near-term targets that we have set for these businesses.

We expect FY2020 to be another productive year with our three key businesses well positioned. In the case of our Zinc, Lead and Silver business, we will see the benefit of increased volumes. In Oil & Gas, we are India's largest private producer of crude, and rank with the world's lowest-cost producers with production, development and exploration pipeline. In Aluminium, we offer India's largest production capacity, supported by our own captive power generation and increasingly integrating backwards for our own Alumina. The strengths of our diverse portfolio, together with our focussed growth strategy expanding our reserves and resource base, a strong balance sheet, strong talent base, technology and modernisation initiatives, all combine to create a truly inspirational Company.

#### **FINANCIAL HIGHLIGHTS FOR FY2019**

Revenue

₹90,901 Crore (-1% y-o-y change) FY2018: ₹ 92,011 Crore

Shutdown of Tuticorin smelter partially offset by

Aluminium business ramp up, ESL acquisition and rupee depreciation

**Crisil and India ratings** changed the outlook on Company's rating (CFR) from 'AA/Positive' to 'AA/Stable'

₹24,012 Crore (-4% y-o-y change) FY2018: ₹ 24.900 Crore

Free cash flow (FCF) post-capex

₹11,553 Crore, (47% y-o-y change) FY2018: ₹ 7,880 Crore

Ever highest contribution to the exchequer of

c. ₹42,400 crore

**RETURN ON** 

**CAPITAL** 

Adjusted EBITDA margin

30% FY2018: 35%

Gross debt at

(14% y-o-y change) FY2018: ₹ 58.159 Crore

ESL acquisition and temporary borrowing at Zinc India

Strong financial position with cash and liquid investments of

₹39,269 Crore

**FCF POST CAPEX** 

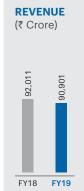
ROCE

c.13% FY2018: 16.9%

Net debt at

₹26,956 crore (23% y-o-y change)

FY2018: ₹ 21.958 Crore





**EBITDA** 





(₹ Crore)



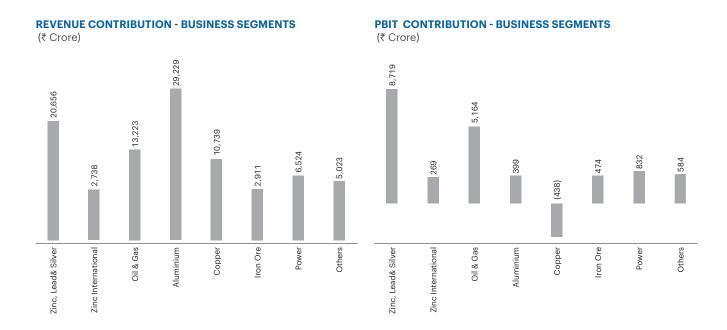
**NET DEBT** 

(₹ Crore)



**GROWTH CAPEX** 

(₹ Crore)



## FINANCIAL PERFORMANCE SUMMARY

In compliance with the provisions of Companies Act, 2013 and SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (Listing Regulations) the Company has prepared its standalone and consolidated financial statements as per Indian Accounting Standards (Ind AS) for the FY2019.

Your Company's standalone and consolidated financial highlights are provided below:

(₹ in Crore)

	Stand	alone	Consol	idated
Particulars	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018
Net Sales/Income from Operations	38,098	45,496	90,901	92,011
Profit from operations before other income, finance costs and exceptional items	2,228	3,611	14,911	18,579
Other Operating Income	546	478	1,147	912
Other Income	6,152	3,559	4,018	3,205
Finance costs	3,757	3,353	5,689	5,112
Net exceptional items gain/(loss)	324	5,407	320	2,897
Profit/(loss) before tax	4,947	9,224	13,560	19,569
Tax expense/(credit)	(128)	1,968	3,862	5,877
Net Profit/(loss) after tax	5,075	7,256	9,698	13,692
Share of profit/(loss) of associate	NA	NA	0	0
Minority Interest	NA	NA	2,633	3,350
Net Profit after taxes, minority interest and consolidated share in profit/(loss) of associate and before other comprehensive income	5,075	7,256	7,065	10,342
Paid-up equity share capital (Face value of ₹1 each)	372	372	372	372
Reserves excluding revaluation reserves as per balance sheet	77,508	78,941	61,925	62,940
Basic EPS after exceptional items	13.65	19.47	19.07	28.30
Transferred to General Reserve	Nil	Nil	Nil	Nil
Interim Dividend	7,005	7,881	7,005	7,881

The financial results and the results of operations, including major developments have been further discussed in detail in the Management Discussion and Analysis section.

#### **OPERATIONAL HIGHLIGHTS FOR FY2019**



## 1

#### **ZINC INDIA**

- Record underground mined metal production at 936kt, up 29% y-o-y. Total mined metal production marginally down 1% y-o-y, post closure of open-cast operations.
- Record lead metal production at 198kt, up 18% y-o-y.
- Record refined silver production at 679mt, up 22% y-o-y.





## **ZINC INTERNATIONAL**

• At Gamsberg, commenced trial production in November 2018 and first shipment in December 2018.





#### OIL & GAS

- Average gross production of 189kboepd for FY2019, up 2% y-o-y.
- 11 development drilling rigs as at March 2019, with 99 wells drilled and 33 wells hooked up during FY2019 in Rajasthan.
- Production Sharing Contract (PSC) of Rajasthan block extended for 10 years, subject to conditions.





## **ALUMINIUM**

- Record aluminium production at 1,959kt, up 17% y-o-y.
- Record alumina production from Lanjigarh refinery at 1,501kt, up 24% y-o-y
- Q4 FY2019 hot metal cost of production significantly lower at \$956 /ton, lower by 12% q-o-q.





#### **POWER**

• Record PAF of 88% at the 1,980 MW TSPL plant in FY2019.





## **IRON ORE**

- Goa operations remain suspended due to state-wide directive from the Hon'ble Supreme Court; engagement continues with the Government for a resumption of mining operations.
- Production of saleable ore at Karnataka at 4.1 million tonnes, up 89% y-o-y.





#### STEEL

- Record annual steel production at 1.2 million tonnes for FY2019, up 17% y-o-y.
- Achieved hot metal production run rate of c.1.5mtpa in FY2019.





## **COPPER INDIA**

• Due legal process being followed to achieve a sustainable restart of the operations.

#### SIGNIFICANT DEVELOPMENTS

#### **ZINC INDIA**

Zinc India has completely transitioned from open cast to fully underground mining with the business creating new records with mined metal production from underground operations at 936kt, up 29% y-o-y. We are expecting these volumes to increase to achieve the design capacity of 1.2 mt. The business now ranks 9th in the Elite Club of top 10 silver producers with a record production of 679 tonnes during the year, up 22% y-o-y.

## ZINC INTERNATIONAL

## Inaugration of Vedanta's Gamsberg mine by President Cyril Ramaphosa

On February 28, 2019, Vedanta announced inauguration of Vedanta Zinc International's (VZI) Gamsberg mine, outside Aggeneys in South Africa's Northern Cape Province by President Cyril Ramaphosa, which represents a US\$400 million investment by Vedanta in South Africa.

### **OIL & GAS**

#### Award of 41 exploration blocks in India pursuant to Open Acreage Licencing Policy at a total bid cost of **US\$551 million**

Vedanta Limited was successfully awarded 41 exploration blocks in sedimentary basins throughout India pursuant to the Indian Open Acreage Licencing Policy ("OALP") at a total bid cost of US\$551 million. The 41 blocks awarded to the Company comprises of 33 onshore blocks and 8 offshore blocks.

OALP is the first major auction of hydrocarbon blocks to take place in India since 2010 and provided an opportunity for the Group to acquire new acreages from all available areas in the sedimentary basins of India.

#### KG-OSN-2009/3 Discovery, Krishna-Godavari Basin, India

Your Company announced a hydrocarbon discovery in well A3-2 within its operated block KG-OSN-2009/3 within Krishna-Godavari Basin, East Coast of India. Vedanta Limited holds 100% participating interest in the block. A3-2 is the first exploration well drilled within the KG-OSN-2009/3 block. Multiple reservoir zones were encountered in the Mesozoic rift formation between the depths of 3351-3944m MDBRT with indications of hydrocarbon during drilling and formation evaluations.

## KG-OSN-2009/3 Oil Discovery, Krishna-Godavari Basin, India

During the year, your Company announced an Oil Discovery in the second exploratory well H2, located in the block KG-OSN-2009/3, Krishna-Godavari Basin, East Coast of India. Vedanta Limited holds 100% participating interest in the block. Multiple reservoir zones were encountered in the well H2 within the Mesozoic sequence between the depths of 3310m to 4026m with hydrocarbon indications during drilling and down hole logging.

### 10 year PSC extension for Cairn, Oil & Gas operated **Rajasthan Block**

During the year, we received approval from the Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas for a ten-year extension of the Production Sharing Contract (PSC) for the Rajasthan Block, RJ-ON-90/1. The tenure of the RJ Block PSC has been extended for an additional period of 10 years with effect from May 15, 2020.

#### **ALUMINIUM**

The business achieved an all-time-high aluminium production at 1,959kt. We also achieved record alumina production from Lanjigarh refinery at 1,501kt. Structural changes put in place including increased Bauxite sourcing reducing our reliance on imported alumina, improved volumes from our alumina refinery, better coal availability, linkage and coal stock on hand and more efficient logistics have provided stability to the operations.

#### **POWER**

FY2019 was a significant year for the Talwandi Sabo Power Limited (TSPL) plant, where we achieved record plant availability of around 88%.

#### **IRON**

During the year, operations in Goa remained suspended due to a state-wide industry directive from the Supreme Court. We continue to engage with and encourage the Central and State Governments to resume production given the benefits to all stakeholders. In this regard, we welcome the efforts of the Goa Mining People Front and FICCI to reopen the industry in Goa.

## COPPER

Production from our copper smelter plant at Tuticorin was suspended for the whole of FY2019. We continue to engage with the Government, the relevant authorities, the Courts and all stakeholders to enable the safe and supported restart of operations.

Meanwhile, we continue to operate our refinery and rod plant at Silvassa, catering to the domestic market.

#### **CSR**

## Inauguration of 500th Nand Ghar reaching out to over 17,000 children

Your Company inaugurated 500th Nand Ghar at Chaksu Block in Jaipur and reached out to more than 17,000 children and 15,000 women, through this programme, aimed to lead the way for early childhood development in Rajasthan, Uttar Pradesh and Madhya Pradesh. We have also planned an outlay of ₹800 crore for setting up 4,000 Nand Ghars across India over next few years.

Through these 500 Nand Ghars, Vedanta is committed to ensure a better future for children and women.

## **ACQUISITIONS**

## **Acquisition of Electrosteel Steels Limited under IBC**

Pursuant to a Corporate Insolvency Resolution process implemented by way of the Insolvency and Bankruptcy Code 2016, your Company acquired Electrosteel Steels Limited, engaged in the business of manufacturing of steel with a total current capacity of 1.5 million tonnes per annum (MTPA) with a potential to increase the capacity to 2.5 MTPA. The operations have seen a complete turnaround in the last 10 months after acquisition with the operations achieving record production.

Your Directors believed that the acquisition will complement the Company's existing Iron Ore Business as the vertical integration of steel manufacturing capabilities has potential to generate significant efficiencies.

The detailed announcements made by the Company in this regard are available on the website of the Company at www.vedantalimited.com

#### **ECONOMIC RESPONSIBILITY**

It has been another successful year for Vedanta as we continue to deliver across our strategic priorities. We stay focussed on contributing by way of economic value creation and building trustworthy relations with the Governments and other stakeholders.

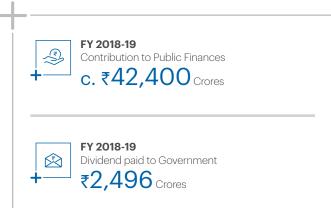
With these values being ingrained in Vedanta's DNA, we are proud to share that we have contributed c. 47% of our turnover, i.e. c. ₹42,400 crore to the public exchequer of the various countries where we operate.

Your Company publishes Tax Transparency Report which provides an overview of the tax strategy, governance and tax contributions made by the Company.

The report for the FY2019 is available on the website at www.vedantalimited.com



For bringing transparency and to protect the interest of investors, your Company has in place a Dividend Distribution Policy formulated in accordance with Listing Regulations which sets out the parameters and circumstances to be considered by the Board in determining the distribution of dividend to shareholders and/or retaining profits earned by the Company. The Policy is available on the website of the Company at www.vedantalimited.com.



#### **DIVIDEND**

We have always believed in sharing the economic value generated. A consistent dividend is a healthy sign of a growing company. With a robust operational performance and a complementary market environment, we returned impressive numbers for FY2019.

#### **RETURN TO SHAREHOLDERS**

(₹ per share)



The Company has declared the following dividends during the year out of the reserves of the Company and in compliance with the Dividend Distribution Policy:-

Type of Dividend	Date of Declaration	Record Date	Rate of Dividend per share (face value ₹1 per share)	%	Total Payout (in Cr.)
1 <sup>st</sup> Interim Dividend	October 31, 2018	November 10, 2018	₹ 17.00	1700	6,320
2 <sup>nd</sup> Interim Dividend	March 6, 2019	March 14, 2019	₹1.85	185	685
Total			₹18.85		

The total dividend for the year stands at ₹18.85/- per equity share representing a dividend yield of ~8% based on last one-year average share price of the Company.

Further, the Board of Directors on October 10, 2018 have approved payment of Dividend on 7.5% Redeemable Non-Convertible Non-Cumulative Preference Shares (RPS) of face value ₹10/- each for a period from April 01, 2018 to October 27, 2018 as per the terms of issuance. These RPS were issued and allotted on April 28, 2017 and were due for redemption on October 27, 2018. The record date fixed for the same was October 22, 2018.

The Directors have not recommend final dividend for the financial year ended March 31, 2019.

#### **CREDIT RATING**

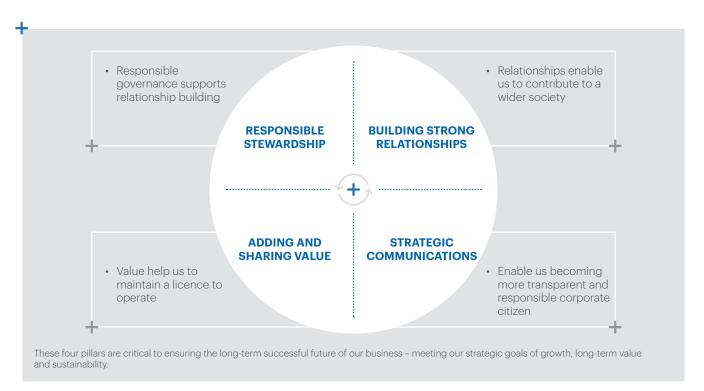
Your Company is rated by CRISIL and India Rating and Research Private Limited on its various debt instruments. The details of ratings provided by the agencies is provided in the Corporate Governance Report.

#### **SUSTAINABILITY**

Sustainable Development is integral to Vedanta's core business strategy. We continue to be a transparent and responsible corporate citizen; committed to a 'social licence to operate' and partner with communities, local governments and academic institutions to help catalyse socio-economic development in the areas where we operate.

The Company reaffirms its Core Values of Trust, Entrepreneurship, Innovation, Excellence, Integrity, Respect and Care, which are the basis of our Sustainable Development Model.

The model continues to be centered on the four strategic pillars: Responsible Stewardship; Building Strong Relationships; Adding and Sharing Value; and Strategic Communications.



With the Sustainable Development model, we built the Sustainable Development framework, which is aligned to global best practices and standards, including the United Nations Global Compact's (UNGC) 10 principles; the International Finance Corporation (IFC) performance standards; the International Council on Mining and Metals (ICMM) principles; UN Sustainable Development Goals (SDGs); and the Organisation for Economic Cooperation and Development (OECD) promoted Multinational Guidelines.

This robust framework provides the businesses and its leaders with the parameters on which to assess, monitor, review key sustainability priorities, such as safety, health, environment, stakeholder engagement and community development activities, as per the Company's approach on 'social licence to operate'.

The Vedanta Sustainability Assurance Program (VSAP) has been the bedrock in promoting transparency and compliance of all our businesses with the Group's Sustainable Development Framework. In continuation with last year, the big focus areas have been on implementation of ten key safety performance standards across the Group; VSAP process has categorically focussed on compliance level to these standards and highlighted areas of improvement.

During the year, we focussed heavily on safety performance of your businesses under the overarching umbrella of Health, Safety and Environment (HSE) best practices. Community engagement and development programmes were geared with emphasis on need assessments and longevity of the project and related outcomes/benefits.

Our resolve is strong, and we continue to work towards achieving zero harm.

Vedanta's teams across businesses are driving various capacity building and behavioural programmes. Our awareness campaigns aim to entrench a culture of safety and risk awareness. Training programmes on 'Making Better Risk decisions' is one such programmes rolled out across the businesses to improve safety decision making of leaders at all levels, particularly those on the front line. Similarly, 'Experience Based Quantification' (EBQ) using Bow Tie Risk Assessment methodologies were utilised to identify critical risks from safety and environmental perspective for key businesses. In FY2019, over 1.4 million hours of safety training were delivered to employees and contractors.

Our Company remains committed to decreasing its carbon footprint. Last year we stated our expectation to reduce our GHG intensity by 16% from a 2012 baseline by 2020. We are committed at ensuring that we develop our carbon reduction strategies in alignment with the framework laid out by the Taskforce on Climate related Financial Disclosures (TCFD). A Carbon Forum has been internally constituted to develop our carbon strategy and provide governance on the risk to business from climate change.

Our businesses have made significant progress on our GHG reduction commitment. Hindustan Zinc Limited and Oil & Gas business have committed to increase their investment in solar power, while other businesses have made significant improvements in their process efficiencies, thereby reducing their GHG intensity emissions. As of March 31, 2019, we had been able to achieve about 14.6% reduction in our GHG

intensity from our baseline number. We are confident of achieving our target by 2020.

Climate related financial risk is a part of our corporate risk register and we believe that climate resilience is the best approach we can take to safe guard our climate related business risks.

We ensure that our Biodiversity Management Plans are in place, and our environmental footprint follows the most rigorous global standards. We have developed specific objectives and targets, particularly with regards to water and energy management.

We remain committed to our agenda of "Zero Harm, Zero Waste, Zero Discharge". This year we were able to recycle more than 111% of the fly ash that was generated at our power plants. Large volumes of our high calorific hazardous wastes are also sent to the cement industry to be used as clinker fuel, thereby preventing them from being sent to secure landfills. This year, we have recycled 94% of our overall High Volume and Low Effect waste in sustainable applications and are continuing to develop new and innovative ways to increase the proportion of waste we recycle.

We are present in some of the world's most unique, remote and underdeveloped regions. We are committed to respect, learn from and create a shared understanding with our communities. Connecting with our communities is not just the right thing to do; it is a fundamental imperative of our 'license to operate'.

Our spend on our social investment and CSR programmes thereby reaffirm our commitment to ensuring the well-being of the communities who live in proximity to our operations.

Lessons from our experience in Tuticorin continue to guide us in improving engagement with our local stakeholders. We have introduced revised stakeholder engagement and grievance mechanism standards and have initiated several projects to understand the perceptions and expectations of local communities from Vedanta. We are hopeful that these measures will help improve our social license to operate over a period of time.

We remain positive that our overall sustainability journey is headed in the right direction. Our sustainability framework is robust and in line with global practices on engaging with civil society, communicating performance on community development, human rights as well as addressing legacy issues. We are confident that it will help us achieve higher levels of performance in the years to come.

A separate detailed report on Company's Sustainability Development also forms part of the Annual Report.

#### **CORPORATE SOCIAL RESPONSIBILITY**

Your Company works towards a larger goal of creating enduring value for the communities it works in.

Towards that end, we undertake various need-based community programmes as part of our Corporate Social Responsibility (CSR). Putting the last as first being the top most priority, the Company has committed to align its CSR activities to the priorities of its neighborhood communities and also the national priorities including the Sustainable Development Goals.

For almost all our programmes, a bottom up community engagement approach is non-negotiable. This collaborative approach ensures community ownership, suitable project design, effective delivery and post project sustainability. Apart from communities, we also strongly believe in partnering with government agencies, corporates, civil society organisations & community-based organisations to carry out durable and meaningful interventions.

All our CSR programmes are governed by the Vedanta CSR Policy, Corporate Technical Standards and each entity specific Standard Operating Procedures for CSR. The documents are periodically revised. Further, in order to benefit from diverse perspectives, and in keeping with a culture of collective leadership, Vedanta has formed a CSR Council. The Council is led by senior business leaders comprising of CSR Heads & CSR executives from the different Business Units. The Council is responsible for governance, synergy and cross learning across the Group CSR efforts. It meets every month and reviews the performance, spends and outcome of CSR programmes for all Business Units. The Council is instrumental in implementing improvement projects to create a seamless enabling eco-system for Business Units to carry out best-inclass community development programmes.

Vedanta has a strong Board CSR Committee including senior Independent Directors. The Committee provides strategic direction for CSR activities, and approves its plans and budgets. It also reviews progress and guides the CSR teams towards running well-governed and impactful community programmes.

#### **Brief overview on Community Development Programmes** for FY2019 is as under:



#### NAND GHAR AND CHILDREN'S **WELL-BEING PROJECTS**

The importance of education for social growth and upliftment is undisputable and for Vedanta this is a very important pillar of its work with communities. Through our various education and childcare initiatives, we reached to around 1.55 lakh children.

The Nand Ghar Project is the Company's flagship national initiative, which aims to build new-age Anganwadis for ensuring the health and learning of young children in rural areas, and also as a platform for women's empowerment and skilling. The Project ultimately aims to impact 85 million children and 20 million women across 1.37 million Anganwadis in the country. During this financial year, we were proud to cross the 500 Nand Ghars mark, with 502 Nand Ghars now operational in 4 states of the country. The key metrics of their operational efficiency are tracked using an online and custom designed application.

As part of the Khushi initiative, HZL, in partnership with Government of Rajasthan strengthens the functioning of 3,089 ICDS Centres (called Anganwadis) in the 5 Districts of Hindustan Zinc's presence, reaching to over 60,000 children and caters to health, nutrition and pre-school need of children in the formative 0-6-year age group. The project also conducts periodic assessments to track developmental metrics of the kids. This year an average increase of 11% in

children's learning capability was identified through these standardised assessments. Attendance also saw an increase with the average attendance increasing from 44% two years ago to 60% now.

Vedanta Limited Jharsuguda initiated a project called 'Vedanta Vidyarthi Vikas Yojana (VVVY)' in the year 2009 to strengthen the education standards of secondary school students through remedial coaching classes. Since the beginning of VVVY project, quality education has been provided to the students of standard 8th to 10th and it's going through a remarkable growth in terms of quality education and passing percentage of children. Till date total of 3,975 students have been enrolled under VVVY project, 1,346 students appeared in matriculation examination and 1,130 students successfully passed with good marks.



## **WOMEN'S EMPOWERMENT**

Women's empowerment is all about equipping and enabling women to make life determining decisions. Vedanta recognises this need for empowering women and is running various projects to help the communities take a step towards a more equitable future. It is associated with around 35,000 women (up from 28,000 last year) and amongst them 3,600 women have started /revamped their own micro enterprises. One of our interventions in this space is the Subhalaxmi Cooperative Society in Jharsuguda which has emerged as a model community-based organisation. The Cooperative has successfully completed 10 years of empowering women since its inception and currently is touching the lives of 3,793 members in 71 villages. Through this programme, the Cooperative has been able to generate funds of ₹2.52 crore and through its various activities it has seen a significant increase in the income of the members.

HZL is running a similar programme called Sakhi which started three years ago and now has 1922 SHGs connecting the Company with 23,954 women. The total savings accumulated through this project are now at ₹6.22 crore and the total loans disbursed amounts to ₹17.13 crore, utilised for household consumption, agriculture, health & sanitation and 492 women utilised the loans to create new enterprises or expand existing enterprises.



## **HEALTH CARE**

There is a great disparity in the quality and coverage of medical treatment in India. The majority of rural population lack basic primary healthcare and given that most of our operations are also in rural areas, enabling rural communities access to affordable and quality healthcare is an important focus for us. The Vedanta Hospital at Lanjigarh continues to provide much needed healthcare to thousands in the District of Kalahandi, Odisha. This year, the hospital has seen a total footfall of 67,425 patients, of which 6,935 were new patients and 11,664 were old patients. Further, 12,980 patients were treated through their Mobile Health Van.

#### **VMRF**

To prevent, control and eradicate cancer and illnesses related to it, Bharat Aluminium Company Limited (BALCO), a subsidiary of Vedanta started Vedanta Medical Research Foundation (VMRF), a voluntary, non-profit organisation. Balco Medical Centre, a state-of-art oncology facility in Naya Raipur, is its first flagship initiative. As the first super-specialty hospital with the capability to treat cancer, Balco Medical Centre's genuinely colossal impact is validated by the reception it received from the people and the milestones achieved - over 4,000 patients were served, more than 230 patients underwent radiation, 250 plus surgeries were performed and well past 1,000 chemotherapies were carried out.



#### **AGRICULTURE AND ANIMAL HUSBANDRY**

In much of rural India, the communities continue to rely heavily on agriculture and animal husbandry. We therefore follow a livelihood development approach of integrating agriculture, dairy, water management, technology, farmer's organisations and market outreach. To increase the income of farming community in Barmer through productivity enhancement of agriculture and livestock, project Unnati, a Cairn CSR initiative, was set up. More than 10,000 farmers benefitted through various interventions like horticulture demonstrations, construction & renovation of traditional water harvesting structures like KHADIN, etc. In similar line, through project SAMADHAN by HZL, the Company aims to improve the returns from Agriculture & Livestock for about 30,000 families. By the end of this year, the project had successfully worked with 8,660 farmers on agriculture and 8,944 farmers on livestock.

In Jharsuguda, to secure economic prosperity among identified households of Siripali village, Jeevika Samriddhi project was launched. The relevance of Jeevika Samriddhi project is based on the need to augment irrigation infrastructure, promotion of advanced agriculture, application of bio-fertiliser and pesticides and making farming as a remunerative profession. 111 farmers are benefiting from this project and because of this project, the irrigation potential of the village increased by 21.34%.



## SKILLING THE YOUTH

To maximise the output from the immense demographic dividend India has, it is imperative that the youth are trained in skills suited for the current economic scenario. With the aim of channelising this untapped potential the Company is running a lot of skill development initiatives providing training to more than 3,000 youths. Balco in partnership with IL&FS is providing training to youth in five different high employment potential trades - Hospitality, Welding Assistant, Industrial stitching, Fitter Fabrication and Electrician. The institute has provided assured employment opportunities to 7,800 students since the inception of its operations. In Thoothukudi, Sterlite Copper through its Tamira Muthukkal project has provided vocational training to 2,000 youth and currently covers 500 more beneficiaries helping them gain skills thus increasing their employability.

A few other programmes ran by HZL, also aims at skilling the youth of Rajasthan and increase their employability.

HZL's Skilling and Entrepreneurship centres provide training to youth to become Domestic Electricians, Security Guard, General duty assistant, Sales entry and Data entry operators and in Micro Finance. Currently, 160 students are being trained and the plans are to train 700 youths each year. Through other initiatives like the Mining academy, ITI training at Maruti, BPO training, etc. the Company has been able to reach 559 youths this year.



#### **ENVIRONMENT PROTECTION** & RESTORATION

In our operations we make it a priority to operate in harmony with the natural environment. The Company is committed to safeguard the environment and makes extensive efforts to protect and restore nature. Pasumai Thoothukudi, an initiative by Sterlite Copper, launched on the World Forest Day with a vision of developing a green belt in Thoothukudi is an illustration of the significance of this commitment for the Company. The Company aims to plant 1 million trees and has already planted 800 saplings within 10 days of the launch of the programme.



#### **SPORTS & CULTURE**

Sports, at an individual level, helps build character, benefits health and for talented individuals becomes a source of livelihood. However, it is at a societal stage where sports can have a value-altering effect which can lead to a more tolerant and inclusive society. Vedanta identifies this dual impact that can be achieved through sports and thus its sports initiatives are focussed on two main objectives; Sports for all and Sports for excellence. Vedanta through its football initiatives in Rajasthan by Hindustan Zinc Football Initiative (ZF), and in Goa by the Iron Ore Business (Sesa Football Academy (SFA)), established on a reclaimed mine has taken great strides in getting closer to reaching these objectives. Zinc Football trains around 2,000 kids, both girls and boys in its 64 Zinc football schools. Sesa Goa also has 4 similar centres training 500 kids on a weekly basis. These centres enable the game to reach the masses and help create a culture of sports in the country. Both academies have their centres of excellence with state-ofart infrastructure that have not just developed players for their respective state teams but also contributed to the national setup with 7 alumni of SFA playing for the Indian national team and 8 playing in the elite Indian Super League. The second edition of 'Vedanta Women's Football League' saw involvement of 160 female football professionals and provided a platform for them to showcase their talents.



## **COMMUNITY INFRASTRUCTURE**

Infrastructure development provides impetus for economic growth and it is no different for the villages in our operational areas. It not only helps elevate the quality of life in the villages, but also forms the foundation for socio-economical upliftment. The Company recognises this need and therefore is aiding the operational villages in developing basic infrastructure in villages, such as school toilets, drinking water projects, sports infra, local drains, community centres etc. as per local needs.

During the year, the Company's divisions spent ₹51.72 crore on CSR activities, while on a consolidated basis it spent about ₹309.24 crore on CSR.

A brief overview of CSR initiatives forms part of this Directors Report and is annexed hereto as **Annexure A**.

Your Company's CSR Policy addresses the Company's commitment to conduct its business in a socially responsible, ethical and environmentally friendly manner; and to continuously work towards improving the quality of life of the communities in the areas where it operates.

The policy may be viewed at www.vedantalimited.com

#### **DIGITISATION INITIATIVES - CSR**

I. Unified & Online CSR Reporting Platform for the Group Vedanta has a large and complex CSR portfolio with multiple and diverse projects running across various locations. During the year, we have worked with Goodera, a global SaaS company, in assisting us with the development of a CSR lifecycle and volunteering technology platform that will assist in planning, managing, evaluating and reporting on our Corporate Social Responsibility (CSR) programmes.

The technology platform will enable Vedanta business Units to continuously measure progress and impact of CSR and volunteering projects, in real time, with last-mile visibility through impact dashboards. While enabling effective governance, this integrated technology platform will also assist in maximising the impact of every rupee spent via automation, intelligence and analytics for data-driven decision-making.

The platform will also empower Vedanta with solutions to engage employees across its geographies to create the culture of giving and volunteering seamlessly.

#### II. A web-enabled, online community grievance register -'NIVAARAN'

Nivaaran is our internal community grievance/requests reporting and monitoring platform. This is an online web-enabled system developed this year by our Information Technology team. This central repository platform primarily aims to enable the submission of community requests/grievances from anywhere and anytime (24x7) by our stakeholder and CSR teams, who validate the request and take action for speedy closure of the same. Tracking grievances/requests is also facilitated on this portal through the system generated unique registration number. It also enables analysis of the data related to grievances across various categories including - type of grievance/requests, resolution time, location/asset etc.

## **CSR IMPACT ASSESSMENT**

Taru Leading Edge assessed the impact of the CSR activities of Vedanta Group in the states of Rajasthan, Uttarakhand, Gujarat, Andhra Pradesh, Odisha, Chhattisgarh, Punjab, Goa, Karnataka and Jharkhand. This study employed various primary and secondary research techniques for comprehensive data gathering to arrive at objective insights which would assist in gauging the impact of the Company's current operational projects and help identify new interventions to improve these projects. Taru, for this study, deployed trained

professionals to oversee the Survey, focus group discussions, and perform in-depth interviews with the community members, beneficiaries, government/local authority personnel etc. To assess the investment made for development of infrastructure, physical survey of the infrastructure was done. Over 6,000 samples were collected for Impact assessment along with 730 Key Informant Interviews/In-depth Interviews and 240 Focus Group Discussions.

Overall, all sectoral interventions under thematic areas of sustainable livelihoods, Health & Nutrition, Water, Sanitation & Hygiene (WASH), Energy & Environment, Education and Sports & Culture received positive feedbacks with around 60% households reporting having benefitted from at least one of the CSR interventions of the Vedanta Indian BUs.

Under the sustainable livelihoods, the CSR interventions reached out to at least 46% of the CSR beneficiaries and around 62% of these CSR beneficiaries reported an increase in household income. Other impacts included benefits such as Increase in yield and lifespan of livestock, more earning from livestock, and generation of more employment opportunities.

The Health & Nutrition CSR interventions of various BUs reached out to approximately 50% of the CSR beneficiaries and around 76% of these beneficiaries reported that they were able to save money on Medicine & Health and close to 70% reported an improvement in Healthcare Quality.

The WASH, Energy & Environment CSR initiatives of Vedanta Group were able to reach approximately 30% of the CSR beneficiaries and more than 60% of these beneficiaries reported impact and benefits such as improvement in general cleanliness in the focus areas, availability of water at home, women feeling safer with construction of toilet facility in the house and improvement in school attendance after construction of toilet in schools.

It was observed that through various interventions in the Education thematic area, more than 80% of the CSR beneficiaries reported an improvement in grades of children, increased interest in going to school and improvement in quality of education.

Vedanta Group has also implemented various other programmes such as Community Centres, Road Safety Programmes, Football Academy Project, Sports & Culture etc. which are also appreciated by the community and have created a positive impact.

## **INNOVATION, DIGITALISATION & TECHNOLOGY**

Vedanta has made innovation a strategic priority by acknowledging the role innovation plays as an enabler across every facet of the business. Beyond this ideology, Vedanta has instilled innovation as a corporate value and the Group's leadership supports and incentivises employees in the establishment of a culture of innovation. This is because Vedanta's leadership believes that innovation, and not just incremental improvement, will help mitigate the volatility in commodity prices. Innovation, which encompasses technology and digitalisation, drives efficiency and sustainability. It is a central part of the Group's drive for operational excellence. We want to become an innovator company and to do this, we are focussed on not only acquiring best in class technology for our assets, but on creating our own.

Calling on two of our core values of entrepreneurship and innovation, we have stepped up our efforts to discover and implement new, innovative and disruptive technologies through the introduction of new systems and incentive programmes.

Across our business units, employees are encouraged to be creative in their thinking and approach. Ideas are valued by continually asking employees to think about what they and the Group can do differently. More than 1,000 ideas have been submitted, of these, 200 were selected for implementation and are being rolled out across the Group.

Of all the trends impacting the mining industry at present, digitalisation is arguably the most crucial, given its over-arching impact on every aspect of operations. Offering significant potential for improving operational efficiency and lowering costs, digitalisation is opening up exciting opportunities at our several eading mines.

Hindustan Zinc's Sindesar Khurd mine is our most automated mine and has successfully implemented mine digitalisation. Here, we are moving into a new era of mining, where high speed WiFi networks and high bandwidth optical fibre forms the backbone of a new digital-enabled operating model.

At our Oil & Gas business, the world's longest, continuously-heated and insulated pipeline is one example of high technology standards. We remain ahead of the curve

with industry leading extraction techniques like enhanced oil recovery and alkaline surfactant polymer, which have been deployed at the Mangala field. Extensive use of digital oil field software has improved reservoir management.

At Gamsberg, we have taken the application of technology a step further. Gamsberg has been conceptualised to be a digital mine. By introducing technology and digitalisation from the start, the operation will have leading-edge systems that report the state of the mine, the quality of ore, the conditions of the concentrator and the quality of the concentrate, all in real-time, to enable minute-by-minute decisions.

## **HUMAN RESOURCES (HR)**



#### **PEOPLE & CULTURE**

Your Company has always aspired to build a culture that demonstrates world-class standards in safety, environment and sustainability. People are our most valuable asset and we are committed to provide all our employees with a safe and healthy work environment.

Our culture exemplifies our core values and nurtures innovation, creativity and diversity. We align our business goals with individual goals and enable our employees to grow on personal as well as professional front.

## **VEDANTA VALUES THAT DRIVE THE ORGANISATION CULTURE ARE:**



### **ENTREPRENEURSHIP**

At Vedanta, our people are our most important assets. We actively encourage their development and support them in pursuing their goals.



## INNOVATION

We embrace a conducive environment for encouraging innovation that leads to a zero harm environment and exemplifying optimal utilisation of natural resources, improved efficiencies and recoveries of by-products.



#### RESPECT

We lay consistent emphasis on human rights, respect the principle of free, prior, informed consent, while our engagements with stakeholders give local communities the opportunity to voice their opinions and concerns.





## CARE

As we continue to grow, we are committed to the triple bottom line of People, Planet and Prosperity, to create a sustainable future in a 'zero harm, zero waste and zero discharge' environment for our communities.



### **TRUST**

We actively foster a culture of mutual trust in our interactions with our stakeholders and encourage an open dialogue which ensures mutual respect.



## INTEGRITY

We place utmost importance on engaging ethically and transparently with all our stakeholders, taking accountability of our actions to maintain the highest standards of professionalism and complying with international policies and procedures.



#### **EXCELLENCE**

Our primary focus is delivering value of the highest standard to our stakeholders. We are constantly motivated by improving our costs and our quality of production in each of our business through a culture of best practice benchmarking.



#### **DIVERSITY**

Diversity remains a strong focus. We are committed to provide equal opportunities to our employees regardless of their race, nationality, religion, gender or age. We are pleased with our progress to date on gender diversity, and women now represent 10.6% of our total workforce and 20% of our Board. We have set ourselves a target to reach over 33% women at senior levels by 2020 and aim to achieve 20% female representation amongst our employees.

## **BOARD DIVERSITY**

Male	80%	
Female	20%	

EMPLOY	EE DIVERSITY										
Male	89.4%	Q	Q		Q	Q	Q		Q		R
Female	10.6%	2	2	Ž,	Q.	2	Ŝ.	2	Q.	Q.	2

We are also focussed on increasing the mix of geographies and nationalities in our workforce. Since most of our operations are in remote areas, we place a strong emphasis on recruiting employees from among the local population. A significant percentage of the senior management team and our employees are recruited from the country in which our operations are located.

We strictly follow our Equal Opportunity policy to ensure there is no discrimination and all our decisions are based on meritocracy.



## RECRUITMENT

We have put a range of initiatives in place to support us in hiring skilled professionals.

#### Right management in place (RMIP)

To re-emphasise the Group's philosophy of empowering the SBUs, we have reviewed our existing Business & SBU structures and followed a rigorous assessment process to ensure we have right talent in the right positions. The RMIP process also ensured that we have filled all the critical roles within our structures and any gaps in the management team are supported by strategic plans to fill vacancies. Our approach to recruitment is focussed on hiring diverse, high quality talent as well as expats and specialists.

## **Vedanta Leadership Development Program (VLDP)**

VLDP is our flagship programme which aims to build organisational capability through developing talented individuals from premier management and technology institutes. It is a tailored programme which focuses on nurturing these bright minds to act as catalysts to steer

our business to the next level of growth by implementing transformational ideas. The programme includes induction sessions, cross functional projects in significant roles, job rotation, development opportunities and continuous anchoring.



#### **TALENT MANAGEMENT AND DEVELOPMENT**

## **Internal Growth Workshops**

We have always aimed to design an organisation which is spearheaded by our "Leaders from Within". Recognising internal talent and recruiting them to leadership roles has been the driving factor in our journey of rapid growth. Aligned with this philosophy, the Group conducts 'Chairman's Internal Growth Workshops' which enable our young leaders to fulfil their potential through development opportunities and provide us with a talent pipeline enabled to fill critical roles across the Group. These workshops have resulted in the development of 600+ high potential New Leaders across the Group's businesses who are given significantly elevated roles and responsibilities.

## **Leadership and Talent Analytics**

We have partnered with experts to evaluate our existing talent management practices and implement best-in-class new initiatives for talent development. We are focussing on employing digital channels to run accelerated growth drives, workshops, in-house learning modules and other development opportunities.

## 360 Degree Feedback

At Vedanta we promote growth and nurturing of our internal talent pool by encouraging internal dialogue between senior leaders and their young mentees and peers. For this reason, we have launched a 360 Degree Feedback for our ExCo Leaders in collaboration with an external partner. We believe that this will help to fast track assessment and development of leaders and we aim to extend this to cover all our professionals in due course.



## PERFORMANCE MANAGEMENT & TOTAL REWARDS

## V-Perform: One Performance System for One Vedanta

At Vedanta, our focus is to constantly improve the level of automation in all our operations. V-Perform is a pan-Vedanta initiative to standardise the Performance Management System (PMS) and process across all Vedanta Group companies by leveraging technology. This enables functions, teams and individuals to track performance on a regular basis, evaluate efficiency through advanced analytics and implement proactive decisions towards achieving Vedanta's objectives. We foster a culture of safety and sustainability to achieve our ultimate vision of "Zero Harm", "Zero Waste & "Zero Discharge". To enhance our safety performance in the workplace and strengthen our existing Safety Management System, a safety competency assessment process was completed mid-year by all employees.

#### **Employee Stock Option Scheme ('ESOS')**

Employee stock options are a significant component of our long-term incentives. They enable our employees to share

in the success of the Company, encouraging high-growth performance and reinforcing employee pride with a focus on ownership.

Your Company has established a share incentive schemes viz. 'Vedanta Limited Employee Stock Option Scheme 2016' ("the Scheme"). The Scheme was framed with a view to reward employees for their contribution in successful operation of the Company with wealth creation opportunities, encouraging high-growth performance and reinforcing employee pride.

The Scheme is a conditional share plan for rewarding performance on pre-determined performance criteria and continued employment with the Company. The pre-determined performance criteria shall focus on rewarding employees for Company performance vis-avis competition and also for achievement of internal operational metrics.

The Scheme was launched after obtaining statutory approvals, including shareholders' approval by way of postal ballot on December 12, 2016. In 2018, 35% of the workforce participated in this Scheme with a focus on our young & senior leaders, employees driving strategic projects and high impact task force members.

The Scheme is currently administered through Vedanta Limited ESOS Trust (ESOS Trust) which is authorised by the shareholders to acquire the Company's shares from secondary market from time to time, for implementation of the Scheme. During the year, the ESOS Trust was re-constituted by the Nomination & Remuneration Committee in its meeting held on July 13, 2018. The details of the trustees can be accessed at www.vedantalimited.com.

No employee has been issued stock options during the year, equal to or exceeding one percent of the issued capital of the Company at the time of grant.

During the year, the acquisition by the trust does not exceeded 2% of the paid-up capital of the Company. Further, the total acquisition by trust at no time exceeded 5% of the paid-up equity capital of the Company.

During the year under review 14,055,556 options were granted to 2,798 employees including Whole-Time Director and Key Managerial Personnel.

Pursuant to the provisions of SEBI (Share Based Employee Benefits) Regulations, 2014 ("Employee Benefits Regulations"), disclosure with respect to the ESOS Scheme of the Company as on March 31, 2019 is available on the website of the Company at www.vedantalimited.com.

The Company confirms that the Scheme complies with the Employee Benefits Regulations and there have been no material changes to the plan during the financial year.

A certificate from M/s. S R Batliboi & Co. LLP, Chartered Accountants, Statutory Auditors, with respect to the implementation of the Company's ESOS schemes, would be placed before the shareholders at the ensuing Annual General Meeting. A copy of the same will also be available for inspection at the Company's Registered Office.

## **EMPLOYEE INFORMATION AND RELATED DISCLOSURES / PARTICULARS OF EMPLOYEES**

The statement of Disclosure of Remuneration under Section 197 of the Companies Act, 2013 and Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 ("Rules") is appended as **Annexure B** to the Report.

The information, as per Rule 5(2) of the Rules, forms part of this Report. However, as per provision of Section 136 of the Act and Rule 5(2), the Report and the Financial Statements are being sent to the Members of the Company excluding the statement of particulars of employees under Rule 5(2) of the Rules. The statement shall be available for inspection at the Company's Registered Office and any Member interested in obtaining a copy of the said statement may write to the Company Secretary.

## PREVENTION OF SEXUAL HARASSMENT AT WORKPLACE

The Company has zero tolerance for sexual harassment at workplace and has adopted a Policy on prevention, prohibition and redressal of sexual harassment at workplace in line with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the Rules thereunder for prevention and redressal of complaints of sexual harassment at workplace.

As part of Vedanta Group, your Company is an equal opportunity employer and believes in providing opportunity and key positions to women professionals. The Group has endeavoured to encourage women professionals by creating proper policies to tackle issues relating to safe and proper working conditions and create and maintain a healthy and conducive work environment that is free from discrimination. This includes discrimination on any basis, including gender, as well as any form of sexual harassment. During the period under review, eight complaints were received and resolved. Four employees were separated on account of complaints. Your Company has constituted Internal Complaints Committee (ICC) for various business divisions and offices, as per the requirements of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

## **RISK MANAGEMENT**

Your businesses are exposed to a variety of risks, which are inherent to a global natural resources organisation. The effective management of risk is critical to support the delivery of the Group's strategic objectives. Risk management is embedded in the organisation's processes and the risk framework helps the organisation meet its objectives by aligning operating controls with the mission and vision of the Group set by the Board.

As part of our governance philosophy, the Board has a Risk Management Committee to ensure a robust risk management system. The details of Committee and its terms of reference are set out in the Corporate Governance Report, which forms part of this Annual Report.

Our risk-management framework is designed to be simple, consistent and clear for managing and reporting risks from the Group's businesses to the Board. Our management systems, organisational structures, processes, standards and code of conduct together form the system of internal controls that govern how we conduct business and manage associated risks. We have a multi-layered risk management framework

to effectively mitigate the various risks, which our businesses are exposed to in the course of their operations.

The Risk Management Committee supports the Audit Committee and the Board in developing the group-wide risk-management framework. Risks are identified through a consistently applied methodology. The Company has put in place a mechanism to identify, assess, monitor and mitigate various risks to key business objectives.

Major risks identified by businesses and functions are systematically addressed through mitigating actions. Risk officers have also been formally nominated at operating businesses, as well as at Group level, to develop the risk-management culture within the businesses.

The Risk Management Policy of the Company was revised by the Board in its meeting held on March 28, 2019 on the recommendation of the Risk Management Committee and Audit Committee to include cyber security.

For a detailed risk analysis, you may like to refer to the risk section in the Management Discussion Analysis Report which forms part of this Annual Report.

#### **INTERNAL FINANCIAL CONTROLS**

Your Board has devised systems, policies and procedures/ frameworks, which are currently operational within your Company for ensuring the orderly and efficient conduct of its business, which includes adherence to policies, safeguarding its assets, prevention and detection of frauds and errors, accuracy and completeness of the accounting records and timely preparation of reliable financial information. In line with best practices, the Audit Committee and the Board reviews these internal control systems to ensure they remain effective and are achieving their intended purpose. Where weaknesses, if any, are identified as a result of the reviews, new procedures are put in place to strengthen controls. These controls are in turn reviewed at regular intervals.

The systems/frameworks include proper delegation of authority, operating philosophies, policies and procedures, effective IT systems aligned to business requirements, an internal audit framework, an ethics framework, a risk management framework and adequate segregation of duties to ensure an acceptable level of risk. Documented controls are in place for business processes and IT general controls. Key controls are tested by entities to assure that these are operating effectively. Besides, the Company has also adopted an SAP GRC (Governance, Risk and Compliance) framework to strengthen the internal control and segregation of duties/ access. It also follows a half-yearly process of management certification through the Control Self-Assessment framework, which includes financial controls/exposures.

The Company has documented Standard Operating Procedures (SOP) for procurement, project/ expansion management capital expenditure, human resources, sales and marketing, finance, treasury, compliance, Safety, Health and Environment (SHE), and manufacturing.

The Group's internal audit activity is managed through the Management Assurance Services ('MAS') function. It is an important element of the overall process by which the Audit Committee and the Board obtains the assurance on the effectiveness of relevant internal controls.

The scope of work, authority and resources of MAS are regularly reviewed by the Audit Committee. Besides, its work is supported by the services of leading international accountancy firms.

The Company's system of internal audit includes: covering monthly physical verification of inventory, a monthly review of accounts and a quarterly review of critical business processes. To enhance internal controls, the internal audit follows a stringent grading mechanism, focussing on the implementation of recommendations of internal auditors. The internal auditors make periodic presentations on audit observations, including the status of follow-up to the Audit Committee.

The Company is also required to comply with the Sarbanes Oxley Act Sec 404, which pertains to Internal Controls over Financial Reporting (ICOFR). Through the SOX 404 compliance programme, which is aligned to the COSO framework, the Audit Committee and the Board also gains assurance from the management on the adequacy and effectiveness of ICOFR.

In addition, as part of their role, the Board and its Committees routinely monitor the Group's material business risks. Due to the limitations inherent in any risk management system, the process for identifying, evaluating, and managing the material business risks is designed to manage, rather than eliminate risk. Besides it created to provide reasonable, but not absolute assurance against material misstatement or loss.

Since the Company has strong internal control systems which are further strengthened by periodic reviews as required under the Listing Regulations and SOX compliance by the Statutory Auditors, the CEO and CFO recommend to the Board continued strong internal financial controls.

Based on the information provided, nothing has come to the attention of the Directors to indicate that any material breakdown in the function of these controls, procedures or systems occurred during the year under review. There have been no significant changes in the Company's internal financial controls during the year that have materially affected, or are reasonably likely to materially affect its internal financial controls.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their objectives. Moreover, in the design and evaluation of the Company's disclosure controls and procedures, the management was required to apply its judgement in evaluating the cost-benefit relationship of possible controls and procedures.

Further, the Audit Committee annually evaluates the internal financial controls for ensuring that the Company has implemented robust systems/framework of internal financial controls viz. the policies and procedures adopted by the Company for ensuring the orderly and efficient conduct of its business, including adherence to Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information.

#### **VIGIL MECHANISM**

The Company has in place a robust vigil mechanism for reporting genuine concerns through the Company's Whistle-Blower Policy. As per the Policy adopted by various businesses in the Group, all complaints are reported to the Director - Management Assurance, who is independent of operating management and the businesses. In line with global practices, dedicated email IDs, a centralised database, a 24X7 whistle-blower hotline and a web-based portal have been created to facilitate receipt of complaints. All employees and stakeholders can register their integrity related concerns either by calling the toll free number or by writing on the web-based portal which is managed by an independent third party. The hotline provides multiple local language options. All cases reported as part of whistle-blower mechanism are taken to their logical conclusion within a reasonable timeframe. After the investigation, established cases are brought to the Group Ethics Committee for decision-making. All Whistle-Blower cases are periodically presented and reported to the Company's Audit Committee. The details of this process are also provided in the Corporate Governance Report and the Whistle-Blower Policy is available on the Company's website at www.vedantalimited.com.

#### **INVESTOR RELATIONS**

Your Company has an active Investor Relations (IR) Programme and continuously strives for excellence in its IR engagement with international and domestic investors through various mediums such as quarterly earnings calls, Investor & Analyst Days, site visits, one-on-one and group meetings, participation in sell-side conferences and non-deal Roadshows.

The promoters of the Company and the senior management consisting of CEO and CFO involve themselves regularly in investor and analyst interactions. Depending on the context and need, the leadership team from businesses is also invited for these engagements.

Vedanta has set standards through the detailed and transparent disclosures on the Company's operational and financial performance. Your Company had created its first Integrated Report (for Financial Year 2018). Your Company initiated a new communication initiative which involves sending a brief update about the Company's performance and events to its shareholders and other stakeholders regularly. Having a diverse shareholder base and seven businesses demands enormous efforts from an IR function to manage investors and sell-side and to ensure that all business updates are provided timely and in complete. The dissemination of business updates through this "Investor Brief" has been well appreciated. As a key milestone in this continuing endeavour, your Company created a digital interactive microsite on the corporate website to provide an interactive experience beyond what is available in the annual and quarterly results materials.

Your Company benchmarks global IR standards and tries to be at par with them. The investor and the analyst community have appreciated your Company's IR team and practices being one of the best in the country. Your Company has been recognised for its IR efforts year on year by globally renowned forums.

#### **CORPORATE GOVERNANCE REPORT**

Your board seeks to embed and sustain a culture that will enable us to achieve our objectives through effective corporate governance and enhance transparent engagement with key stakeholders.

In our constant endeavour to benchmark our policies and practices and in light of various developments in the realm of corporate governance and regulatory reforms, your Company continues to maintain and implement the highest standards of corporate governance and ethical business practices across the globe.

A separate report on Corporate Governance setting out the governance structure, principal activities of the Board and its Committees and the policies and practices that enable the Board to fulfil its stewardship responsibilities together with a Certificate from the Statutory Auditors of the Company regarding compliance of conditions of Corporate Governance as stipulated under Listing Regulations is provided as an Annexure to the Annual report.

#### **DIRECTORS & KEY MANAGERIAL PERSONNEL**

We aim to bring a diverse and complementary range of skills, knowledge and experience to the Board, so that we are equipped to navigate the operational, social, regulatory and geopolitical complexity in which our business operates. Achieving the right blend of skills and diversity to support effective decision-making is a continuing process.

The detailed composition of the Board and Key Managerial Personnel (KMP) of the Company along with the changes in the board and KMP during the period under review are provided in the Corporate Governance Report.

#### **DIRECTORS SEEKING RE-APPOINTMENT**

Pursuant to the provision of Companies Act, 2013, Ms. Priya Agarwal (DIN: 05162177), Non-Executive Director of the Company, is liable to retire by rotation at the ensuing Annual General Meeting (AGM) and being eligible, has offered herself for re-appointment. Accordingly, the appointment of Ms. Priya Agarwal is being placed for approval of the members at the AGM. A brief profile of Ms. Priya and other related information is provided in the AGM notice. The Board on the recommendation of Nomination & Remuneration Committee recommends her re-appointment at the AGM.

## **DECLARATION BY INDEPENDENT DIRECTORS**

The Company has received declaration from all the Independent Directors that they continue to meet the criteria of independence as provided under the Companies Act and Listing Regulations and comply with the Code for Independent Directors as specified under Schedule IV of the Act.

The Directors have also confirmed that they are not aware of any circumstance or situation, which exists or may be reasonably anticipated, that could impair or impact their ability to discharge their duties with an objective independent judgement and without any external influence.

## **BOARD DIVERSITY & INCLUSION**

Your Company believes that a diverse and inclusive Board is essential for achieving long-term growth and development of the Company. This ensures timely anticipation of risks and opportunities. The Company has a diverse Board consisting of Directors possessing variety of skills, expertise, qualifications and experience. The details of the key qualifications, skills and attributes are forming part the Corporate Governance Report.

## POLICY ON DIRECTOR'S APPOINTMENT AND **REMUNERATION**

The Company's Nomination & Remuneration Policy sets out the criteria for determining qualifications, positive attributes and independence while evaluating a person for appointment/ re-appointment as Director or as KMP, with no discrimination on the grounds of ethnicity, nationality, gender or race or any other such factor.

The salient features of the Policy and the changes during the year are provided in the Corporate Governance Report and the policy is also available on the website of the Company at www.vedantalimited.com

#### **FAMILIARISATION PROGRAMME FOR BOARD MEMBERS**

Your Company has a separately defined Familiarisation Programme for its Directors which aims to provide insights to the newly inducted Directors about the Company, its operations, business, industry and environment and also to update the Directors on a continual basis.

The details of training and familiarisation programme process for Directors have been provided under the Corporate Governance Report and is also available on the website of the Company at www.vedantalimited.com

#### **BOARD EVALUATION**

Your Board is committed to transparency in assessing the performance of Directors. The Company has put in place a robust framework for evaluation of the Board, its Committees the Chairman, and Individual Directors and the governance processes that support the Board's work.

The Company engaged the services of a leading HR consultancy, to conduct the entire process of Board evaluation and the same was facilitated through an online secured module ensuring transparent, effective and independent of involvement of the management. The evaluation was conducted through questionnaires having qualitative parameters and feedback based on ratings. Recommendations arising from the evaluation process were considered by the Board to optimise its effectiveness.

The outcome of the Board evaluation was discussed by the Nomination & Remuneration Committee and the Board at the meeting held on March 28, 2019.

A detailed update on the Board Evaluation is provided in the Corporate Governance Report.

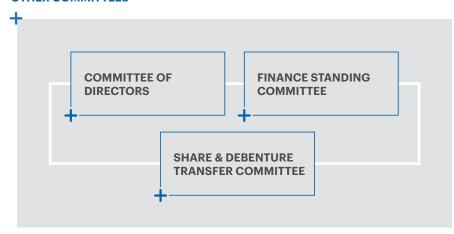
#### **BOARD & COMMITTEE MEETINGS**

The Board in conjunction with its Committees meets at regular intervals to ensure all decisions are taken timely. The Board met 10 times during the FY2019. The details of Board committees as on March 31, 2019 are provided below:

#### STATUTORY BOARD COMMITTEES



## **OTHER COMMITTEES**



Further, the Board of Directors at their meeting held on January 31, 2019 have also constituted Sustainability Committee w.e.f. April 1, 2019.

The details on Board, its committees. their composition and terms and reference and meetings held during FY2019 and attendance is provided in the Corporate Governance Report.

All the recommendations made by each of the Committees were accepted by the Board.

#### **AUDITORS AND AUDITORS' REPORT**

## +

#### **STATUTORY AUDITORS**

- M/s. S R Batliboi & Co. LLP, Chartered Accountants (FRN: 301003E) were appointed as Statutory Auditors of your Company at the AGM held on June 29, 2016 for a term of five consecutive years i.e. until the conclusion of the 56th AGM.
- The report of the Statutory Auditor forming part of the Annual Report, does not contain any qualification, reservation, adverse remark or disclaimer.
   The observations made in the Auditors' Report are self-explanatory and therefore do not call for any further comments.
- M/s. S R Batliboi & Co. LLP have confirmed their independence and eligibility under the provisions of the Act & Listing Regulations.

#### **COST AUDITORS**

- Your Company is required to have the audit of its cost records conducted by a Cost Accountant in practice.
- The Board has appointed M/s. Shome and Banerjee as Cost Auditors for its Oil & Gas Business and and M/s. Ramnath lyer & Co for other business segments to conduct cost audit for year ended March 31, 2019.
- Further M/s. Ramnath Iyer & Co. have been appointed as the Lead Cost Auditors of the Company.
- The said auditors have been re appointed for FY2020 as well.

#### **SECRETARIAL AUDITOR**

- The Company has appointed M/s. Chandrasekaran & Associates, a firm of Company Secretaries in practice to undertake the Secretarial Audit of the Company for FY2019.
- The Report of the Secretarial Audit in Form MR-3 is annexed herewith as **Annexure D**. Further, the Annual Secretarial Compliance Report is available on the website at www.vedantalimited.com.
- The Secretarial Audit Report does not contain any qualifications, reservation, adverse remarks or disclaimer.
- The Board has re-appointed M/s. Chandrasekaran & Associates as Secretarial Auditors for FY2020.

#### **INTERNAL AUDITOR**

- M/s. Deloitte Haskins & Sells, LLP was appointed as the Internal Auditors for FY2019.
- The Group's internal audit activity is managed through the Management Assurance Services ('MAS') function.
- The Board, on the recommendation of the Audit Committee has re-appointed M/s. Deloitte Haskins & Sells, LLP as the Internal Auditors for FY2020.

## **REPORTING OF FRAUDS BY AUDITORS**

During the year under review, the Statutory Auditor, Cost Auditors and Secretarial Auditor have not reported any instances of frauds committed in the Company by its Officers or Employees to the Audit Committee under Section 143(12) of the Companies Act, 2013, details of which needs to be mentioned in this Report.

#### **MANAGEMENT DISCUSSION AND ANALYSIS**

Pursuant to Regulation 34 of the Listing Regulations, a detailed report on the Management Discussion and Analysis is presented in a separate section in the Annual Report.

# DETAILS OF LOANS/ GUARANTEES/ INVESTMENT MADE BY THE COMPANY

The particulars of loans given, investments made, guarantees given and securities provided along with the purpose for which the loan or guarantee or security is proposed to be utilised as per the provisions of Section 186 of the Act are provided in the standalone financial statement. (Please refer to Notes to the standalone financial statement).

The Company has a policy on material subsidiaries and the same may be accessed at www.vedantalimited.com.

## **DEBENTURES**

During the financial year, your Company raised ₹5,000 crore through issuance of secured, rated, redeemable, non-cumulative, non-convertible debentures of face value of ₹1,000,000 each on private placement basis as per the following details:

Coupon Rate	Date of Allotment	No. of NCDs	Total Amount	Tenor	Maturity Date
8.50% Secured Redeemable Non-Convertible Debentures - Series I	April 5, 2018	23,500	2,350	3 years	April 5, 2021
8.50% Secured Redeemable Non-Convertible Debentures - Series II	April 5, 2018	16,500	1,650	3 years 2 months & 10 Days	June 15, 2021
9.18% Secured Redeemable Non-Convertible Debentures	July 4, 2018	10,000	1,000	2 years & 363 days	July 2, 2021

The aforesaid debentures are listed on BSE Limited.

#### **FIXED DEPOSITS**

As reported last year, the Company has discontinued the renewal of its fixed deposits on maturity. As at March 31, 2019 deposits amounting to ₹ 54, 000 remains unclaimed. Since the matter is sub judice, the Company is maintaining status quo.

## **TRANSFER TO RESERVES**

The Company proposes Nil transfer to General Reserve out of its total profit of ₹5,075 crore for the financial year.

### **CAPITAL STRUCTURE**

The Authorised Share Capital of the Company is ₹ 74,12,01,00,000 divided into 44,020,100,000 number of equity shares of ₹ 1/- each and 3,010,000,000 Preference Shares of ₹ 10/- each.

During the year the Company redeemed 3,010,000,000 Preference Shares of ₹ 10/- each as per their terms of issuance. The paid-up share capital of the Company was reduced from ₹ 33,817,504,871 divided into 3,717,504,871 equity shares of face value of ₹ 1 each and 3,010,000,000 preference shares of face value of ₹ 10 each to 3,717,504,871 equity shares of ₹ 1 each.

The details of share capital as on March 31, 2019 is provided below:-

Particulars	Amount (₹)
Authorised Share Capital	74,12,01,00,000
Paid up Capital	3,71,75,04,871
Listed Capital	3,71,71,96,639
Shares under Abeyance pending allotment	3,08,232

<sup>\*308,232</sup> equity shares are pending for allotment and listing hence, are kept under abeyance category since they are subjudice.

#### **UNCLAIMED SHARES**

Pursuant to the SEBI Circular and Regulation 39 of the Listing Regulations regarding the procedure to be adopted for unclaimed shares issued in physical form in public issue or otherwise, the Company has a separate demat account in the title of 'Vedanta Limited – Unclaimed Suspense Account' with M/s. Karvy Stock Broking Limited. The details of shares lying in the unclaimed suspense account are provided below:

Description	No. of shareholders	No. of Equity shares of ₹1 each
Aggregate number of shareholders and the outstanding shares in the suspense account lying at the beginning of the year	4,018	3,403,603
Number of shares transferred to the unclaimed suspense account during the year	0	0
Number of shareholders who approached issuer for transfer of shares from suspense account during the year	80	98,681
Number of shareholders to whom shares were transferred from suspense account during the year	-	-
Number of shares transferred to IEPF account pursuant to Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules, 2016 read with Amendment Rules, 2017	1,221	654,660
Aggregate number of shareholders and the outstanding shares in the suspense account lying at the end of the year. The voting rights on these shares shall remain frozen till the rightful owner of such shares claims the shares	2,717	2,650,262

## TRANSFER OF UNPAID AND UNCLAIMED AMOUNTS TO INVESTOR EDUCATION AND PROTECTION FUND (IEPF)

In accordance with provision of Companies Act and IEPF Rules, the Company is required to transfer the following amounts to IEPF:-

- Dividend amount that remains unpaid/unclaimed for a period of 7 years;
- Shares on which the dividend has not been paid/claimed for 7 consecutive years or more

Your Company in its various communications to the shareholders from time to time, request them to claim the unpaid/unclaimed amount of dividend and shares due for transfer to the IEPF account established by Central Government. Further, in compliance with the IEPF (Accounting, Audit, Transfer and Refund) Rules, 2016 (IEPF Rules) including statutory modifications thereof, the Company publishes notice in newspapers and also sends specific letters to all the shareholders, whose shares are due to be transferred to IEPF, to enable them claim their rightful dues.

The details of dividend transferred during the year is provided below:

#### Dividend transferred to IEPF during the year

Financial Year	Type of Dividend	Dividend declared on	Amount transferred to IEPF (in ₹)	Date of transfer to IEPF
2010-11	Interim Dividend	March 12, 2011	1,23,51,835.00	May 9, 2018
2010-11	Final Dividend	July 25, 2011	52,19,694.00	September 21, 2018
2010-11	Final Dividend	July 21, 2011	1,73,95,336.00	September 24, 2018
2010-11	Final Dividend	August 14, 2011	19,77,927.00	August 31, 2018
2011-12	Interim Dividend	October 24, 2011	56,27,575.00	December 19, 2018
2011-12	Interim Dividend	January 25, 2012	1,01,63,686.00	March 16, 2019
Total			5,27, 36,053.00	

Unpaid dividend on the shares on which there was a specific order of court/ tribunal/ statutory authority restraining transfer of such shares and dividend thereon, were not transferred to IEPF pursuant to Section 124 of the Companies Act, 2013 and Rule 6 of IEPF (Accounting, Audit, Transfer and Refund) Rules, 2016 including statutory modifications or re-enactments thereof.

## Dividend declared during the year transferred to IEPF

Financial Year	Type of Dividend	Dividend declared on	Amount transferred to IEPF (in ₹)	Date of transfer to IEPF
2040 40	1 <sup>st</sup> Interim Dividend	October 31, 2018	3,99,58,228.00	November 22, 2018
2018-19	2 <sup>nd</sup> Interim Dividend	March 6, 2019	43,48,395.40	March 18, 2019
Total			44,306,623.40	

## Shares transferred/credited to IEPF

During the year, the Company transferred 1,346,250 equity shares of ₹1/- each comprising of 2,399 shareholders to IEPF.

The Company has also uploaded the details of unpaid and unclaimed amounts lying with the Company as on August 24, 2018 (date of last Annual General Meeting) on the Company's website www.vedantalimited.com. Further, the details of equity shares transferred are available on the Company's website www.vedantalimited.com.

The shareholders whose shares/dividends have been transferred to IEPF can claim the same from IEPF in accordance with the prescribed procedure and on submission of such documents as prescribed under the IEPF Rules. The process for claiming the unpaid dividend/shares out of the IEPF can be accessed at www.iepf.gov.in.

The dates on which unclaimed dividend and their corresponding shares would become liable to be transferred to the IEPF during the FY 2020 is provided below:

## Dividend to be transferred to IEPF during FY 2020

Dividend	Date of Declaration of Dividend	Due date for transfer to IEPF	Amount (As on March 31, 2019)
Final Dividend 2011-12	29-Jul-2012	28-Aug-19	18,12,052.50
Final dividend 2011-12	24-Apr-2012	7-Sep-19	1,01,03,138.00
Final Dividend 2011-12	25-Apr-2012	18-Sep-19	59,70,651.00
Interim Dividend 2012-13 (1st)	23-Oct-2012	28-Dec-19	64,03,296.90
Interim 2012-13	31-Oct-2012	5-Jan-20	44,62,555.00
Interim Dividend 2012-13 (2 <sup>nd</sup> )	30-Oct-2012	4-Jan-20	14,49,220.00
Total			3,02,00,913.40

#### SUBSIDIARIES, JOINT VENTURES AND ASSOCIATE **COMPANIES**

Your Company has 54 subsidiaries (15 direct and 39 indirect) as at March 31, 2019, as disclosed in the notes to accounts.

During the year and till date the following changes have taken place in subsidiary companies:

## Subsidiary companies formed/acquired:

- Vedanta Star Limited acquired on April 23, 2018
- Electrosteel Steels Limited acquired on June 4, 2018

As at March 31, 2019, the Company has 5 associate companies and joint ventures.

## **Associate Companies and Joint Ventures:**

- · RoshSkor Township (Pty) Limited
- · Gaurav Overseas Private Limited
- · Goa Maritime Private Limited
- Madanpur South Coal Company Limited
- · Rampia Coal Mines and Energy Private Limited

As required under Listing Regulations, the Consolidated Financial Statement of the Company and its subsidiaries, prepared in accordance with Ind AS 110 issued by the Institute of Chartered Accountants of India, form part of the Annual Report and are reflected in the Consolidated Financial Statement of the Company.

During the year, the Board of Directors have reviewed the affairs of the subsidiaries. Pursuant to Section 129(3) of the Companies Act 2013 (the Act), a statement containing the salient features of the financial statement of the subsidiaries and associate companies is attached to the financial statement in Form AOC-1. The statement also provides details of performance and financial position of each of the subsidiaries.

In accordance with Section 136 of the Act, the audited Standalone and Consolidated financial statements of the Company along with relevant notes and separate audited accounts of subsidiaries are available on the website of the Company at www.vedantalimited.com. A copy of the financial statements of the Company and of the subsidiary companies shall be made available upon request by any member of the Company. Additionally, these financial statements shall be available for inspection by members at the Registered Office of the Company.

#### **RELATED PARTY TRANSACTIONS**

Your Company has in place a Policy on Related Party Transaction (RPT) (RPT Policy) formulated in line with the provision of the Companies Act and Listing Regulations. The Policy may be accessed at www.vedantalimited.com.

The Policy sets out the philosophy and processes to be followed for approval and review of transactions with Related Party and intends to ensure that proper reporting, approval and disclosure processes are in place for all transactions with Related Parties.

A detailed landscape of all RPTs to the Audit Committee, specifying the nature, value, and terms and conditions of the transaction is presented to the Audit Committee. Also, a Related Party Transactions Manual-Standard Operating Procedures has been formulated to identify and monitor all such transactions.

During the fiscal 2019, all the contracts/ arrangements/ transactions entered into by the Company with the related parties were in the ordinary course of business and on an arm's length basis and were in compliance with the provisions of the Companies Act and Listing Regulations.

Further, there have been no materially significant RPTs during the year pursuant to the provisions of the Companies Act and Listing Regulations. Accordingly, the disclosure required u/s 134(3)(h) of the Act in Form AOC-2 is not applicable to your Company.

## SIGNIFICANT & MATERIAL ORDERS PASSED BY THE **REGULATORS OR COURTS OR TRIBUNALS**

Provided below are the significant and material orders which have been passed by any regulators or courts or tribunals against the Company impacting the going concern status and Company's operations in future.

#### Iron-Ore Division - Goa Operations

Supreme Court (SC) in the Goa Mining matter in 2014 declared that the deemed mining leases of the lessees in Goa expired on November 22, 1987 and the maximum of 20 years renewal period of the deemed mining leases in Goa under the MMDR Act had also expired on November 22, 2007 and directed state to grant fresh mining leases.

Thereafter, various mining leases were renewed by the state government before and on the date the MMDR Amendment Ordinance 2015 came into effect (i.e. January 12, 2015).

These renewal of mining leases were challenged before the SC by Goa Foundation and others in 2015 as being arbitrary and against the judgement of the SC in the earlier Goa mining matter. The Supreme Court passed the judgement in the matters on February 7, 2018 wherein it set aside the second renewal of the mining leases granted by the State of Goa. The court directed all lease holders operating under a second renewal to stop all mining operations with effect from March 16, 2018 until fresh mining leases (not fresh renewals or other renewals) in accordance with the provisions of the MMDR Act, 1957 and fresh environmental clearances are granted.

Some mining lessees and other mining stakeholder have filed applications in the pending Abolition Act matter for resumption of mining in the State. The Central Government has also filed an early hearing application in the long pending abolition matter.

#### **Copper Division**

Copper division of Vedanta Limited has received an order from Tamil Nadu Pollution Control Board (TNPCB) on April 9, 2018 whereby they have rejected the Company's application for renewal of Consent to Operate (CTO) for the 400,000 Metric Tonnes Per Annum (MTPA) Copper Smelter plant in Tuticorin. In furtherance to the order of TNPCB rejecting the Company's application, the Company decided to shut its Copper smelting operations at Tuticorin and has filed an appeal with TNPCB Appellate authority against the order. During the pendency of the appeal the TNPCB vide its order dated May 23, 2018 ordered disconnection of electricity supply and closure of the Company's Copper Smelter plant. Post this the Government of Tamil Nadu on May 28, 2018 ordered the permanent closure of the plant. The Company challenged the same in the National Green Tribunal which passed a favourable order for reopening of the plant. The order was appealed by the TNPCB and the State of Tamil Nadu in the Supreme Court. The Supreme Court passed an order upholding the appeal and directing the Company to approach the Madras High Court for relief. The Company has filed a writ petition in the Madras High Court that is currently pending adjudication.

In a separate proceeding, the Madurai Bench of the Madras High Court in a PIL filed against the Company, has stated that the application for renewal for Environmental Clearance for Copper Smelter Plant 2 project, shall be processed after conduct of mandatory public hearing and the application shall be decided by the competent authority on or before September 23, 2018. In the interim, the High Court ordered us to cease construction and all other activities on site for the proposed expansion project with immediate effect. Separately, SIPCOT through its letter dated May 29, 2018, cancelled 342.22 acres of the land allotted to us for the

proposed expansion project. The Company challenged the same in the High Court which passed an interim stay on the withdrawal of land allotment.

#### **SECRETARIAL STANDARDS**

The Company has complied with the applicable provisions of the Secretarial Standards issued by the Institute of Companies Secretaries of India.

#### **ANNUAL RETURN**

An extract of the Annual Return in prescribed form MGT-9 is annexed hereto as 'Annexure C' to the Directors' Report.

#### **BUSINESS RESPONSIBILITY REPORT &** SUSTAINABILITY REPORT



In pursuance of our commitment to responsible business and in compliance with Listing Regulations, a Business Responsibility Report ("BRR") which describes the initiatives taken by the Company from an environmental, social and governance perspective forms part of this Annual Report.

Our strategy continues to focus on delivering long-term value and growth to our shareholders through diversified portfolio of large, long life and low-cost assets. At Vedanta, we understand the value of a unified sustainable development agenda that goes beyond compliance.

We manage our business in a sustainable manner, ensuring we have effective and appropriate business processes and behaviours in place, focussing on health and safety management and responsibly managing our environmental impacts and preserving biodiversity. We aim to create a culture based on our values which ensures the professional growth and personal well-being of our entire workforce.

Your Company also publishes the Sustainability Report annually which is based on Global Reporting Initiatives (GRI) Standards. The Sustainability report is available on the website of the Company at www.vedantalimited.com

#### **AWARDS AND ACCOLADES**

Your Company has been winning accolades for its unique innovations and contributions to the stakeholders & society. Such recognitions are a testimony to the growth, emphasis on being a safe operator and commitment towards delivering value to our people, investors and stakeholders.

During the year, we won multiple awards and recognition. The details of the same are provided in separate section in the Annual Report.

#### **MATERIAL CHANGES & COMMITMENT AFFECTING THE** FINANCIAL POSITION OF THE COMPANY

There are no material changes and commitments affecting the financial position of the Company subsequent to the close of the financial year till the date of this Report.

## **ENERGY CONSERVATION, TECHNOLOGY ABSORPTION, FOREIGN EXCHANGE EARNINGS AND OUTGO**

The information on conservation of energy, technology absorption stipulated under Section 134(3)(m) of the Act read with Rule 8 of the Companies (Accounts) Rules, 2014, is annexed herewith as 'Annexure E'.

The details of the Foreign Exchange Earnings and Outgo are as follows:

(₹ in crore)

Description	Year Ended March 31, 2019	Year Ended March 31, 2018
Expenditure in foreign currency	3,459	1,551
Earnings in foreign currency	18,596	28,394
CIF Value of Imports	18,633	28,900

## **DIRECTORS RESPONSIBILITY STATEMENT**

Your Directors hereby confirms that:-

- (a) in the preparation of the annual accounts, the applicable accounting standards have been followed and there is no material departures from the same;
- (b) they have selected such accounting policies and applied them consistently and made judgements and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year, i.e. March 31, 2019 and of the profit and loss of the Company for that period;
- (c) they have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 2013 for safeguarding the Company's assets and for preventing and detecting fraud and other irregularities;
- (d) the annual accounts have been prepared on a going concern basis:

- (e) they have laid down internal financial controls to be followed by the Company and that such internal financial controls are adequate and are operating effectively; and
- (f) proper systems have been devised to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

#### **ACKNOWLEDGEMENT**

Your Board takes this opportunity to convey their sincere appreciation to all employees for their dedicated services, firm commitment and collective contribution to the goals, mission and vision of the Company.

We would also like to express our sincere gratitude to all our stakeholders for their endless faith in their Company.

The Directors further take this opportunity to acknowledge the support and assistance extended to us by the Government, Bankers, Stock Exchanges, Financial Institutions and Communities, Shareholders and Investors.

Together, we will continue to benefit from, and contribute to, one of the fastest-growing economies in the world and add value for our shareholders.

We look forward to delivering another year of value adding growth.

For and on behalf of the Board of Directors

Place: Mumbai Dated: May 7, 2019

**Navin Agarwal Executive Chairman** 

## **Annexure A**

**Annual Report on Corporate Social Responsibility Activities** 

#### AS PRESCRIBED UNDER SECTION 135 OF THE COMPANIES ACT, 2013 READ WITH COMPANIES (CORPORATE SOCIAL **RESPONSIBILITY POLICY) RULES, 2014**

1. A brief outline of the Company's CSR policy, including overview of projects or programmes proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programmes:

Vedanta Limited firmly believes in the coexistence of business and communities and is committed to the development of an eco-system of prosperity in the society around operations.

As a responsible corporate citizen, we believe that our neighbourhood communities are our primary stakeholders and we seek to build mutually supportive relationships with them. It is this integration of business and CSR which provides us the social licence to operate and ushers in a different developmental paradigm towards sustainable change in society. As part of our CSR policy, we believe in partnering with government agencies, development organisations, corporates, civil societies & community-based organisations to implement durable and meaningful initiatives.

We also believe that our employees have the potential to contribute towards building strong communities through sharing their knowledge and expertise. Hence, we proactively create opportunities whereby employees can also connect and contribute.

The Company complies with Section 135 of the Act and the approach is focused on long-term programmes aligned with community needs and national priorities, including Sustainable Development goals. There are ten broad thematic areas under which the Company undertakes its community development projects. The Nandghar Project is among the Company's flagship national initiatives, which aims to build new-age Anganwadis for ensuring the health and learning of young children in rural areas, and also for becoming a platform of women's empowerment and skilling.

More on Vedanta's CSR policy may be seen at www.vedantalimited.com

## 2. The composition of the CSR Committee:

The Company's Corporate Social Responsibility (CSR) Committee comprises of seven (7) members including four (4) Independent Directors, two (2) Whole-Time Directors and one (1) Non-Executive Director as per below details:-

Name	Designation
Mr. Ravi Kant	Chairman, Independent Director
Mr. K. Venkataramanan	Independent Director
Mr. Aman Mehta	Independent Director
Mr. U. K. Sinha	Independent Director
Mr. Tarun Jain	Whole-Time Director
Mr. Srinivasan Venkatakrishnan	Whole-Time Director & CEO
Ms. Priya Agarwal	Non-Executive Director

### 3. Average net profit of the Company for the three financial years

The average net profit of the Company for the last three financial years is ₹ 659 crores.

### 4. Prescribed CSR Expenditure (2% of the amount shown as in item 3 above):

Base on the average net profit of the Company for the last three financial years, the Company is required to spend ₹ 13 crores on its CSR activities. The Company as a good corporate citizen has spent ₹ 51.72 crores in FY 2019 on its CSR activities.

5 & 6. Details of CSR spent during the financial year and in case the Company has failed to spend the two per cent of the average net profit of the last three financial years or any part thereof, the Company shall provide the reasons for not spending the amount in its Board report.

The Company has invested ₹ 51.72 crores in the year FY 2019 under different projects across its operations. This reaffirms the commitment of Company to ensure sustainable development of its business and community together. The detailed business unit wise CSR spend has been given in the required format.

## On a consolidated basis, the detailed CSR spent for FY 2019 is provided below:

	(₹ Crores)
	For the year ended March 31, 2019
Vedanta Limited (Standalone) (A)	51.72
Vedanta Subsidiaries (India) (B)	
Talwandi Sabo Power Limited (TSPL)	0.51
Hindustan Zinc Limited (HZL)	130.2
Bharat Aluminium Company Limited (BALCO)	5.43
BALCO Hospital	99.8
Sesa Resources Limited (SRL)	6.88
Sesa Mining Corporation Limited (SMCL)	0.05
Electrosteel Steels Limited (ESL)	0.52
Total (B)	243.39
Vedanta Subsidiaries (Global) (C)	
Zinc International	
(Skorpion Zinc (SZ) & Black Mountain Mining	14.13
Proprietary Limited (BMM ))	
Total (C)	14.13
Total CSR Spent	309.24

7. A responsibility statement of the CSR Committee that the implementation and monitoring of CSR Policy, is in compliance with CSR objectives and Policy of the Company.

The CSR Committee of the Company hereby confirms that the implementation and monitoring of CSR Policy, is in compliance with CSR objectives and policy of the Company.

Ravi Kant

Non-Executive and Independent Director (Chairman of CSR Committee)

			Project	Cairn - Oil & Ga	S	Amount	Snent*	Cumulative	
SI.	CSR Project or	Sector in which the project is	TTOJECT	Name of		Airioulit	Ороне	Spend till reporting	Amount Spent, Direct or implementing
	Activity Identified	covered		District	Outlay*	Direct	Overheads	period	agency
1	Nandghar (Contribution to Vedanta Foundation)	Children's Well-being & education	Rajasthan	Barmer	21.47	5	-	5	Cairn Foundation
2	Support in district Hospital Barmer -specialist doctors and cleaning staffs	Health Care	Rajasthan	Barmer	2	2.15	-	2.15	Barmer Jan Sewa Samiti
3	Health and nutrition entitlements Project	Health Care	Gujarat	Rajkot, Viramgam & Morbi	0.12	0.06	-	0.06	Chetna
4	Mobile Health Van Project	Health Care	Rajasthan & Gujarat	Barmer in Rajasthan Radhanpur & Dwarka in Gujarat	2.71	2.1	-	2.1	Wockhardt Foundation, Dhara Sansthan and Helpage India
5	Expenses towards O&M of Nandghar	Others	Rajasthan	Barmer	0.62	0.62	-	0.62	KPMG & Adfactors
6	Micro CSR activities	Others	Rajasthan & Gujarat	Suvali, Barmer	0.24	0.18	-	0.18	CEDRA, Dhara Sansthan and Barmer Jan Sewa Samiti
7	Project Divyang - Support to 3 paralympics	Sports & Culture	Rajasthan	Rajasthan	0.33	0.25	-	0.25	Paralympic Committee of India
8	Project Tamana (Skill training of differently abled children)	Skills	Delhi NCR	Delhi	0.26	0.12	-	0.12	Tamana
9	Skill Training and infra revamp of Cairn Centre of Excellence, Jodhpur	Skills	Rajasthan	Jodhpur	3.05	2.46	-	2.46	Nettur Technical Training Foundation, Alethe Consulting, Howell, Mohangarh Engineers
10	Barmer Smart City Project	Community Development (Infrastructure)	Rajasthan	Barmer	0.55	0.63	-	0.63	Anil Construction & Laxman construction
11	Compliance and statutory advisory for Cairn Foundation	Others	Delhi NCR	Delhi	0.11	0.1	-	0.1	KPMG
12	Commissioning/ maintenance/ O&M of Rawatsar Solar Plant	Community Development (Infrastructure)	Rajasthan	Barmer	0.09	-	-	-	Sun Shakthi Solar System
13	Barmer Unnati Project & support to Mujhyamantri Jal Swawlamban Yojna	Agriculture	Rajasthan	Barmer	2.22	2.3	-	2.3	NABARD, BAIF and Watershed Dept. (GoR)
14	Sustaining dairy development	Agriculture & Animal Husbandry	Rajasthan	Barmer	0.38	0.25	-	0.25	Society for Upliftment of Rural Economy
15	Skill Training and infra revamp in Cairn Enterprise Centre, Barmer	Skills	Rajasthan	Barmer	2.55	1.9	-	1.9	SEEDS and Pawan Construction
16	Providing improved sanitation in Baitu Block - HH toilets project By RDO	Drinking Water & Sanitation	Rajasthan	Barmer	1.05	1.04	-	1.04	RDO Trust
17		Drinking Water & Sanitation	Rajasthan	Barmer	2	2.17	-	2.17	Waterlife
18	School sanitation initiative by Yuva Unstoppable	Drinking Water & Sanitation	Rajasthan	Barmer	0.55	0.54	-	0.54	Yuva Unstoppable
19	Safe Drinking Water Project by Fontus Water	Drinking Water & Sanitation	Rajasthan	Barmer	1.69	0.58	-	0.58	Fontus Water
20	Solar Power Back Up for Kawas RO Plant	Drinking Water & Sanitation	Rajasthan	Barmer	0.2	0.17	-	0.17	Ultrathon Electric
21	Distribution of recyclable bags in the community	Environment, Restoration & protection	Rajasthan	Barmer	0.09	0.09	-	0.09	Viba Press
22	Sholarship in CEC, Barmer	Children's Well-being & education	Rajasthan	Barmer	0.12	0.09	-	0.09	Cairn Foundation
23	Functionalisation of FRUs in Barmer by IPE GLOBAL	Health Care	Rajasthan	Barmer	0.6	0.64	-	0.64	IPE Global
24		Drinking Water & Sanitation	Rajasthan	Barmer	0.5	0.18	-	0.18	Swajal

# Annexure A continued

So Activity identified				Cairn - Oil & Ga	S				
Name of Country   Description   Descriptio			Project	or Programme	_	Amount	Spent*		
Section   Sect		the project is	Δrea			Direct	Overheads	reporting	Direct or implementing
City half Marathon  26 Study on salinity of groundwater and water supply & distribution  27 Contribution to District Administration  28 Support to PHC -S'Yanam, Health Care Rajasthan Berner  29 Support to Rajasthan Sports & Rajasthan Berner  29 Support to Rajasthan Sports & Rajasthan Berner  30 Support to Cairms Pink City Sports & Rajasthan Berner  31 Appointment of consultants Others Rajasthan Berner, Delhi NCR  32 Support to Gaja Cyclone relief work in Tamil Nadu  33 Support to Gaja Cyclone relief work in Tamil Nadu  34 Green Belt Development appoint or Groen City  35 Support to Group CSR Initiatives - Goodera  36 Application, baseline study, development around Corporate office and appointment of consultants of the sports of Group Corporate office and appointment of Corpora	<ul> <li>Showcasing CSR initiatives at different state &amp; national forums</li> <li>CSR Stall in Rajasthan Heritage Week</li> </ul>		Corporate - Rajasthan,		·		-		
groundwater and water supply & distribution supply & distribution supply & distribution to District Administration believely ment (Infrastructure) Pradesh (Infrastructure)	City half Marathon								
Administration Development (Infrastructure)  28 Support to PHC-S'Yanam, Ravva (API) District Medical Dept.  29 Support to Rajasthan Health Care Andhra Pradesh  29 Support to Rajasthan Heitage Week 2018  29 Support to Rajasthan Sports & Rajasthan Heitage Week 2018  30 Support to Cairins Pink City Sports & Rajasthan Culture  31 Appointment of consultants Others Rajasthan Barmer, Delhi NCR  32 Support to Gaip Cyclone relief work in Tamil Nadu  33 Support to Gaip Cyclone relief work in Tamil Nadu  34 Support to Gaip Cyclone Application, baseline study, development of MIS framework  35 Green Belt Development around Corporate office and Restoration & protection for Green City  36 Support for Gronound Restoration of Sports & Rajasthan Culture  37 Support to Gaip Cyclone rorromotion of Sports & Rajasthan Culture  38 Support to Group CSR Others Rajasthan Guipara and Andhra Pradesh framework  39 Green Belt Development of MIS Framework  30 Support to Group CSR Others Rajasthan Guipara to Courte Gui	groundwater and water		Rajasthan	Barmer	0.65	0.53	-	0.53	Bank Geoscience
Ravva (AP)  District Medical Dept.  Pradesh Dept.  Pradesh Dept.  Rajasthan Sports & Rajasthan Heirtage Week 2018 Culture  Support to Cairns Pink City Sports & Rajasthan Jaipur 0.28 0.28 - 0.28 GT health Care Sports Fest Culture  Appointment of consultants Others Rajasthan Barmer, Delhi NCR 0.56 - 0.55 Subhash Mittal & Nyati Mundra, Nimbus & Nyati Mundra, Nyati Mundra, Nimbus & Nyati Mundra, Nimbus & Nyati Mundra, Nyati Mu		Development		East Godavari	2	2	-	2	Direct
Heritage Week 2018	Ravva (AP)  District Medical	Health Care		East Godavari	0.07	0.06	-	0.06	Direct
Sports Fest Culture  Appointment of consultants Others Rajasthan Barmer, Delhi NCR 0.56 - 0.55 Subhash Mittal & Nyati Mundra, Nimbus  Support to Gaja Cyclone relief work in Tamil Nadu  Support to Gaja Cyclone relief work in Tamil Nadu  Culture Rajasthan, - 0.31 0.3 - 0.3 Direct  Rajasthan, - 0.36 - 0.35 Goodera  Application, baseline study, development of MIS framework  Green Belt Development around Corporate office and appointment of consultant protection for Green City  Support for promotion of sports & Rajasthan Jaipur  Nimbus  Rajasthan Jaipur  O.14 0.14 - 0.14 Cairn Foundation sports - AIP Wrestling Culture  Name Management of Gujarat by Sama Charitable Trust  Others Rajasthan - 0.2 0.24 - 0.24 Others  Rajasthan - 0.2 0.24 - 0.24 Others	, ,	- 1	Rajasthan	Jaipur	1.18	1.18	-	1.18	Prasad Bidapa
Appointment of consultants of consultants for administrative works and audits & compliances  32 Support to Gaja Cyclone relief work in Tamil Nadu  33 Support to Group CSR Others Rajasthan, Andhra Application, baseline study, development around Corporate office and appointment of consultant for Green City  35 Support for promotion of sports & Rajasthan protection  36 Support for promotion of sports & Rajasthan protection  37 Support for promotion of Sports & Rajasthan protection  38 Support for promotion of Sports & Rajasthan of Sports & Subhash Mittal & Nyati Mundra, Nimbus  36 Nanhe Kadam & Aarogya Project Services  37 Sujalam Sufalam with Government of Gujarat by Sama Charitable Trust  38 Others misc. activities  39 Others Rajasthan of Sports & Rajasthan and Delhi  30 Others misc. activities  31 Support to Group CSR Others Rajasthan of Sports & Rajasthan of Sports of Subhash Mittal & Nyati Mundra, Nimbus of Subrect of Subhash Mittal & Nyati Mundra, Nimbus of Subrect of Subr			Rajasthan	Jaipur	0.28	0.28	-	0.28	GT health Care
relief work in Tamil Nadu  33 Support to Group CSR Initiatives – Goodera Application, baseline study, development of MIS framework  34 Green Belt Development around Corporate office and appointment of consultant for Green City  35 Support for promotion of sports & Rajasthan Jaipur  36 Nanhe Kadam & Aarogya Project Services  37 Sujalam Sufalam with Government of Gujarat by Sama Charitable Trust  38 Others misc. activities  Others Rajasthan - 0.2 0.24 - 0.24 Others  Rajasthan - 0.25 0.26 - 0.35 Goodera  0.36 - 0.35 Goodera  0.37 O.38 O.39 Goodera  0.38 O.39 O.39 O.39 O.39 O.39 O.39 O.39 O.39	31 Appointment of consultants for administrative works and		Rajasthan	Barmer, Delhi NCR	0.56	-	0.55	0.55	& Nyati Mundra,
Initiatives – Goodera Application, baseline study, development of MIS framework  34 Green Belt Development around Corporate office and appointment of consultant for Green City  35 Support for promotion of sports – AIP Wrestling Culture  36 Nanhe Kadam & Aarogya Project Services 37 Sujalam Sufalam with Government of Gujarat by Sama Charitable Trust  38 Others misc. activities  Others  Gujarat and Andhra Pradesh Andhra Pradesh Pradesh Pradesh Pradesh Pradesh  Bujgaon  O.27 O.23 - O.23 Nimbus  O.29  O.21 O.24 - O.24 Others  O.20 O.20 O.21 - O.21 O.22 O.24 - O.24 Others		Health Care	Tamil Nadu	-	0.31	0.3	-	0.3	Direct
around Corporate office and Restoration & appointment of consultant for Green City  35 Support for promotion of sports & Rajasthan Jaipur 0.14 0.14 - 0.14 Cairn Foundation sports - AIP Wrestling Culture  36 Nanhe Kadam & Aarogya Project Services  37 Sujalam Sufalam with Government of Gujarat by Sama Charitable Trust  38 Others misc. activities Others Rajasthan - 0.2 0.2 0.24 - 0.24 Others	Initiatives - Goodera Application, baseline study, development of MIS	Others	Gujarat and Andhra	-	0.36	-	0.35	0.35	Goodera
35 Support for promotion of sports & Rajasthan Jaipur 0.14 0.14 - 0.14 Cairn Foundation sports - AIP Wrestling Culture  36 Nanhe Kadam & Aarogya Project Services  37 Sujalam Suffalam with Government of Gujarat by Sama Charitable Trust  38 Others misc. activities Others Rajasthan and Delhi  39 Delta Rajasthan Daipur 0.14 0.14 - 0.14 Cairn Foundation on the sports of the sports o	34 Green Belt Development around Corporate office and appointment of consultant	Restoration &	Haryana	Gurgaon	0.27	0.23	-	0.23	Nimbus
Project Services  37 Sujalam Sufalam with Orinking Water Gujarat Viramgam 0.02 0.01 - 0.01 Sama Charitable Trust  38 Others misc. activities Others Rajasthan and Delhi		,	Rajasthan	Jaipur	0.14	0.14	-	0.14	Cairn Foundation
37 Sujalam Sufalam with Government of Gujarat by Sama Charitable Trust  38 Others misc. activities Others Rajasthan and Delhi	36 Nanhe Kadam & Aarogya	Health Care	Gujarat	Viramgam	0.06	0.06	-	0.06	CEDRA
and Delhi	37 Sujalam Sufalam with Government of Gujarat by	_	Gujarat	Viramgam	0.02	0.01	-	0.01	Sama Charitable Trust
	38 Others misc. activities	Others	and Delhi	-	0.2	0.24	-	0.24	Others
Sub-Total         50         28.77         0.90         29.67	Sub-Total				50	28.77	0.90	29.67	

				Vednata Limited - Lan	jigarh				
		Project or Programme		Amount Spent*			Cumulative		
SI. No.	CSR Project or Activity Identified	Sector in which the project is covered	Area	Name of District	Amount Outlay*	Direct	Overheads	Spend till reporting period	Amount Spent, Direct or implementing agency
39	Eradicating malnutrition through Mid Day Meal programme*	Education	Lanjigarh Block	Kalahandi District	3	0.02	-	0.02	Manna Trust
40	Promoting eductation thourgh Khushi Child Care Centre	Education	Lanjigarh Block	Kalahandi District	0.5	0.41	-	0.41	FIDR
41	Pre Matric Tutorial Support- Shiksha Sambal	Education	Lanjigarh & Muniguda Block	Kalahandi & Rayagada District	0.25	0.19	-	0.19	FIDR
42	Support to schools	Education	Lanjigarh Block	Kalahandi District	0.2	0.12	-	0.12	Direct
43	Scholarship	Education	Lanjigarh Block	Kalahandi District	0.2	0	-	0	Direct
44	Value Based Education*	Education	Lanjigarh Block	Kalahandi District	0.5	0	-	0	Magic Bus
45	Promoting preventive health through Vedanta Hospital, Ambulance and MHU	Health	Lanjigarh & Muniguda Block	Kalahandi & Rayagada District	4	3.24	-	3.24	PVO
46	Maa Santoshi Jankalyan Hospital, Bankakundru	Health	Lanjigarh Block	Kalahandi District	0.15	0.14	-	0.14	MSJK

# Annexure A continued

	Vednata Limited - Lanjigarh								
			Project	or Programme	_	Amount	: Spent*	Cumulative	
SI. No.	CSR Project or Activity Identified	Sector in which the project is covered	Area	Name of District	Amount Outlay*	Direct	Overheads	Spend till reporting period	Amount Spent, Direct or implementing agency
74	Village Coordinator	Project Management	Lanjigarh Block	Kalahandi District	0.2	-	0.09	0.09	Direct
75	Revolving Fund*	Project Management	Lanjigarh Block	Kalahandi District	0.02	-	-	0	Direct
76	Salary	Admin	Lanjigarh Block	Kalahandi District	1.5	-	1.55	1.55	Direct
77	Provision				-	0.12	-	0.12	
	Wrong entries					(0.02)		(0.02)	
78	Unbudgeted					0.46		0.46	
	Sub-Total				22.8	7.81	1.97	9.79	

				Iron Ore Business						
			Project or Pro	gramme		Amoun	t Spent*	Cumulative		
SI. No.	CSR Project or Activity Identified	Sector in which the project is covered	Area	Name of District	Amount Outlay*	Direct	Overheads	Spend till reporting period	Amount Spent, Direct or implementing agency	
79	Agriculture rejuvenation and dairy farming project	Sustainable livelihood (livelihood enhancement projects)	Amona & Navelim	North Goa	0.381	0.2068	0	0.2068	Directly	
80	Evening study center	Children's Well-being & Education	Megalahalli, Bommavvanagthihalli, Kadaleguddu, Bheemasamuda, Hirekandavadi, D.Medikeripura Chikkenahalli.	Chitradurga	0.04	0.0473	0	0.0473	Implementing agenc MYRADA, Chitradurga	
81	Support to Educational institutions & Scholarship	Children's Well-being & Education	Amona, Navelim Megalahalli, Bommavvanagthihalli, Konanuru, Sirigere, Haliyuru, Palikehalli, Hire Kandavadi, Tanigehalli, Nallikatte, Alagatta, V Palya, Siddapura, Bhhemasamudra, B Durga, Bommenahalli, Kadaleguddu		1.201	0.9806	0	0.9806	Directly	
82	Skill development for youths Vedanta Computer Literacy programme	Livelihood Non-Farm	Megalahalli, Bommavvanagthihalli, Navelim, Kagalagere, Ganjigatte, Muttugaduru, Sirigere, Medikeripura, Hosa Rangapura, Chikkenahalli, Palikehalli, Hale Rangapura. Malappanahatti, Siddapura Jalikatte, Cholaghatta.		0.3792	0.0544	0	0.0544	Direct as well as through Vedanta Foundation	
83	Anganwadi Renovation programme	Children's Well-being & Education	Dharwad, Manoharpur	Dharwad, West Singhbum	1.8	0.7644	0	0.7644	Directly	
84	Community Medical Centres (CMC), Mobile Health Vans	Health	Amona, Navelim, Megalahalli, Kagalagere, Bommenahalli, Chikkenahalli, Malappanahatti, Konanuru, B.N Halli, Kadaleguddu, Medikeripura, Siddapura, Tanigehalli, Muttugaduru.	North Goa, Chitradurga, West Singhbum	0.83	0.5313	0	0.5313	Implementing agency MYRADA in Chitradurga & Voluntary Health Association of Goa in Goa & SevaMob in Manoharpur	

	Iron Ore Business   Amount Spent* Cumulative									
	Controlina		Project or Programme Sector in which				Amount Spent*		A	
SI.	CSR Project or	the project is		Name of	Amount			Spend till reporting	Amount Spent, Direct or implementing	
No.	Activity Identified	covered	Area		Outlay*	Direct	Overheads	period	agency	
85	Health campaigns & Awareness sessions	Health	Amona, Navelim, Meghanhalli, Kadaleguddu, Bommenahalli, Sirigere, Avinahatti, Bheemasamudra.	North Goa, Chitradurga	0.129	0.0066	0	0.0066	Directly	
86	Drinking water projects	Health (Drinking water)	Amona, Navelim, Meghanhalli, Sonshi, Manoharpur Nallikatte Malali, Tanigehalli, Sasalu, Hosahalli, Bheemasamudra, Bettada Nagenahalli, Hulluru, Hulluru Nayakarahatti, Chikka Gutanuru, Bommenahalli, Hunasekatte , Hireguntanuru, Konanuru, Haliyuru, Palya, Medikeripura, Malappanahatti ,Kodagavalli, Chikkenahalli, B N Halli, Kagalagere, Basavapura, Kadaleguddu.		0.9867	0.3598	0		Directly	
87	Sanitation units	Health (Sanitation)	Amona, Navelim, Megalahalli Bheemasamudra Kadaleguddu Kagalgere V. Palya, Kagalgere Gollarahatti, Kagalgere Megalahahatti, Muttugudooru, Palikehalli, Kurubarhalli, Bommenahalli.	North Goa, Chitradurga,	0.46	0.1719	0	0.1719	Directly	
88	Women SHG formation & training	Empowering Women	Amona, Navelim, Meghanhalli, Sirigere, Chikkenahalli, Konanuru, Bommenahalli, Kadaleguddu, Bheemasamudra, Medikeripura, Muttugaduru.	North Goa, Chitradurga,	0.186	0.0538	0	0.0538	Direct as well as through implementing agency MYRADA	
89	Sports & cultural activities at local level	Promotion of sport and culture activity	Amona, Navelim, Meghanhalli, Manoharpura Bommenahalli, Hire Guntanuru.	North Goa, Chitradurga, West Singhbum	0.085	0.0339	0	0.0339	Directly	
90	Environment Protection and Restoration	Environment	Amona, Navelim Kadaleguddu, Bheemasamudra.	North Goa	0.035	0.001	0	0.001	Directly	
91	Community Development (Infrastructure) & Community Mobilisation	Need based	Amona, Navelim, Meghanhalli, Manoharpura Hire Guntanuru, Bheemasamudra, Chikkenahalli, Bommenahalli	North Goa, Chitradurga, Manoharpur	0.73	0.1174	0	0.1174	Directly	
92	CSR Audit & CSR impact assessment	Programme & Admin		North Goa, South Goa & Chitradurga	0.25	0	0.0461	0.0461	Directly	
	Sub-Total		<u> </u>		7.49	3.33	0.05	3.38		

			Projec	Vedanta Limited - Jhar et or Programme	9	Amoun	t Spent*	Cumulative	
O.	OOD Davis at an	Sector in which	110,00	Name of	— Amount	74110411	Соронс	Spend till reporting	Amount Spent,
SI. No.	CSR Project or Activity Identified	the project is covered	,	Area District	Outlay*	Direct	Overheads	period	Direct or implementing agency
93	MHU		Jharsuguda	Jharsuguda	0.40	0.6214	-	0.62	Wockhardt Foundation/ Dist. Health Dept.
94	Project Jagruti: Prevention of HIV / AIDS	-	Jharsuguda	Jharsuguda	0.08	0.0001	-	0.00	NHM/ Health Institution
95	Drinking water & Sanitation initiatives: Tubewell repairing,water tanker, pond renovation and other facilities for drinking water	Health, Water & Sanitation	Jharsuguda	Jharsuguda	1.05	1.0442	-	1.04	Direct through Community Membe Municipality/ Contractor
96	Village cleaning - Sunarimunda, Nursery & Gandhi Chowk & Biju Chowk, Pitapali		Jharsuguda	Jharsuguda	0.34	0.2574	-	0.26	Direct through Contractor & Community Member
97	Health & Awareness Camp: Eye camps, Malaria, dengue, Diarrhoea and other prevalent disease		Jharsuguda	Jharsuguda	0.02	0	-	-	NHM/ Health Institution/ Community member
98	Rehabilitation of People with Disabilities	Rehabilitation of People with Disabilities	Jharsuguda	Jharsuguda	0.10	0	-	-	National repute Organisation
99	Vedanta DAV Scholarship programme		Jharsuguda	Jharsuguda	0.55	0.498	-	0.50	DAV institution
	Other Educational Initiatives: VVVY Project/ Computer Class/ Tutorial Classes/ Bridge school/ Competitive exam preparation classes	Quality Education	Jharsuguda	Jharsuguda	0.15	0.1858	-	0.19	AJKA/Government Education Department, Village Education Department
101	Promoting Smart Classes & Mini-Science lab in 5 Odiya medium school - Next Education/STEM Learning		Jharsuguda	Jharsuguda	0.22	0.07	-	0.07	NGO partner - New
102	Women Empowerment: Subhalaxmi Co-op, Capacity Buidling, Micro Enterprises	Sustainable Livelihood &	Jharsuguda	Jharsuguda	0.25	0.0695	-	0.07	Subhalaxmi Co-op. and NGO partners
	Farm Activity: Project Jeevika Samridhhi & other initiative		Jharsuguda	Jharsuguda	0.20	0.1265	-	0.13	SEWA, NABARD, Agriculture Dept, Horticulture Dept.
104	Supporting Sports & Culture events	Sports, Culture & Social Events	Jharsuguda	Jharsuguda	0.13	0.0202	-	0.02	Direct through Community Member
105	Plantation & Maintenance	Bio Investment	Jharsuguda	Jharsuguda	0.21	0.229	-	0.23	Pvt. Organistion/ Govt.
	Initiative at R & R Colony: O & M, Health, Water, Education, Sanitation, Infra, Sports & Culture	Development Initiatives in Resettlement & Rehabilitation Colony	Jharsuguda	Jharsuguda	0.54	0.2082	-	0.21	Direct through Contractor
107	Basic and Social Infrastruture Projects	Nandghar, Community Infrastructure & RPDAC Compliance	Jharsuguda	Jharsuguda	0.50	0.1533	-	0.15	Direct through Contractor & Community Member
08	Programme Coordination exp, Study, MIS, Group Initiatives – Concurrent Audit, Village Coordinator, Tour & Travel, EVP etc.	Expenses: Other	Jharsuguda	Jharsuguda	0.39	1.3691	-	1.37	NA -
109	Strategic Infra initiative around periphery villages	Strategic infra support around periphery villages	Jharsuguda	Jharsuguda	6.94	1.2414	-	1.24	Direct through Contractor

				٧	'edanta Limited -	Jharsugud	а				
			Proje	ect or I	Programme			Amount	:Spent*	Cumulative	
SI. CSR Project No. Activity Ide		Sector in which the project is covered		Area	Name of District		Amount Outlay*	Direct	Overheads	Spend till reporting period	Amount Spent, Direct or implementing agency
110 Non-CSR (Cultural I	Expenses nitiatives)	Non CSR Expenses	Jharsuguda		Jharsuguda		-	(0.0017)	-	(0.0017)	
111 Reversal a Other tha	amount (Exp. n Section 135)	Reversal Amount					-	(0.2774)	-	(0.2774)	
Sub-Tota	I						12.07	5.82	-	5.82	

				Sterlite Copper					
			Project or	Programme		Amoun	t Spent*	Cumulative	
SI. No.	CSR Project or Activity Identified	Sector in which the project is covered	Area	Name of District	Amount Outlay*	Direct	Overheads	Spend till reporting period	Amount Spent, Direct or implementing agency
112	Promoting education and eradicating malnutrition through Khushi Child Care Center	Education	Thoothukudi	Thoothukudi	-	0.05	-	0.05	Vedanta Foundation
113	Promoting girl child education	Education	Thoothukudi	Thoothukudi	1.5	0.23	-	0.23	Humana People to People India
114	Support to schools	Education	Thoothukudi	Thoothukudi	0.12	-	-	-	Direct
115	Scholarship	Education	Thoothukudi	Thoothukudi	0.35	1.85	-	1.85	Direct
116	Mobile health care	Health	Thoothukudi	Thoothukudi	1.82	0.17	-	0.17	Direct
117	Providing Safe Drinking Water	Health	Thoothukudi	Thoothukudi	0.8	0.18	-	0.18	Sri Sudalai enterprises
118	Vision to all (eye test for students)	Health	Thoothukudi	Thoothukudi	0.04	-	-	-	Aravind eye hospital
119	Sakhi (Women SHG Promotion, Stregthening and IGA inclusion)	Women Empowerment	Thoothukudi	Thoothukudi	1.19	0.22	-	0.22	Bell education and women empowerment society/ Thulasi socia Trust/ Dhaayagam welfare society
120	Promotion sustainable Agriculture practices – SRI, Sunflower, farmers Club, Farm activity*	Livelihood	Thoothukudi	Thoothukudi	0.5	0.02	-	0.02	Direct
121	Promoting Animal Husbandary project - Poultry & Goatry, Pisciculture	Livelihood	Thoothukudi	Thoothukudi	1.17	0.02	-	0.02	Direct
122	Skill Development*	Livelihood	Thoothukudi	Thoothukudi	1	0.2	-	0.2	IL&FS
123	Need based infrastructre development projects	Infrastructure	Thoothukudi	Thoothukudi	2.65	-	-	-	Direct
124	Nandghar	Infrastructure	Thoothukudi	Thoothuudi	0.5	-	-	-	Direct
125	Promotion of Sports & Culture	Stakeholder Engagement	Thoothukudi	Thoothukudi	-	0.01	-	0.01	Direct
126	Meeting	Stakeholder Engagement	Thoothukudi	Thoothukudi	-	0.05	-	0.05	Direct
127	Branding (Printing Banner Wall Painting etc.)	Stakeholder Engagement	Thoothukudi	Thoothukudi	0.05	-	0.04	0.04	Direct
128	Organising Events	Stakeholder Engagement	Thoothukudi	Thoothukudi	-	-	-	-	Direct
129	Baseline survey	Project Management	Thoothukudi	Thoothukudi	0.12	-	-	-	Taru
130	Impact assessment/ studies/ audits	Project Management	Thoothukudi	Thoothukudi	0.1	-	0.07	0.07	Subhash Mittal
131	Village Coordinator	Project Management	Thoothukudi	Thoothukudi	0.11	-	0.08	0.08	BVG India
132	Salary	Admin	Thoothukudi	Thoothukudi	-	-	-	-	
133	Provision				-	(0.13)	-	(0.13)	
	Sub-Total				12.02	2.89	0.17	3.06	
	Grand Total				104.38	48.62	3.10	51.72	

<sup>\*</sup>Difference in sum of activity wise expenditure and total expenditure is due to round off of activity wise figures.

# **Annexure B**

Disclosure in Board's report as per provisions of Section 197 of the Companies Act, 2013 read with Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014.

		Disclosure		
SI. No.	Requirement	Name of the Director	Category	Ratio
1	Ratio of the remuneration of each director to the	Navin Agarwal (1)	Executive Chairman	488.97
	median remuneration of the employees of the	Tarun Jain	Whole-Time Director	350.21
	Company for the financial year	G. R. Arun Kumar	Whole-Time Director & Chief Financial Officer	100.31
		Srinivasan Venkatakrishnan (2)	Whole-Time Director & Chief Executive Officer	Nil
2	Percentage increase in remuneration of each director,	Name	Category	Increment Percentage
	Chief Financial Officer, Chief Executive Officer,	Navin Agarwal	Executive Chairman	3%
	Company Secretary or Manager, if any, in the financial	Tarun Jain	Whole-Time Director	10%
	year	G. R. Arun Kumar	Whole-Time Director & Chief Financial Officer	25%
		Kuldip Kaura <sup>(3)</sup>	Interim Chief Executive Officer	3%
		Prerna Halwasiya (4)	Company Secretary & Compliance Officer	26%
		Bhumika Sood (5)	Company Secretary & Compliance Officer	Nil
3	Percentage increase in the median remuneration of employees in the financial year	The median remuneration increased by 5.90%	ion of the employees in the finan	cial year was
4	Number of permanent employees on the rolls of company	There were 9,823 empl	loyees of Vedanta Limited as on I	March 31, 2019
5	Average percentile increase already made in the salaries of employees other than the managerial	Average increment in F 9.68%	Y 2019 for Managerial Personnel	(M4 and Above):
	personnel in the last financial year and its comparison with the percentile increase in the managerial remuneration and justification thereof and point out if	Average Increment in F Below): 10.58%	Y 2019 for non Managerial Perso	onnel (M5 and
	there are any exceptional circumstances for increase in the managerial remuneration	No exceptional increase	e given in the managerial remune	eration.
6	Affirmation that the remuneration is as per the remuneration policy of the Company		Yes	

#### Notes:

- The ratio inclusive of remuneration received from Vedanta Resources Limited, UK, the Holding Company, for Mr. Navin Agarwal is 501.39.
- 2. Mr. Srinivasan Venkatakrishnan will not receive any remuneration from Vedanta Limited. He will receive the entire remuneration from the holding company i.e. Vedanta Resources Limited UK.
- 3. For the period from April 1, 2018 till August 30, 2018.
- 4. For the period from July 31, 2018 till March 31, 2019.
- 5. Ms. Bhumika Sood resigned from the position of Company Secretary & Compliance Officer w.e.f. June 16, 2018.

# **Annexure C**

#### Form No. MGT-9

#### **Extract of Annual Return**

as on the financial year ended on March 31, 2019

[Pursuant to Section 92(3) of the Companies Act, 2013 and rule 12(1) of the Companies (Management and Administration) Rules, 2014]

#### I. REGISTRATION AND OTHER DETAILS:

1.	CIN	L13209MH1965PLC291394
2.	Registration Date	June 25, 1965
3.	Name of the Company	Vedanta Limited
4.	Category/Sub-Category of the Company	Public Listed Company
5.	Address of the Registered office and contact details	1st Floor, 'C' Wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai – 400 093, Maharashtra E-mail ID: Comp.Sect@vedanta.co.in Tel: +91 22 66434500 Fax: +91 22 66434530 Website: www.vedantalimited.com
6.	Whether listed company	Yes
7.	Name, Address and Contact details of Registrar and Transfer Agent, if any	Karvy Fintech Private Limited (Erstwhile Karvy Computershare Private Limited) Karvy Selenium Tower No. B, Plot No.31-32, Gachibowli, Financial District, Nanakramguda, Serilingampally, Hyderabad, Telangana – 500 032, India E-mail ID: einward.ris@karvy.com Tel: +91 40 33211000 / 67162222 Fax: +91 40 23311968 Website: www.karvyfintech.com

# II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10% or more of the total turnover of the Company shall be stated:-

SI. No	Name and Description b. of main products/services	NIC Code of the Product/service	% to total turnover of the Company
1.	Copper & Copper products	24201	17.77
2.	Aluminum & Aluminum products	24202	55.42
3.	Extraction of crude petroleum and natural gas	0610/ 0620	18.38

#### III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES:

SI. N	o. Company*	CIN / GLN	Holding/ Subsidiary/Associate	% shares held	Applicable Section
1	Twin Star Holding Limited	-	Holding Company	37.11%	2(46)
2	Finsider International Company Limited	-	Holding Company	10.80%	2(46)
3	Westglobe Limited	-	Holding Company	1.19%	2(46)
4	Welter Trading Limited	-	Holding Company	1.03%	2(46)

#### Note:

<sup>\*</sup> All the above entities are subsidiaries of Volcan Investment Limited, the ultimate Holding Company

SI.			Holding/	~ I I I I	
No.	Subsidiaries Hindustan Zinc Limited	CIN / GLN L27204RJ1966PLC001208	Subsidiary/ Associate Subsidiary	% shares held 64.92%	Applicable Section 2(87)
2	Bharat Aluminium Company Limited	U74899DL1965PLC004518	Subsidiary	51%	2(87)
3	MALCO Energy Limited	U31300TN2001PLC069645	Subsidiary	100%	2(87)
4	Copper Mines of Tasmania Proprietory Limited		Subsidiary	100%	2(87)
5	Thalanga copper mines Proprietory Limited		Subsidiary	100%	2(87)
6	Monte Cello B.V.		Subsidiary	100%	2(87)
7	Talwandi Sabo Power Limited	L40101PB2007PLC031035	Subsidiary	100%	2(87)
8	Sesa Resources Limited	U13209GA1965PLC000030	Subsidiary	100%	2(87)
9	Sesa Mining Corporation Limited	U13209GA1969PLC000091	Subsidiary	100%	2(87)
10	Sterlite Ports Limited	U40109TN2010PLC084216	Subsidiary	100%	2(87)
11	Maritime Ventures Private Limited	U61200TN2013PTC091762	Subsidiary	100%	2(87)
12	Goa Sea Port Private Limited	U63000TN2016PTC111287	Subsidiary	100%	2(87)
13	Vizag General Cargo Berth Private Limited	U35100TN2010PTC075408	Subsidiary	100%	2(87)
14	Paradip Multi Cargo Berth Private Limited	U35100TN2011PTC079116	Subsidiary	100%	2(87)
15 16	Bloom Fountain Limited		Subsidiary Subsidiary	100% 100%	2(87)
17	Twin Star Energy Holdings Limited Twin Star Mauritius Holdings Limited		Subsidiary	100%	2(87) 2(87)
18	Western Cluster Limited		Subsidiary	100%	2(87)
19	Sterlite (USA) Inc.*		Subsidiary	100%	2(87)
20	Fujairah Gold FZC		Subsidiary	100%	2(87)
21	THL Zinc Ventures Limited		Subsidiary	100%	2(87)
22	THL Zinc Limited		Subsidiary	100%	2(87)
23	THL Zinc Holding B.V.		Subsidiary	100%	2(87)
24	THL Zinc Namibia Holdings (Proprietary) Limited		Subsidiary	100%	2(87)
25	Skorpion Zinc (Proprietary) Limited		Subsidiary	100%	2(87)
26	Skorpion Mining Company (Proprietary) Limited		Subsidiary	100%	2(87)
27	Namzinc (Proprietary) Limited		Subsidiary	100%	2(87)
28	Amica Guesthouse (Proprietary) Limited		Subsidiary	100%	2(87)
29	Rosh Pinah Healthcare (Proprietary) Limited		Subsidiary	69%	2(87)
30	Black Mountain Mining (Proprietary) Limited		Subsidiary	74%	2(87)
31	Vedanta Lisheen Holdings Limited		Subsidiary	100%	2(87)
32 33	Vedanta Lisheen Mining Limited Killoran Lisheen Mining Limited		Subsidiary Subsidiary	100% 100%	2(87) 2(87)
34	Killoran Lisheen Finance Limited		Subsidiary	100%	2(87)
35	Lisheen Milling Limited		Subsidiary	100%	2(87)
36	Vedanta Exploration Ireland Limited		Subsidiary	100%	2(87)
37	Lisheen Mine Partnership		Subsidiary	100%	2(87)
38	Lakomasko BV, Netherlands		Subsidiary	100%	2(87)
39	Cairn India Holdings Limited		Subsidiary	100%	2(87)
40	Cairn Energy Hydrocarbons Limited		Subsidiary	100%	2(87)
41	Cairn Exploration (No. 2) Limited		Subsidiary	100%	2(87)
42	Cairn Energy Gujarat Block 1 Limited		Subsidiary	100%	2(87)
43	Cairn Energy Discovery Limited		Subsidiary	100%	2(87)
44	Cairn Energy India Proprietory Limited		Subsidiary	100%	2(87)
45	CIG Mauritius Holdings Private Limited		Subsidiary	100%	2(87)
46	CIG Mauritius Private Limited		Subsidiary	100%	2(87)
47	Cairn Lanka (Private) Limited		Subsidiary	100%	2(87)
48	Cairn South Africa Proprietary Limited Avanstrate (Japan) Inc. (ASI)		Subsidiary	100% 51.63%	2(87)
49 50	Avanstrate (Japan) Inc. (ASI) Avanstrate (Korea) Inc.		Subsidiary Subsidiary	51.63%	2(87) 2(87)
51	Avanstrate (Taiwan) Inc.		Subsidiary	51.63%	2(87)
52	Sesa Sterlite Mauritius Holdings Limited		Subsidiary	100%	2(87)
53	Vedanta Star Limited	U13209JH2018PLC011308	Subsidiary	100%	2(87)
54	Electrosteel Steels Limited	L27310JH2006PLC012663	Subsidiary	90%	2(87)
		22,010311200012000	Cabbidial y		2(07)
	PachSkar Township (Proprietory) Limited		Associate	E00/	2(0)
1	RoshSkor Township (Proprietory) Limited	 11/5200MH1080PTC05253/	Associate	50%	2(6)
2	Gaurav Overseas Private Limited Goa Maritime Private Limited	U45200MH1989PTC052534 U61200GA2003PTC003250	Associate Associate	50% 50%	2(6)
4	Madanpur South Coal Company Limited	U10300CT2006PLC020006	Associate	18.05%	2(6) 2(6)
5	Rampia Coal Mine and Energy Private Limited	U101010R2008PTC009827	Associate	17.39%	2(6)
J	Nampia Obar Millio and Ellergy Frivate Ellillited	0.10.10.10.112.0001.10003027	/ 10000lat6	17.00/0	۷(۵)

**Notes:**Following Companies became Subsidiaries during the year:
Vedanta Star Limited on April 23, 2018
Electrosteel Steels Limited on June 4, 2018

<sup>\*</sup> under liquidation

# IV. SHARE HOLDING PATTERN (EQUITY SHARE CAPITAL BREAKUP AS PERCENTAGE OF TOTAL EQUITY)

# a) Category-wise Share Holding

		No.	of Shares held of the year (Ap	at the beginning oril 1, 2018)			lo. of Shares h of the year (Ma			. %
Category	Category of		DI : 1	T. 1	% of Total				% of Total	Change during
Code	Shareholders	Demat	Physical	Total	Shares	Demat	Physical	Total	Shares	the year
(1)	(II)	(III)	(IV)	(V)	(∨I)	(VII)	(VIII)	(IX)	(X)	(XI)
(A)	PROMOTER AND PROMOTER GROUP									
(1)	Indian									
(a)	Individual/HUF	160,656	-	160,656	0.01	160,656	-	160,656	0.01	0.00
(b)	Central Government/State	-	-	-	-	-	-	-	-	-
(a)	Government(s)  Bodies Corporate									
(c)		-	-	-	-	-	•	-	•	-
(d)	Financial Institutions/Banks	-	-	-	-	-	•	-	•	-
(e)	Others	-	-	400.050		-	-	-	-	
	Sub-Total A(1):	160,656	-	160,656	0.01	160,656		160,656	0.01	0.00
(2)	Foreign									
(a)	Individuals (NRIs/Foreign Individuals)	-	-	-	-	-	-		-	-
(b)	Bodies Corporate	1,764,165,424	-	1,764,165,424	47.46	1,764,165,424		1,764,165,424	47.46	0.00
(c)	Institutions	-	_	-	-	_				-
(d)	Qualified Foreign Investor	-	_	_	-	_		-		-
(e)	Others	-	_	_	-	-		-		-
(-)	Sub-Total A(2) :	1,764,165,424		1,764,165,424	47.46	1,764,165,424		1,764,165,424	47.46	0.00
	Total A=A(1)+A(2)	1,764,326,080	_	1,764,326,080	47.47	1,764,326,080		1,764,326,080	47.47	0.00
(B)	PUBLIC SHAREHOLDING	.,, с .,о20,000		.,, 0 1,020,000	.,,,,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1,701,020,000		0.00
(1)	Institutions									
(a)	Mutual Funds/UTI	224,144,231	7,200	224,151,431	6.03	424,278,056	7,200	424,285,256	11.41	5.38
(b)	Financial Institutions/Banks	239,318,297	36,420	239,354,717	6.44	241,397,734	36,420	241,434,154	6.50	0.06
(c)	Central Government/State	-	-	-	-	-	-	-	-	- 0.00
(0)	Government(s)									
(d)	Venture Capital Funds	-	_	_	-	-		-		_
(e)	Insurance Companies	20,660,864	_	20,660,864	0.56	29,511,947		29,511,947	0.79	0.23
(f)	Foreign Institutional Investors	670,925,115	9,784	670,934,899	18.05	611,421,324	9,784	611,431,108	16.45	(1.60)
(g)	Foreign Venture Capital	-	=	=	-	-			-	-
	Investors									
(h)	Qualified Foreign Investor	-	=	=	-	-		-	-	-
(i)	Others	-	=	=	-	-		-	-	-
	Sub-Total B(1):	1,155,048,507	53,404	1,155,101,911	31.08	1,306,609,061	53,404	1,306,662,465	35.15	4.07
(2)	Non-Institutions									
(a)	Bodies Corporate	314,098,655	792,916	314,891,571	8.47	116,326,606	350,764	116,677,370	3.14	(5.33)
(b)	Individuals									
	(i) Individuals holding nominal	164,709,999	14,607,056	179,317,055	4.82	207,199,602	11,364,303	218,563,905	5.88	1.06
	share capital upto ₹ 2 lakh	04400550		04.400.550	0.05	44.050.500		44.050.500	0.00	(0.00)
	(ii) Individuals holding nominal share capital in	24,166,559	-	24,166,559	0.65	14,650,566	-	14,650,566	0.39	(0.26)
	excess of ₹ 2 lakh									
(c)	Others									
	Clearing Members	6,134,255	-	6,134,255	0.17	5,193,604		5,193,604	0.14	(0.03)
	Foreign Bodies	7,794	=	7,794	0.00	7,000		7,000	0.00	0.00
	Foreign Bodies-DR	2,359,415	-	2,359,415	0.06	1,270,234		1,270,234	0.03	(0.03)
	Foreign Nationals	100	-	100	0.00	1,280		1,280	0.00	0.00
	IEPF	1,060,879	-	1,060,879	0.03	2,407,129		2,407,129	0.06	0.04
	NBFC	32,660	-	32,660	0.00	45,235		45,235	0.00	0.00
	Non-Resident Indians (NRI)	3,730,460	164,599	3,895,059	0.10	5,776,912	147,799	5,924,711	0.16	0.06
	NRI Non-Repatriation	2,335,948	=	2,335,948	0.06	2,965,013	-	2,965,013	0.08	0.02
	Overseas Corporate Bodies	1,100	-	1,100	0.00	1,100		1,100	0.00	0.00
	Qualified Institutional Buyer	-	-	-	0.00	90		90	0.00	0.00

		No	of Shares held of the year (Ap	at the beginning oril 1, 2018)			o. of Shares he f the year (Ma			. %
Category Code	Category of Shareholders	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	Change during the year
(1)	(II)	(III)	(IV)	(V)	(VI)	(VII)	(VIII)	(IX)	(X)	(XI)
	ESOS Trusts	9,233,871	-	9,233,871	0.25	14,998,702	-	14,998,702	0.40	0.15
	Trusts	5,904,930	2,756	5,907,686	0.16	14,719,947	2,756	14,722,703	0.40	0.24
(d)	Qualified Foreign Investor	-	-	-	0.00	-	-	-	0.00	0.00
	Sub-Total B(2):	533,776,625	15,567,327	549,343,952	14.77	385,563,020	11,865,622	397,428,642	10.69	(4.08)
	Total B=B(1)+B(2):	1,688,825,132	15,620,731	1,704,445,863	45.85	1,692,172,081	11,919,026	1,704,091,107	45.84	(0.01)
	Total (A+B) :	3,453,151,212	15,620,731	3,468,771,943	93.32	3,456,498,161	11,919,026	3,468,417,187	93.31	(0.01)
(C)	SHARES HELD BY CUSTODIANS, AGAINST WHICH DEPOSITORY RECEIPTS HAVE BEEN ISSUED									
(1)	Promoter and Promoter Group *	99,292,708	-	99,292,708	2.67	99,292,708	-	99,292,708	2.67	0.00
(2)	Public	149.131.988	_	149.131.988	4.01	149,486,744		149.486.744	4.02	0.01
\_/	Grand Total (A+B+C):	3,701,575,908	15,620,731	3,717,196,639	100.00	3,705,277,613	11,919,026	3,717,196,639	100.00	0.00

# b) Shareholding of Promoter/Promoter Group

			ding at the be year (April 1,			holding at the ar (March 31		Change in Shareholding during the year	%
SI.	Shareholder's Name	No. of Shares	% of total Shares of the Company	% of Shares pledged/ encumbered to total shares	No. of Shares	% of total Shares of the Company	% of Shares pledged/ encumbered to total shares	No. of shares	
1	Twin Star Holdings Limited*	1,379,377,457	37.11	0.00	1,379,377,457	37.11	0.00	0	0.00
2	Finsider International Company Limited	401,496,480	10.80	0.00	401,496,480	10.80	0.00	0	0.00
3	Westglobe Limited	44,343,139	1.19	0.00	44,343,139	1.19	0.00	0	0.00
4	Welter Trading Limited	38,241,056	1.03	0.00	38,241,056	1.03	0.00	0	0.00
5	Agarwal Galvanising Private Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
6	Hare Krishna Packaging Private Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
7	Sterlite Metal Rolling Mills Private Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
8	Richter Holdings Limited, Cyprus	0	0.00	0.00	0	0.00	0.00	0	0.00
9	Vedanta Resources Cyprus Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
10	Vedanta Resources Holdings Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
11	Vedanta Finance UK Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
12	Monte Cello NV Netherlands Antilles	0	0.00	0.00	0	0.00	0.00	0	0.00
13	Vedanta Resources Limited, UK (Earlier Vedanta	0	0.00	0.00	0	0.00	0.00	0	0.00
	Resources Plc)								
14	Vedanta Resources Finance Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
15	Vedanta Resources Finance II Plc	0	0.00	0.00	0	0.00	0.00	0	0.00
16	Anil Agarwal Discretionary Trust	0	0.00	0.00	0	0.00	0.00	0	0.00
17	Conclave PTC Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
18	Volcan Investments Limited	0	0.00	0.00	0	0.00	0.00	0	0.00
19	Ankit Agarwal	36,300	0.00	0.00	36,300	0.00	0.00	0	0.00
20	Pratik Pravin Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
21	Suman Didwania	87,696	0.00	0.00	87,696	0.00	0.00	0	0.00
22	Sakshi Mody	18,000	0.00	0.00	18,000	0.00	0.00	0	0.00
23	Pravin Agarwal	18,660	0.00	0.00	18,660	0.00	0.00	0	0.00
24	Dwarkaprasad Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
25	Anil Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
26	Vedvati Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
27	Navin Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
28	Kiran Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
29	Agnivesh Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
30	Priya Agarwal	0	0.00	0.00	-	0.00	0.00	0	0.00
	Total	1,863,618,788	50.14	0.00	1,863,618,788	50.14	0.00	0	0.000

<sup>\*</sup>Twinstar Holdings Limited (Promoter) holds 24,823,177 ADS representing 99,292,708 equity shares. One (1) American Depository Shares represents Four (4) equity shares.

#### c) Change in Promoters' Shareholding

There has been no change in the shareholding of Promoters during the financial year 2018-19.

# d) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs):

		Cumulative during the year		ansaction Details	Tr		Shareholding at of the year A	
	% of total shares of the					% of total shares of the		•
Reasc	Capital	No. of Shares	Date	Purchase	Sale	Company	No. of Shares	Name of the Share Holder
						6.37	236,640,744	LIFE INSURANCE CORPORATION OF INDIA
Purchas	6.37	236,658,744	25/05/2018	18,000	0			
Sa	6.37	236,640,744	25/05/2018	0	18,000			
Purchas	6.37	236,641,464	14/12/2018	720	0			
Sa	6.37	236,640,744	14/12/2018	0	720			
	6.37	236,640,744	30/03/2019					
						0.51	19,056,459	ICICI PRUDENTIAL - MUTUAL FUNDS
Purchas	0.54	20,057,667	06/04/2018	1,001,208	0			
Sa	0.53	19,830,528	06/04/2018	0	227,139			
Purchas	0.53	19,830,771	13/04/2018	243	0			
Sa	0.53	19,823,386	20/04/2018	0	7,385			
Sa	0.53	19,822,657	27/04/2018	0	729			
Purchas	0.53	19,823,209	04/05/2018	552	0			
Sa	0.53	19,822,723	04/05/2018	0	486			
Purchas Purchas	0.53 0.53	19,826,307 19,829,774	11/05/2018 18/05/2018	3,584 3,467	0			
Purchas Sa	0.53	19,829,774	18/05/2018	3,467	438			
Purchas	0.53	19,829,336	25/05/2018	611	430			
Sa	0.53	19,828,971	25/05/2018	0	976			
Purchas	0.66	24,388,019	01/06/2018	4,559,048	0			
Sa	0.66	24,386,287	01/06/2018	0	1,732			
Purchas	0.75	27,719,931	08/06/2018	3,333,644	0			
Purchas	1.18	43,845,704	15/06/2018	16,125,773	0			
Purchas	1.30	48,138,671	22/06/2018	4,292,967	0			
Sa	1.30	48,138,444	22/06/2018	0	227			
Purchas	1.55	57,565,129	29/06/2018	9,426,685	0			
Purchas	1.73	64,161,215	06/07/2018	6,596,086	0			
Purchas	1.88	70,021,894	13/07/2018	5,860,679	0			
Sa	1.88	70,021,784	13/07/2018	0	110			
Purchas	1.97	73,402,195	20/07/2018	3,380,411	0			
Purchas	1.98	73,564,155	27/07/2018	161,960	0			
Sa	1.98	73,563,183	27/07/2018	0	972			
Purchas	1.98	73,583,957	03/08/2018	20,774	0			
Sa	1.98	73,582,742	03/08/2018	0	1,215			
Purchas	2.00	74,354,551	10/08/2018	771,809	0			
Sa	2.00	74,344,927	10/08/2018	0	9,624			
Purchas	2.04	75,672,627	17/08/2018	1,327,700	0			
Sa	2.04	75,648,263	17/08/2018	4.040.699	24,364			
Purchas	2.14	79,667,951 79,648,114	24/08/2018	4,019,688	10.937			
Sa Purchas	2.14 2.30	85,508,633	24/08/2018 31/08/2018	0 5,860,519	19,837 0			
Purchas	2.83	105,172,214	07/09/2018	19,663,581	0			
Purchas	3.15	117,002,394	14/09/2018	11,830,180	0			
Sa	3.15	116,996,838	14/09/2018	0	5,556			
Purchas	3.24	120,343,827	21/09/2018	3,346,989	0			
Purchas	3.65	135,529,035	28/09/2018	15,185,208	0			
Sa	3.65	135,529,004	28/09/2018	0	31			
Purchas	3.83	142,279,520	05/10/2018	6,750,516	0			
Purchas	4.01	148,992,111	12/10/2018	6,712,591	0			
Purchas	4.06	150,943,664	19/10/2018	1,951,553	0			
Purchas	4.10	152,282,696	26/10/2018	1,339,032	0			
Sa	4.08	151,632,720	26/10/2018	0	649,976			
Purchas	4.12	152,978,115	02/11/2018	1,345,395	0			
Purchas	4.12	153,073,545	09/11/2018	95,430	0			
Purchas	4.13	153,672,053	16/11/2018	598,508	0			
Purchas	4.18	155,196,861	23/11/2018	1,524,808	0			
Purchas	4.49	166,745,972	30/11/2018	11,549,111	0			
Purchas	4.50	167,415,860	07/12/2018	669,888	0			
Purchas	4.53	168,485,200	14/12/2018	1,069,340	0			

	Shareholding at of the year A		Tra	ansaction Details		Cumulative Holding during the year 2018-19		
		% of total					% of total	
SI.  No. Name of the Share Holder	No. of Shares	shares of the Company	Sale	Purchase	Date	No. of Shares	shares of the Capital	Reason
			0	3,505	21/12/2018	168,488,705	4.53	Purchase
			0	200,668	28/12/2018	168,689,373	4.54	Purchase
			6,290	0	28/12/2018	168,683,083	4.54	Sale
			0	5,510	31/12/2018	168,688,593	4.54	Purchase
			0	2,302,858	04/01/2019	170,991,451	4.60	Purchase
			0	1,674	11/01/2019	170,993,125	4.60	Purchase
			1	0	11/01/2019	170,993,124	4.60	Sale
			0	2,720,026	18/01/2019	173,713,150	4.67	Purchase
			0	1,227	25/01/2019	173,714,377	4.67	Purchase
			249,184	0	25/01/2019	173,465,193	4.67	Sale
			0	4,242	01/02/2019	173,469,435	4.67	Purchase
			751,582	0	01/02/2019	172,717,853	4.65	Sale
			0	9,236,613	08/02/2019	181,954,466	4.89	Purchase
			1,882	0	08/02/2019	181,952,584	4.89	Sale
			0	1,540,901	15/02/2019	183,493,485	4.94	Purchase
			5,057	0	15/02/2019	183,488,428	4.94	Sale
			0	1,978	22/02/2019	183,490,406	4.94	Purchase
			10,164	0	22/02/2019	183,480,242	4.94	Sale
			0	2,441	01/03/2019	183,482,683	4.94	Purchase
			598,356	0	01/03/2019	182,884,327	4.92	Sale
			0	1,201,004	08/03/2019	184,085,331	4.95	Purchase
			6,499	0	08/03/2019	184,078,832	4.95	Sale
			0	2,904	15/03/2019	184,081,736	4.95	Purchase
			2,900	0	15/03/2019	184,078,836	4.95	Sale
			0	62,758	22/03/2019	184,141,594	4.95	Purchase
			3,231	0	22/03/2019	184,138,363	4.95	Sale
			0	1,619	29/03/2019	184,139,982	4.95	Purchase
			500,058	0	29/03/2019	183,639,924	4.94	Sale
					30/03/2019	183,639,924	4.94	
3 HDFC TRUSTEE COMPANY LIMITED -	55,060,452	1.48						
MUTUAL FUNDS			0	6.027	06/04/2010	EE 066 470	4.40	Durahaaa
			0	6,027	06/04/2018	55,066,479	1.48	Purchase
			612,933 0	0	06/04/2018	54,453,546	1.46	Sale
			6,000	2,350 0	13/04/2018 13/04/2018	54,455,896	1.46	Purchase
			0,000			54,449,896	1.46	Sale Purchase
			300,000	300,358 0	20/04/2018	54,750,254	1.47 1.46	Sale
			0	718	20/04/2018 27/04/2018	54,450,254 54,450,972	1.46	Purchase
			0	1,030	04/05/2018	54,452,002	1.46	
								Purchase
			382,000 0	0 201,123	04/05/2018 11/05/2018	54,070,002 54,271,125	1.45 1.46	Sale Purchase
			0	265,383	18/05/2018	54,536,508	1.46	Purchase
			0	630,963	25/05/2018	55,167,471	1.47	Purchase
			776	030,903	25/05/2018	55,166,695	1.48	Sale
			0	961,180	01/06/2018	56,127,875	1.46	Purchase
			0	11,978,606	08/06/2018	68,106,481	1.83	Purchase
			1,361,000	11,976,606	08/06/2018	66,745,481	1.80	Sale
			1,361,000	705,110	15/06/2018	67,450,591	1.81	Purchase
			0	340,812	22/06/2018	67,791,403		Purchase
			0	5,672,474			1.82 1.98	Purchase
			4,051	0 0	29/06/2018 29/06/2018	73,463,877 73,459,826	1.98	Sale
			4,051	2,014,405	06/07/2018		2.03	Purchase
						75,474,231 75,474,025		
			206	2 621 916	06/07/2018	75,474,025	2.03	Sale
			0	2,621,916	13/07/2018	78,095,941	2.10	Purchase
			0	2,454	20/07/2018	78,098,395	2.10	Purchase
			7.011	840,373	27/07/2018	78,938,768	2.12	Purchase
			7,911	1 007 001	27/07/2018	78,930,857	2.12	Sale
			0	1,887,891	03/08/2018	80,818,748	2.17	Purchase
			0	582,807	10/08/2018	81,401,555	2.19	Purchase

			Cumulative during the ye		ansaction Details	Tra		Shareholding at of the year Ap	
23	Reason	shares of the	No. of Shares	Date	Purchase	Sale	shares of the	No. of Shares	
0 3,401 17/08/2018 81,404,933 2.19 0 2,202,555 24/08/2018 83,607,468 2.25 19,779 0 31/08/2018 83,607,468 2.25 19,779 0 31/08/2018 83,569,522 2.25 11,400 0 0 07/09/2018 83,589,724 2.25 11,400 0 0 07/09/2018 83,589,724 2.25 11,400 0 1,171 64 14/09/2018 83,589,522 2.25 11,400 0 1,171 64 14/09/2018 83,589,522 2.25 11,400 0 1,171 64 14/09/2018 83,589,523 2.25 11,400 0 1,171 64 14/09/2018 83,589,523 2.25 11,400 0 1,171 64 14/09/2018 83,589,523 2.25 11,400 0 1,171 64 14/09/2018 83,589,523 2.25 11,400 0 1,101,600 0 65,100/2018 83,589,523 2.25 11,400 0 1,101,600 0 65,100/2018 83,696,631 2.30 11,401,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 83,589,523 2.25 11,400 0 1,409/2018 93,109,64 2.51 11,400 0 1,409/2018 93,109,654 2.51 11,400 0 1,409/2018 93,109,654 2.51 11,400 0 1,409/2019 93,109,654 2.51 11,400 0 1,409/2019 93,109,654 2.51 11,400 0 1,409/2019 93,109,654 2.51 11,400 0 1,409/2019 93,109,654 2.51 11,400 0 1,409/2019 93,109,654 2.51 11,400 0 1,409/2019 93,109,654 2.51 11,400 0 1,409/2019 93,109,209,209,209,209,209,209,209,209,209,2	Sale	-					Company	140. Of Office	No. Name of the origin Holder
0 2,202,555 24,008,2018 83,607,488 2.25 19,729 0 31,08,2018 83,508,453 2.25 11,400 0 6,788 07,009,2018 83,508,522 2.25 11,400 0 1,115 14,009,2018 83,508,522 2.25 3,678 0 14,009,2018 83,508,522 2.25 3,678 0 14,009,2018 83,508,522 2.25 3,678 0 14,009,2018 83,508,523 2.25 3,678 0 14,009,2018 83,508,523 2.25 3,678 0 12,009,2018 83,508,535 2.25 3,678 0 12,009,2018 83,508,535 2.25 3,678 0 22,009,2018 83,508,535 2.25 3,678 1 24,009,2018 83,508,535 2.25 3,678 1 24,009,2018 83,508,535 2.25 3,678 1 24,009,2018 83,508,631 2.30 3,101,2018 83,508,323 2.25 3,101,2018 8	Purchase								
19,729	Purchase		83,607,488						
19,729	Purchase								
1,400	Sale								
11,400	Purchase								
0       1,115       14/09/2018       83,858,237       2,25         3,678       0       444,010       21/09/2018       83,585,259       2,26         0       0       4,44,010       21/09/2018       84,025,569       2,26         0       1,371,062       28/09/2018       85,966,91       2,30         0       1,011,806       05/10/2018       85,396,631       2,30         0       1,612,283       12/10/2018       86,407,841       2,32         0       2,14,416       19/10/2018       86,202,124       2,37         0       2,14,416       19/10/2018       88,234,540       2,37         799,750       0       26/10/2018       92,790,171       2,50         0       8,000       02/11/2018       91,990,271       2,47         211       0       0,211/2018       91,990,271       2,47         0       2,230       0,911/2018       93,090,307       2,47         0       2,232       0,911/2018       93,090,307       2,47         0       2,232       0,911/2018       93,199,207       2,47         0       1,233       3,111/2018       92,000,855       2,48         9,244 <td< td=""><td>Sale</td><th></th><td></td><td></td><td>0</td><td>11,400</td><td></td><td></td><td></td></td<>	Sale				0	11,400			
3,678	Purchase	2.25			1,115	0			
0 444,010 21/09/2018 84,025,569 2.26 0 1,371,062 28/09/2018 85,396,631 2.30 0 1,011,806 05/10/2018 86,396,631 2.30 0 1,011,806 05/10/2018 86,407,841 2.32 0 1,612,283 12/10/2018 88,234,540 2.37 0 214,416 19/10/2018 88,234,540 2.37 0 4,555,631 26/10/2018 93,2790,171 2.50 799,750 0 26/10/2018 91,990,421 2.47 0 80,000 02/11/2018 91,998,431 2.47 211 0 02/11/2018 91,998,431 2.47 211 0 02/11/2018 91,998,431 2.47 0 2,037 09/11/2018 92,200,357 2.48 0 2,238 23/11/2018 92,000,357 2.48 0 1,010,218 30/11/2018 92,000,527 2.48 0 1,010,218 30/11/2018 93,015,073 2.50 0 164,146 07/12/2018 93,195,219 2.51 0 3,858 21/12/2018 93,196,54 2.51 0 3,858 21/12/2018 93,196,54 2.51 0 3,011 0 28/12/2018 93,196,54 2.51 0 4,025 31/12/2018 93,196,54 2.51 0 4,025 31/12/2018 93,195,41 2.51 0 4,025 31/12/2018 93,195,41 2.51 0 5,040 11,000 93,195,200 93,195,200 2.51 0 5,040 11,000 93,195,200 93,195,200 2.51 0 5,040 04/01/2019 93,197,250 2.51 0 5,040 04/01/2019 93,197,250 2.51 0 5,040 08/02/2019 93,197,302 2.51 0 5,040 08/02/2019 93,193,322 2.51 0 5,040 08/02/2019 93,223,300 2.58 0 5,744 15/02/2019 93,223,300 2.58 0 5,744 15/02/2019 95,727,358 2.58 0 5,744 15/02/2019 95,727,350 2.58 0 6,03/2019 95,727,350 2.58 0 8,483 01/03/2019 95,737,340 2.58 0 8,483 01/03/2019 95,737,340 2.58 0 8,483 01/03/2019 95,737,340 2.58 0 8,233 04,03/2019 95,737,340 2.58 0 8,483 01/03/2019 95,737,340 2.58 0 8,483 01/03/2019 95,737,340 2.58 0 8,233 04,0219 95,737,340 2.58 0 8,233 04,0219 95,737,340 2.58 0 8,233 04,0219 95,737,340 2.58 0 8,233 04,03/2019 95,737,340 2.58	Sale	2.25			0	3,678			
1,371,062   28/09/2018   85,395,631   2,30	Purchase	2.26	84,025,569	21/09/2018	444,010	0			
596         0         28/09/2018         85.396,035         2.30           0         1,011,806         05/10/2018         86,407,841         2.32           0         1,612,283         12/10/2018         86,407,841         2.37           0         214,416         19/10/2018         88,234,540         2.37           0         4,555,631         26/10/2018         99,790,171         2.50           0         2,670         96/10/2018         99,994,21         2.47           211         0         02/11/2018         91,998,481         2.47           0         2,037         91/17/2018         99,988,270         2.47           0         2,037         91/17/2018         91,998,481         2.47           0         2,037         91/17/2018         91,998,481         2.47           0         2,202         16/11/2018         91,998,481         2.47           0         2,237         16/11/2018         91,998,481         2.47           0         2,232         16/11/2018         91,998,481         2.47           0         1,010/218         30,900,307         2.47           0         1,021/17/2018         91,900,307         2.50	Purchase	2.30			1,371,062	0			
0	Sale	2.30				596			
0	Purchase				1,011,806	0			
0       214,416       19/10/2018       88,234,540       2.37         0       4,555,631       26/10/2018       92,790,171       2,50         799,750       0       8,060       02/11/2018       91,998,481       2,47         2111       0       02/11/2018       91,998,270       2,47         0       2,037       09/11/2018       92,000,307       2,47         0       2,220       16/11/2018       92,000,307       2,48         0       2,220       16/11/2018       92,000,507       2,48         0       1,010,218       30/11/2018       92,000,507       2,50         0       1,010,218       30/11/2018       93,015,073       2,50         0       1,010,218       30/11/2018       93,015,073       2,50         0       1,611/2018       30,115,073       2,50         0       7,577       14/12/2018       93,179,673       2,51         0       3,858       21/12/2018       33,194,472       2,51         3,011       0       28/12/2018       93,194,414       2,51         3,011       0       28/12/2018       93,197,250       2,51         193       0       0,401/2019 <td< td=""><td>Purchase</td><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Purchase								
0   4,555,631   26/10/2018   92,790,171   2,50     799,750   0   26/10/2018   91,990,421   2,47     0   8,080   02/11/2018   91,998,481   2,47     211   0   02/11/2018   91,998,481   2,47     0   2,037   09/11/2018   92,000,307   2,47     0   2,220   16/11/2018   92,000,527   2,48     0   2,232   23/11/2018   92,000,527   2,48     0   1,010,218   30/11/2018   93,015,073   2,50     0   164,146   07/12/2018   93,179,219   2,51     0   7,577   14/12/2018   93,179,219   2,51     0   3,783   28/12/2018   93,194,427   2,51     0   3,773   28/12/2018   93,194,427   2,51     0   3,773   28/12/2018   93,194,427   2,51     0   4,025   31/12/2018   93,194,427   2,51     0   4,025   31/12/2018   93,194,427   2,51     0   4,025   31/12/2018   93,195,441   2,51     0   1,809   04/01/2019   93,197,057   2,51     193   0   04/01/2019   93,293,773   2,51     0   5,497   18/01/2019   93,204,276   2,51     0   5,497   18/01/2019   93,203,773   2,51     0   5,497   18/01/2019   93,203,773   2,51     0   5,497   18/01/2019   93,203,773   2,51     0   5,497   18/01/2019   93,203,773   2,51     0   5,497   18/01/2019   95,733,002   2,58     0   5,744   15/02/2019   95,733,002   2,58     0   5,744   15/02/2019   95,733,002   2,58     0   7,026   22/02/2019   95,737,734   2,58     0   8,463   01/03/2019   95,737,734   2,58     0   5,744   15/02/2019   95,737,734   2,58     0   5,745   15/03/2019   95,746,197   2,58     0   5,746   15/03/2019   95,746,197   2,58     0   5,746   15/03/2019   95,746,197   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   95,746,849   2,58     0   5,756   15/03/2019   96,250,968   2,59	Purchase								
799,750         0         26/10/2018         91,990,421         2.47           0         8,060         02/11/2018         91,998,481         2.47           211         0         0.2/11/2018         91,998,270         2.47           0         2,037         09/11/2018         92,000,307         2.47           0         2,220         16/11/2018         92,000,527         2.48           0         1,010,218         30/11/2018         92,000,855         2.48           0         1,010,218         30/11/2018         93,015,073         2.50           0         1,641,46         07/12/2018         93,179,219         2.51           0         7,577         14/12/2018         93,195,642         2.51           0         3,753         28/12/2018         93,196,64         2.51           3,011         0         28/12/2018         93,194,427         2.51           0         1,869         04/01/2018         93,197,250         2.51           193         0         04/01/2019         93,197,250         2.51           193         0         04/01/2019         93,197,250         2.51           0         7,219         110/10/2019 <td< td=""><td>Purchase</td><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Purchase								
0   8.060   02/11/2018   91,998.481   2.47   211   0   02/11/2018   91,998.270   2.47   0   2.037   09/11/2018   92,000.307   2.47   0   2.220   16/11/2018   92,002.527   2.48   0   2.328   23/11/2018   92,004.855   2.48   0   1,010.218   30/11/2018   93,015,073   2.50   0   164.146   07/12/2018   93,179.219   2.51   0   7.577   14/12/2018   93,186.766   2.51   0   3.858   21/12/2018   93,190.654   2.51   0   3.773   28/12/2018   93,191.416   2.51   0   28/12/2018   93,191.416   2.51   0   28/12/2018   93,191.416   2.51   0   4.025   31/12/2018   93,195.441   2.51   0   4.025   31/12/2018   93,195.441   2.51   0   7.219   11/01/2019   93,197.657   2.51   0   7.219   11/01/2019   93,197.657   2.51   0   7.219   11/01/2019   93,204.276   2.51   0   5.497   18/01/2019   93,204.276   2.51   0   9.048   07/02/2019   93,223.20   2.51   0   9.048   07/02/2019   93,223.20   2.51   0   9.048   07/02/2019   93,223.20   2.51   0   9.048   07/02/2019   93,233.20   2.58   152   0   08/02/2019   95,737.40   2.58   2.294   0   15/02/2019   95,737.708   2.58   2.294   0   15/02/2019   95,737.708   2.58   2.294   0   15/02/2019   95,737.708   2.58   2.59   2.294   0   8.003/2019   95,737.708   2.58   2.59   2	Sale								
211       0       02/11/2018       91,998,270       2.47         0       2,037       09/11/2018       92,000,307       2.47         0       2,220       16/11/2018       92,000,307       2.48         0       2,328       23/11/2018       92,004,855       2.48         0       1,010,218       30/11/2018       93,105,073       2.50         0       164,146       07/12/2018       93,179,219       2.51         0       7,577       14/12/2018       93,190,654       2.51         0       3,733       28/12/2018       93,190,654       2.51         3,011       0       28/12/2018       93,191,416       2.51         3,011       0       28/12/2018       93,191,416       2.51         0       1,809       0/40/12/2019       93,195,441       2.51         0       1,809       0/40/12/2019       93,195,441       2.51         0       7,219       11/01/2019       93,197,250       2.51         0       7,219       11/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       7,249       11/01/2019       93,204,2	Purchase								
0 2,037 09/11/2018 92,000,307 2.47 0 2,220 16/11/2018 92,002,527 2.48 0 2,328 23/11/2018 92,004,855 2.48 0 1,010,218 30/11/2018 93,015,073 2.50 0 1,64,146 07/12/2018 93,179,219 2.51 0 7,577 14/12/2018 93,186,796 2.51 0 3,858 21/12/2018 93,190,654 2.51 0 3,873 28/12/2018 93,190,654 2.51 0 3,73 28/12/2018 93,194,427 2.51 0 4,025 31/12/2018 93,195,441 2.51 0 4,025 31/12/2018 93,195,441 2.51 0 1,809 04/01/2019 93,195,50 2.51 193 0 04/01/2019 93,195,057 2.51 193 0 04/01/2019 93,204,276 2.51 0 7,219 11/01/2019 93,204,276 2.51 0 5,497 18/01/2019 93,203,773 2.51 0 9,048 01/02/2019 93,213,322 2.51 0 9,048 01/02/2019 93,213,322 2.51 0 0 8,048 01/02/2019 93,213,322 2.51 0 0 5,744 15/02/2019 95,727,258 2.58 0 5,744 15/02/2019 95,733,002 2.58 2,294 0 15/02/2019 95,737,734 2.58 2,294 0 15/02/2019 95,733,002 2.58 2,294 0 15/02/2019 95,737,734 2.58 0 8,463 01/03/2019 95,737,734 2.58 0 8,463 01/03/2019 95,737,734 2.58 1,581 0 0 8/03/2019 95,734,830 2.58 1,581 0 0 8/03/2019 95,746,849 2.58 1,581 0 0 8/03/2019 95,746,849 2.58	Sale								
0       2,220       16/11/2018       92,002,527       2.48         0       2,238       23/11/2018       92,004,655       2.48         0       1,010,218       30/11/2018       93,015,073       2.50         0       164,146       07/12/2018       93,179,219       2.51         0       7,577       14/12/2018       93,190,654       2.51         0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,194,427       2.51         0       0       4,025       31/12/2018       93,194,427       2.51         0       0       4,025       31/12/2018       93,194,427       2.51         0       0       4,025       31/12/2018       93,194,427       2.51         0       0       4,025       31/12/2018       93,197,441       2.51         0       0       1,699       04/01/2019       93,197,657       2.51         193       0       0       0       93,197,057       2.51         0       7,219       11/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51	Purchase								
0       2,328       23/11/2018       92,004,855       2.48         0       1,010,218       30/11/2018       93,015,073       2.50         0       164,146       07/12/2018       93,179,219       2.51         0       7,577       14/12/2018       93,196,596       2.51         0       3,858       21/12/2018       93,190,654       2.51         0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,194,427       2.51         0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,195,441       2.51         193       0       04/01/2019       93,197,057       2.51         193       0       04/01/2019       93,209,773       2.51         0       7,219       11/01/2019       93,209,773       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       9,048       01/02/2019       93,213,322       2.51         0       9,048       01/02/2019       93,727,258       2.58         0       5,744       15/02/2019       95,727,258 <td>Purchase</td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Purchase								
0       1,010,218       30/11/2018       93,015,073       2.50         0       164,146       07/12/2018       93,179,219       2.51         0       7,577       14/12/2018       93,196,796       2.51         0       3,858       21/12/2018       93,190,654       2.51         0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,191,416       2.51         0       1,809       04/01/2019       93,197,557       2.51         193       0       04/01/2019       93,197,057       2.51         193       0       04/01/2019       93,297,73       2.51         0       5,497       18/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,213,322       2.51         0       9,048       01/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,58	Purchase								
0       164,146       07/12/2018       93,179,219       2.51         0       7,577       14/12/2018       93,186,796       2.51         0       3,858       21/12/2018       93,190,654       2.51         0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,194,427       2.51         0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       9,048       01/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,410       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,737,734       2.58         0       2,25       2,202/2019       95,737,734	Purchase								
0       7,577       14/12/2018       93,186,796       2.51         0       3,858       21/12/2018       93,190,654       2.51         0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,194,416       2.51         0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,221,3322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,737,734       2.58         0       7,026       22/02/2019       95,737,734	Purchase								
0       3,858       21/12/2018       93,190,654       2.51         0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,191,416       2.51         0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,204,276       2.51         0       3,549       25/01/2019       93,223,370       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,737,734       2.58         0       2,233       08/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,746,197	Purchase								
0       3,773       28/12/2018       93,194,427       2.51         3,011       0       28/12/2018       93,191,416       2.51         0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,204,773       2.51         0       3,549       25/01/2019       93,223,370       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       9,048       01/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,737,734       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       2,233       08/03/2019       95,746,197       2.58         1,581       0       08/03/2019       95,746,849	Purchase								
3,011       0       28/12/2018       93,191,416       2.51         0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,746,949       2.58         1,581       0       08/03/2019       95,746,849	Purchase								
0       4,025       31/12/2018       93,195,441       2.51         0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,737,734       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968 <td>Sale</td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Sale								
0       1,809       04/01/2019       93,197,250       2.51         193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,737,734       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
193       0       04/01/2019       93,197,057       2.51         0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,737,734       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,746,197       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
0       7,219       11/01/2019       93,204,276       2.51         0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         2,294       0       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Sale								
0       5,497       18/01/2019       93,209,773       2.51         0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,746,849       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
0       3,549       25/01/2019       93,213,322       2.51         0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,746,849       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
0       9,048       01/02/2019       93,222,370       2.51         0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
0       2,505,040       08/02/2019       95,727,410       2.58         152       0       08/02/2019       95,727,258       2.58         0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
152       0       08/02/2019       95,727,258       2.58         0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
0       5,744       15/02/2019       95,733,002       2.58         2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Sale								
2,294       0       15/02/2019       95,730,708       2.58         0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase								
0       7,026       22/02/2019       95,737,734       2.58         0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Sale								
0       8,463       01/03/2019       95,746,197       2.58         0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase					2,204			
0       2,233       08/03/2019       95,748,430       2.58         1,581       0       08/03/2019       95,746,849       2.58         0       505,265       15/03/2019       96,252,114       2.59         1,146       0       15/03/2019       96,250,968       2.59	Purchase					0			
1,581     0     08/03/2019     95,746,849     2.58       0     505,265     15/03/2019     96,252,114     2.59       1,146     0     15/03/2019     96,250,968     2.59	Purchase								
0     505,265     15/03/2019     96,252,114     2.59       1,146     0     15/03/2019     96,250,968     2.59	Sale								
1,146 0 15/03/2019 <b>96,250,968 2.59</b>	Purchase								
	Sale								
	Purchase	2.59	96,259,470	22/03/2019	8,502	0			
5,545 0 22/03/2019 <b>96,253,925 2.59</b>	Sale								
0 20,108 29/03/2019 <b>96,274,033 2.59</b>	Purchase								
4,362 0 29/03/2019 <b>96,269,671 2.59</b>	Sale								
30/03/2019 96,269,671 2.59	Jule				0	4,002			
4 PTC CABLES PRIVATE LIMITED 42,730,200 1.15 0		2.53	30,203,071	30,00,2013		0	1 15	42 730 200	4 PTC CABLES PRIVATE LIMITED
30/03/2019 42,730,200 1.15	Nil	1.15	42,730,200	30/03/2019					
5 ADITYA BIRLA SUN LIFE TRUSTEE PRIVATE 39,499,878 1.06 LIMITED - MUTUAL FUNDS							1.06	39,499,878	
1,248,502 0 06/04/2018 <b>38,251,376 1.03</b>	Sale	1.03	38,251,376	06/04/2018	0	1,248,502			
0 582,000 13/04/2018 <b>38,833,376 1.04</b>	Purchase	1.04	38,833,376	13/04/2018	582,000	0			
2,273,998	Sale	0.98	36,559,378	13/04/2018	0	2,273,998			
0 343,000 20/04/2018 <b>36,902,378 0.99</b>	Purchase	0.99			343,000				
2,122,506	Sale	0.94	34,779,872	20/04/2018	0	2,122,506			
685,000	Sale	0.92	34,094,872		0	685,000			

	Shareholding at the beginning of the year April 1, 2018	Tra	ansaction Details	;	Cumulative during the year		
	% of total					% of total	
SI.  No. Name of the Share Holder	shares of the No. of Shares Company	Sale	Purchase	Date	No. of Shares	shares of the Capital	Reason
	. ,	0	47,250	18/05/2018	34,142,122	0.92	Purchase
		2,594,500	0	18/05/2018	31,547,622	0.85	Sale
		0	959,694	25/05/2018	32,507,316	0.87	Purchase
		132,563	0	25/05/2018	32,374,753	0.87	Sale
		0	670,000	01/06/2018	33,044,753	0.89	Purchase
		0	4,124,250	08/06/2018	37,169,003	1.00	Purchase
		153,254	0	08/06/2018	37,015,749	1.00	Sale
		0	931,000	15/06/2018	37,946,749	1.02	Purchase
		1,600,000	0	15/06/2018	36,346,749	0.98	Sale
		0	6,050	22/06/2018	36,352,799	0.98	Purchase
		2,251,000	0	22/06/2018	34,101,799	0.92	Sale
		907,800	0	29/06/2018	33,193,999	0.89	Sale
		1,320,000	0	06/07/2018	31,873,999	0.86	Sale
		100,000	0	13/07/2018	31,773,999	0.85	Sale
		0	372	20/07/2018	31,774,371	0.85	Purchase
		415,000	0	20/07/2018	31,359,371	0.84	Sale
		0	444,327	27/07/2018	31,803,698	0.86	Purchase
		61,827	0	27/07/2018	31,741,871	0.85	Sale
		0	1,750	03/08/2018	31,743,621	0.85	Purchase
		175,000	0	03/08/2018	31,568,621	0.85	Sale
		2,807,013	0	10/08/2018	28,761,608	0.77	Sale
		0	777	17/08/2018	28,762,385	0.77	Purchase
		15,750	0	17/08/2018	28,746,635	0.77	Sale
		0	261	24/08/2018	28,746,896	0.77	Purchase
		1,628,000	0	24/08/2018	27,118,896	0.73	Sale
		367,500	0	31/08/2018	26,751,396	0.72	Sale
		0	600,000	07/09/2018	27,351,396	0.74	Purchase
		2,000,000	0	07/09/2018	25,351,396	0.68	Sale
		0	6,020,750	14/09/2018	31,372,146	0.84	Purchase
		0	31,500	28/09/2018	31,403,646	0.84	Purchase
		0	3,110,000	05/10/2018	34,513,646	0.93	Purchase
		126,500	0	05/10/2018	34,387,146	0.93	Sale
		0	3,025,000	12/10/2018	37,412,146	1.01	Purchase
		67,500	0	12/10/2018	37,344,646	1.00	Sale
		379,250	0	19/10/2018	36,965,396	0.99	Sale
		0	522	26/10/2018	36,965,918	0.99	Purchase
		24,500		26/10/2018	36,941,418	0.99	Sale
		155,750	E00.000	02/11/2018	36,785,668	0.99	Sale
		0	500,000	30/11/2018	37,285,668	1.00	Purchase
		836,500	0	30/11/2018	36,449,168	0.98	Sale
		1,023	110 600	07/12/2018	36,448,145	0.98	Sale
		650,000	119,600	14/12/2018	36,567,745	0.98	Purchase
		650,000 723,500	0	14/12/2018	35,917,745 35,194,245	0.97	Sale Sale
		100,050	0	21/12/2018	35,194,245	0.95	Sale
		1,017,000	0	28/12/2018 04/01/2019	35,094,195 34,077,195	0.94 0.92	Sale
		3,460,000	0	11/01/2019	34,077,195 30,617,195	0.92	Sale
		1,490,000	0	18/01/2019	29,127,195	0.82	Sale
		259,900	0	25/01/2019	28,867,295	0.78	Sale
		4,003,800	0	01/02/2019	24,863,495	0.67	Sale
		407,100	0	08/02/2019	24,456,395	0.66	Sale
		407,100	6,698	15/02/2019	24,463,093	0.66	Purchase
		185,000	0,030	15/02/2019	24,278,093	0.65	Sale
		144,000	0	22/02/2019	24,278,093	0.65	Sale
		222,200	0	01/03/2019	23,911,893	0.64	Sale
		0	23,000	08/03/2019	23,934,893	0.64	Purchase
		52,900	23,000	15/03/2019	23,881,993	0.64	Sale
		52,900	5,544	29/03/2019	23,887,537	0.64	Purchase
		84,885	0	29/03/2019	23,802,652	0.64	Sale
		04,000	U	30/03/2019	23,802,652	0.64	Jale

	Shareholding at of the year A		Tra	nsaction Details	3	Cumulative Holding during the year 2018-19		
SI.	No. of Chause	% of total shares of the	0-1-	Domala	Data	No of Observe	% of total shares of the	D
No. Name of the Share Holder  6 UNIT TRUST OF INDIA - MUTUAL FUNDS	No. of Shares 18,873,996	Company 0.51	Sale	Purchase	Date	No. of Shares	Capital	Reason
O CHIT THOUSE OF INDIK IMOTORIZATIONED	10,070,000	0.01	0	46,222	06/04/2018	18,920,218	0.51	Purchase
			0	17,826	13/04/2018	18,938,044	0.51	Purchase
			3,681	0	13/04/2018	18,934,363	0.51	Sale
			0	1,043,282	20/04/2018	19,977,645	0.54	Purchase
			0	435,550	27/04/2018	20,413,195	0.55	Purchase
			8,860	0	27/04/2018	20,404,335	0.55	Sale
			0	332,647	04/05/2018	20,736,982	0.56	Purchase
			32,000	0	04/05/2018	20,704,982	0.56	Sale
			0	56,958	11/05/2018	20,761,940	0.56	Purchase
			0	278,687	18/05/2018	21,040,627	0.57	Purchase
			12,281	0	18/05/2018	21,028,346	0.57	Sale
			0	146,815	25/05/2018	21,175,161	0.57	Purchase
			0	508,239	01/06/2018	21,683,400	0.58	Purchase
			0	1,294,124	08/06/2018	22,977,524	0.62	Purchase
			0	104,567	15/06/2018	23,082,091	0.62	Purchase
			0	2,952,587	22/06/2018	26,034,678	0.70	Purchase
			0	25,864 38,615	29/06/2018 06/07/2018	26,060,542	0.70 0.70	Purchase Purchase
			1,485,750	30,013	06/07/2018	26,099,157 24,613,407	0.66	Sale
			1,403,730	73,000	13/07/2018	24,686,407	0.66	Purchase
			9,538	0	13/07/2018	24,676,869	0.66	Sale
			0	102,314	20/07/2018	24,779,183	0.67	Purchase
			4,978	0	20/07/2018	24,774,205	0.67	Sale
			0	77,865	27/07/2018	24,852,070	0.67	Purchase
			5,183	0	27/07/2018	24,846,887	0.67	Sale
			0	38,043	03/08/2018	24,884,930	0.67	Purchase
			0	958,171	10/08/2018	25,843,101	0.70	Purchase
			0	427,981	17/08/2018	26,271,082	0.71	Purchase
			110,250	0	17/08/2018	26,160,832	0.70	Sale
			0	52,450	24/08/2018	26,213,282	0.71	Purchase
			42,740	0	24/08/2018	26,170,542	0.70	Sale
			0	296,696	31/08/2018	26,467,238	0.71	Purchase
			0	69,930	07/09/2018	26,537,168	0.71	Purchase
			204,750	0	07/09/2018	26,332,418	0.71	Sale
			0	70,260	14/09/2018	26,402,678	0.71	Purchase
			0	52,905 394,627	21/09/2018 28/09/2018	26,455,583 26,850,210	0.71 0.72	Purchase Purchase
			9,802	0	28/09/2018	26,840,408	0.72	Sale
			0	205,900	05/10/2018	27,046,308	0.72	Purchase
			0	526,627	12/10/2018	27,572,935	0.74	Purchase
			0	23,493	19/10/2018	27,596,428	0.74	Purchase
			0	93,393	26/10/2018	27,689,821	0.74	Purchase
			533,750	0	26/10/2018	27,156,071	0.73	Sale
			0	2,028,075	02/11/2018	29,184,146	0.79	Purchase
			0	367,080	09/11/2018	29,551,226	0.79	Purchase
			0	63,671	16/11/2018	29,614,897	0.80	Purchase
			0	38,455	23/11/2018	29,653,352	0.80	Purchase
			0	20,255	30/11/2018	29,673,607	0.80	Purchase
			0	275,574	07/12/2018	29,949,181	0.81	Purchase
			0	8,763	14/12/2018	29,957,944	0.81	Purchase
			0	357,125	21/12/2018	30,315,069	0.82	Purchase
			0 140	81,800	28/12/2018	30,396,869	0.82	Purchase
			8,148	17 924	28/12/2018	30,388,721	0.82	Sale
			0	17,834 109,680	31/12/2018	30,406,555	0.82	Purchase Purchase
			0	269,132	04/01/2019 11/01/2019	30,516,235 30,785,367	0.82 0.83	Purchase
			12,388	0	11/01/2019	30,772,979	0.83	Sale
			0	1,090,277	18/01/2019	31,863,256	0.86	Purchase
				.,0,2.7	,, 20.0	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.00	

	Shareholding at of the year A		Tra	ansaction Details	s	Cumulativ during the y		
SI.		% of total shares of the					% of total shares of the	
No. Name of the Share Holder	No. of Shares	Company	Sale	Purchase	Date	No. of Shares	Capital	Reason
			0	1,075,170	25/01/2019	32,938,426	0.89	Purchase
			13,800	0	25/01/2019	32,924,626	0.89	Sale
			0	459,516	01/02/2019	33,384,142	0.90	Purchase
			0	84,537	08/02/2019	33,468,679	0.90	Purchase
			0	381,972	15/02/2019	33,850,651	0.91	Purchase
			0	44,311	22/02/2019	33,894,962	0.91	Purchase
			0	117,121	01/03/2019	34,012,083	0.91	Purchase
			499,100	0	01/03/2019	33,512,983	0.90	Sale
			0	92,314	08/03/2019	33,605,297	0.90	Purchase
			0	98,690	15/03/2019	33,703,987	0.91	Purchase
			2,846	0	15/03/2019	33,701,141	0.91	Sale
			0	59,528	22/03/2019	33,760,669	0.91	Purchase
			1,189	0	22/03/2019	33,759,480	0.91	Sale
			0	24,677	29/03/2019	33,784,157	0.91	Purchase
			81,773	0	29/03/2019	33,702,384	0.91	Sale
				0	30/03/2019	33,702,384	0.91	
7 STATE BANK OF INDIA - MUTUAL FUNDS	14,070,844	0.38						
				1,146,586	06/04/2018	15,217,430	0.41	Purchase
			3,727	0	06/04/2018	15,213,703	0.41	Sale
			0	37,113	13/04/2018	15,250,816	0.41	Purchase
			0	115,422	20/04/2018	15,366,238	0.41	Purchase
			0	142,036	27/04/2018	15,508,274	0.42	Purchase
			0	248,736	04/05/2018	15,757,010	0.42	Purchase
			0	170,236	11/05/2018	15,927,246	0.43	Purchase
			0	125,995	18/05/2018	16,053,241	0.43	Purchase
			0	120,229	25/05/2018	16,173,470	0.44	Purchase
			0	60,752	01/06/2018	16,234,222	0.44	Purchase
			0	173,764	08/06/2018	16,407,986	0.44	Purchase
			0	88,170	15/06/2018	16,496,156	0.44	Purchase
			0	6,046,396	22/06/2018	22,542,552	0.61	Purchase
			11	0	22/06/2018	22,542,541	0.61	Sale
			0	105,385	29/06/2018	22,647,926	0.61	Purchase
			16,753	0	29/06/2018	22,631,173	0.61	Sale
			0	135,773	06/07/2018	22,766,946	0.61	Purchase
			450,000	0	06/07/2018	22,316,946	0.60	Sale
			0	151,308	13/07/2018	22,468,254	0.60	Purchase
			2,217	0	13/07/2018	22,466,037	0.60	Sale
			0	194,010	20/07/2018	22,660,047	0.61	Purchase
			0	125,202	27/07/2018	22,785,249	0.61	Purchase
			251	0	27/07/2018	22,784,998	0.61	Sale
			0	97,483	03/08/2018	22,882,481	0.62	Purchase
			3,080	0	03/08/2018	22,879,401	0.62	Sale
				173,051	10/08/2018	23,052,452	0.62	Purchase
			2	0	10/08/2018	23,052,450	0.62	Sale
			0	60,929	17/08/2018	23,113,379	0.62	Purchase
			0	163,347	24/08/2018	23,276,726	0.63	Purchase
			0	783,650	31/08/2018	24,060,376	0.65	Purchase
			1,688	0	31/08/2018	24,058,688	0.65	Sale
			0	244,347	07/09/2018	24,303,035	0.65	Purchase
			197	0	07/09/2018	24,302,838	0.65	Sale
			0	220,396	14/09/2018	24,523,234	0.66	Purchase
			5,226	0	14/09/2018	24,518,008	0.66	Sale
			0	181,727	21/09/2018	24,699,735	0.66	Purchase
			0	135,656	28/09/2018	24,835,391	0.67	Purchase
			34,074	0	28/09/2018	24,801,317	0.67	Sale
			0	133,920	05/10/2018	24,935,237	0.67	Purchase
			0	208,211	12/10/2018	25,143,448	0.68	Purchase
			0	94,980	19/10/2018	25,238,428	0.68	Purchase
			0	180,207	26/10/2018	25,418,635	0.68	Purchase

		Shareholding at of the year A		Tra	nsaction Details		Cumulativ during the ye		
SI.			% of total shares of the					% of total shares of the	
No.	Name of the Share Holder	No. of Shares	Company	Sale	Purchase	Date	No. of Shares	Capital	Reason
9	GOVERNMENT OF SINGAPORE	23,940,659	0.64						
				0 364,217	840,878 0	06/04/2018	24,781,537	0.67 0.66	Purchase Sale
				9,924	0	20/04/2018 27/04/2018	24,417,320 24,407,396	0.66	Sale
				15,364	0	04/05/2018	24,392,032	0.66	Sale
				49,619	0	11/05/2018	24,342,413	0.65	Sale
				37,328	0	18/05/2018	24,305,085	0.65	Sale
				8,614	0	25/05/2018	24,296,471	0.65	Sale
				1,957,819	0	01/06/2018	22,338,652	0.60	Sale
				0	733,455	08/06/2018	23,072,107	0.62	Purchase
				0	532,876	15/06/2018	23,604,983	0.64	Purchase
				0	113,947	22/06/2018	23,718,930	0.64	Purchase
				0	143,939	20/07/2018	23,862,869	0.64	Purchase
				10,233	0	27/07/2018	23,852,636	0.64	Sale
				13,148 115,162	0	03/08/2018 10/08/2018	23,839,488 23,724,326	0.64 0.64	Sale Sale
				0	331,197	24/08/2018	24,055,523	0.65	Purchase
				0	759,166	31/08/2018	24,814,689	0.67	Purchase
				0	460,816	07/09/2018	25,275,505	0.68	Purchase
				0	420,514	14/09/2018	25,696,019	0.69	Purchase
				0	267,929	21/09/2018	25,963,948	0.70	Purchase
				0	171,147	05/10/2018	26,135,095	0.70	Purchase
				21,441	0	12/10/2018	26,113,654	0.70	Sale
				0	68,045	19/10/2018	26,181,699	0.70	Purchase
				0	43,815	02/11/2018	26,225,514	0.71	Purchase
				0	152,727	23/11/2018	26,378,241	0.71	Purchase
				0	753,729	30/11/2018	27,131,970	0.73	Purchase
				37,876 0	0 211,919	07/12/2018 21/12/2018	27,094,094 27,306,013	0.73 0.73	Sale Purchase
				11,143	211,919	28/12/2018	27,306,013	0.73	Sale
				185,096	0	04/01/2019	27,109,774	0.73	Sale
				1,888,505	0	08/02/2019	25,221,269	0.68	Sale
				661,391	0	01/03/2019	24,559,878	0.66	Sale
				355,803	0	08/03/2019	24,204,075	0.65	Sale
				0	749,195	15/03/2019	24,953,270	0.67	Purchase
				0	126,301	22/03/2019	25,079,571	0.67	Purchase
				0		30/03/2019	25,079,571	0.67	
10	HSBC POOLED INVESTMENT FUND - HSBC POOLED ASIA PACIFIC EX JAPAN EQUITY FUND	10,273,802	0.28						
				0	64,620	06/04/2018	10,338,422	0.28	Purchase
				0	75,811	20/04/2018	10,414,233	0.28	Purchase
				0	40,667	04/05/2018	10,454,900	0.28	Purchase
				0	127,911	11/05/2018	10,582,811	0.28	Purchase
				0	546,696	18/05/2018	11,129,507	0.30	Purchase
				0	290,978	25/05/2018	11,420,485	0.31	Purchase
				0	398,355	01/06/2018	11,818,840	0.32	Purchase
				0	1,194,975	08/06/2018	13,013,815	0.35	Purchase
				0	517,404	15/06/2018	13,531,219	0.36	Purchase
				0	988,058	22/06/2018	14,519,277	0.39	Purchase
				0	100,000 908,092	29/06/2018 06/07/2018	14,619,277 15,527,369	0.39 0.42	Purchase Purchase
				0	210,000	13/07/2018	15,527,369	0.42	Purchase
				0	511,000	20/07/2018	16,248,369	0.42	Purchase
				0	603,000	27/07/2018	16,851,369	0.45	Purchase
				0	100,000	19/10/2018	16,951,369	0.46	Purchase
				0	100,000	26/10/2018	17,051,369	0.46	Purchase
				0	300,000	02/11/2018	17,351,369	0.47	Purchase
				0	186,106	23/11/2018	17,537,475	0.47	Purchase
				0	1,518,397	30/11/2018	19,055,872	0.51	Purchase
				0	171,459	07/12/2018	19,227,331	0.52	Purchase

	Shareholding at of the year A		Trar	nsaction Details		Cumulative Holding during the year 2018-19		
SI.		% of total shares of the					% of total shares of the	
No. Name of the Share Holder	No. of Shares	Company	Sale	Purchase	Date	No. of Shares	Capital	Reason
			0	170,503	14/12/2018	19,397,834	0.52	Purchase
			0	557,949	28/12/2018	19,955,783	0.54	Purchase
			0	696,523	11/01/2019	20,652,306	0.56	Purchase
			0	656,287	18/01/2019	21,308,593	0.57	Purchase
			0	1,505,841	25/01/2019	22,814,434	0.61	Purchase
			0	289,318	01/02/2019	23,103,752	0.62	Purchase
			0	490,640	08/02/2019	23,594,392	0.63	Purchase
			0	427,566	15/02/2019	24,021,958	0.65	Purchase
			563,431	0	01/03/2019	23,458,527	0.63	Sale
			200,000	0	08/03/2019	23,258,527	0.63	Sale
			200,000	0	29/03/2019	23,058,527	0.62	Sale
					30/03/2019	23,058,527	0.62	

# e) Shareholding of Directors and Key Managerial Personnel:

		Shareholding at th of the ye			Increase/	_	Cumulative Shareholding during the year	
SI. No.	Name of the Director or KMP	No. of Shares	% of total shares of the Company	Date	Decrease in share holding	Reasons	No. of Shares	% of total shares of the Company
1	Mr. G. R. Arun Kumar Whole-Time Director & Chief Financial Officer	8,000 (equity shares)	0.00	-	-	-	8,000	0.00
		26,000 (preference shares)	0.00	26.10.2018	26,000	Redemption of shares as per the terms of issuance	-	-
2	Mr. Aman Mehta Non-Executive Independent Director	-	-	28.09.2018 25.01.2019	195 279	Market Purchase Market Purchase	195 474	0.00

**Note:** No other Directors or KMPs besides the above hold shares in the Company

## **V. INDEBTEDNESS**

Indebtedness of the Company including interest outstanding/accrued but not due for payment

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	20,532	20,181	-	40,713
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	705	4	-	709
Total (i+ii+iii)	21,237	20,185	-	41,422
Change in Indebtedness during the year				
Additions - Principal amount	14,005	29,048	-	43,053
Reductions - Principal amount	(8,511)	(33,051)	-	(41,562)
Net Change relating to principle amount	5,494	(4,003)	-	1,491
Net movement in interest due but not paid	-	-	-	-
Net movement in interest accrued but not due	184	2	-	186
Indebtedness at the end of the financial year				
i) Principal Amount	26,026	16,178	-	42,204
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	889	6	-	895
Total (i+ii+iii)	26,914	16,184	-	43,099

#### VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

#### A. Remuneration to Managing Director, Whole-Time Directors and/or Manager and Key Managerial Personnel:

Ove	erall Ceiling as per the Act		11% c	f Net Profits					
Tota	al (A)	307,076,198	219,929,636	6,299,4018	-	3,890,265	20,025,646	1,454,889	615,370,652
	ers, please specify (PF, Superannuation, dical and LTA)	12,053,782	-	2,689,824	-	250,488	-	66,809	15,060,903
(Anı	nual Performance Bonus^)								
- oth	ners, specify	59,855,112	40,235,919	14,683,392	-	611,948	8,884,232	710,929	124,981,532
- as	% of profit	-	=	=	-	-	-	=	-
Cor	nmission	-	-	-	-	-	-	-	-
Swe	eat Equity	-	=	=	=	-	-	=	-
Sto	ck Option®	132,651,161	47,698,772	15,204,789	-	775,869			196,330,591
(C)	Profits in lieu of salary under Section 17(3) of Income-tax Act, 1961	-	-	-	-	-	-	-	-
(b)	Value of perquisites u/s 17(2) of Income-tax Act, 1961*	12,917,480	-	59,600	-	-	-	-	12,977,080
(a)	Salary as per provisions contained in Section 17(1) of the Income-tax Act, 1961	89,598,663	131,994,945	30,356,413	-	2,251,960	11,141,414	677,151	266,020,546
Gro	ss salary								
Peri	od	FY2019	FY2019	FY2019	1/3/2019- 31/03/2019	31/7/2019 - 31/3/2019	1/4/2018- 30/08/2018	1/4/2018- 16/06/2018	Total
Des	ignation	Executive Chairman	WTD	WTD & CFO	WTD & CEO	CS	CEO(ceased)	CS(ceased)	
Part	iculars	Navin Agarwal <sup>(1)</sup>	Tarun Jain	G. R. Arun Kumar	Srinivasan Venkatakrishnan <sup>(2)</sup>	Prerna Halwasiya	Kuldip Kaura <sup>(3)</sup>	Bhumika Sood	_

#### Notes:

Additionally, on account of delisting of Vedanta Resources Limited, UK, all the outstanding shares of Executive Directors and KMPs were bought by Volcan under Cash Offer Plan and the same has not been included above.

1. Sitting fees and commission paid to Mr. Navin Agrawal from HZL was ₹ 2,00,000 and ₹ 1,500,000 respectively during the FY2019.

In addition to the above, Mr. Navin Agarwal received remuneration from Vedanta Resources Limited, UK, the Holding Company amounting to GBP 85,000 (₹ 77.97 lakh) for the financial year ending March 31, 2019.

2. Mr. Srinivasan Venkatakrishnan is not paid any remuneration from the Company. The entire remuneration will be received from the Holding Company i.e. Vedanta Resources Limited. The remuneration received by Mr. Venkat through Vedanta Resources Limited for the period from March 1, 2019 till March 31, 2019 is ₹ 102.31 lakh.

Additionally, Mr. Venkatakrishnan received an amount of GBP 1,467,528 (₹ 1,346 lakh) from Vedanta Resources Limited, UK in lieu of Anglo Gold Ashanti bonus & LTIP as per agreed terms of appointment.

3.In addition to the above, Mr. Kuldip Kaura received remuneration from Vedanta Resources Limited, UK, the Holding Company amounting to GBP 415,738 (₹ 381.36 lakh).

Additionally, the Company had paid an annual bonus of ₹ 1,25,08,755 for FY 2018 to Mr. Thomas Albanese who was the Whole-Time Director & Chief Executive Officer of the Company till August 31, 2017.

<sup>^</sup>The Annual Performance bonus to Executive Directors & KMPs is for FY 2018 which is paid during FY 2019.

<sup>\*</sup> Value of Perquisites u/s 17(2) Income-tax Act, 1961 does not include perquisite value of Superannuation. However, contribution to Superannuation is shown under 'Others'. Further as the liabilities for defined benefit plan, i.e. gratuity are provided on accrual basis for the Company as a whole, the amounts pertaining to WTDs & Key Management Personnel are not included above.

elt is the perquisite value of the options exercises under, Vedanta Resources Limited (erstwhile VRPLC) stock options and deferred stock option Scheme.

#### B. Remuneration to other directors:

SI. No. Particulars of Remuneration	Name of Directors	Total Amount
1. Independent Directors		
a) Fee for attending board/committee meetings	Mr. Aman Mehta	1,100,000
	Mr. K. Venkataramanan	650,000
	Ms. Lalita D Gupte	1,100,000
	Mr. Ravi Kant	1,150,000
	Mr. U. K. Sinha	900,000
b) Commission	Mr. Aman Mehta	7,500,000
	Mr. K. Venkataramanan	7,500,000
	Ms. Lalita D. Gupte	7,500,000
	Mr. Ravi Kant	7,500,000
	Mr. U. K. Sinha	7,500,000
c) Others, please specify	-	-
Total (1)		42,400,000
2. Other Non-Executive Directors		
a) Fee for attending board/ committee meeting	s Ms. Priya Agarwal	600,000
b) Commission	Ms. Priya Agarwal	7,500,000
<ul> <li>Others, please specify (includes salary, allowants)</li> <li>PF &amp; superannuation, perquisites &amp; LTIP value</li> </ul>		
Total (2)		8,100,000
Total (B)= (1+2)	Nil	50,500,000
Overall Ceiling as per the Act for Directors who ar	re neither MD or WTD 1% of Net Profit	
Total Remuneration (A) + (B)		665,870,652

# VII. PENALTIES/ PUNISHMENT/ COMPOUNDING OF OFFENCES:

				Details of Penalty/ Punishment/		
Тур	e	Section of the Companies Act	Brief Description	Compounding fees imposed	Authority [RD/ NCLT/ COURT]	Appeal made, if any (give Details)
A.	Company					
	Penalty	NIL	NIL	NIL	NIL	NIL
	Punishment	NIL	NIL	NIL	NIL	NIL
	Compounding	NIL	NIL	NIL	NIL	NIL
В.	Directors					
	Penalty	NIL	NIL	NIL	NIL	NIL
	Punishment	NIL	NIL	NIL	NIL	NIL
	Compounding	NIL	NIL	NIL	NIL	NIL
C.	Other Officers in Default					
	Penalty	NIL	NIL	NIL	NIL	NIL
	Punishment	NIL	NIL	NIL	NIL	NIL
	Compounding	NIL	NIL	NIL	NIL	NIL

# **Annexure D**

# Secretarial Audit Report

for the financial year ended March 31, 2019

To, The Members Vedanta Limited 1st Floor, C Wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai, Maharashtra- 400093

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate governance practices by Vedanta Limited (hereinafter called the "Company"). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, we hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on March 31, 2019 complied with the statutory provisions listed hereunder and also that the Company has proper Board processes and compliance mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on March 31, 2019 according to the provisions of:

- (i) The Companies Act, 2013 (the "Act") and the rules made thereunder:
- (ii) The Securities Contracts (Regulation) Act, 1956 ("SCRA') and the rules made thereunder;
- (iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder to the extent of Regulation 76 of Securities and Exchange Board of India (Depositories and Participants) Regulations, 2018;
- (iv) Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;
- (v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ("SEBI Act"):-
  - (a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
  - (b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;
  - (c) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018;
  - (d) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014;
  - (e) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008;

- (f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client to the extent of securities issued;
- (g) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009; Not Applicable
- (h) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998; Not Applicable
- (vi) The Management has identified and confirmed the following laws as being specifically applicable to the Company:
  - a) The Mines and Minerals (Development and Regulation) Act, 2015 and the rules and regulations made thereunder.
  - b) Indian Boilers Act, 1923 and rules and regulations made thereunder.
  - c) Manufacture, Storage and Import of Hazardous Chemical Rule, 1989.

We have also examined compliance with the applicable clauses/ Regulations of the following:

- (i) Secretarial Standards issued by The Institute of Company Secretaries of India.
- (ii) Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.

During the period under review, the Company has substantially complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. mentioned above.

We further report that:

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors. The changes in the composition of the Board of Directors that took place during the period under review were carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors to schedule the Board/Committee Meetings. Agenda and detailed notes on agenda were sent in advance (and at a shorter notice for which necessary approvals obtained) and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

All decisions at Board Meetings and Committee Meetings are carried out unanimously as recorded in the minutes of the meetings of the Board of Directors or Committee of the Board, as the case may be.

We further report that there are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

We further report that during the audit period, following major events have happened which are deemed to have major bearing on the Company's affairs in pursuance of the above referred laws, rules, regulations, guidelines, standards, etc.

1) The Board of Directors have approved redemption of 3,010,000,000 nos., 7.5% Non-Convertible

- Non-Cumulative Redeemable fully paid-up Preference Shares at a face value of ₹10 each.
- 2) The shareholders in its meeting held on August 24, 2018 have approved offer or invitation to subscribe the Non-Convertible Debentures or other Debt Securities upto ₹ 20,000 Crore.
- 3) The Company has issued Non-Convertible Debentures of ₹ 5,000 Crores during the period under review
- 4) The Company has redeemed Non-Convertible Debentures of ₹ 3,700 Crores during the period under review. Further, the Company has approved an early redemption of 5,000 (Five Thousand) 7.80% Secured, Rated, Non-Cumulative, Redeemable, Non-Convertible Debentures (NCDs), of face value of ₹ 10,00,000 (Rupees Ten Lacs) each aggregating to ₹ 500 Crores (Five Hundred Crores) at par.
- 5) The Company made an Investment of ₹ 19.62 Crores in Equity Shares of Vedanta Star Limited, a wholly owned subsidiary of Company.
- 6) The Company through its subsidiary, Vedanta Star Limited, acquired 90% of Electrosteel Steels Limited under the IBC process.

For Chandrasekaran Associates Company Secretaries

> Dr. S. Chandrasekaran Senior Partner

Date: May 07, 2019 Membership No.: A1644 Place: Delhi Certificate of Practice No.: 715

Note: This report is to be read with our letter of even date which is annexed as Annexure-A and forms an integral part of this report.

# **Annexure-A to Secretarial Audit report**

To, The Members Vedanta Limited 1st Floor, C Wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai, Maharashtra - 400093

- 1. Maintenance of secretarial record is the responsibility of the Management of the Company. Our responsibility is to express an opinion on these secretarial records based on our audit.
- 2. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial records. The verification was done on the random test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, we followed provide a reasonable basis for our opinion.
- 3. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.
- 4. Whenever required, we have obtained the Management representation about the compliance of laws, rules and regulations and happening of events etc.
- 5. The compliance of the provisions of Corporate and other applicable laws, rules, regulations, standards is the responsibility of Management. Our examination was limited to the verification of procedures on random test basis.
- 6. The Secretarial Audit report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the Management has conducted the affairs of the Company.

For Chandrasekaran Associates

Company Secretaries

Dr. S. Chandrasekaran

Senior Partner Membership No.: A1644 Certificate of Practice No.: 715

Date: May 07, 2019 Place: Delhi

# **Annexure E**

#### (A) CONSERVATION OF ENERGY:

Conservation of natural resources continues to be the key focus area of your Company. Some of the important steps taken in this direction are as follows:-

#### Oil & Gas Business: Rajasthan Operations:

- Sustainable disposal of off-spec polymer through Common Effluent Treatment Plant, Balotra for reuse as coagulant in waste water treatment: 108 KL & 4,940 Kgs till December, 2018 for FY2019 (100% for reuse).
- Avoidance of GHG emission by renewable power generation (solar): 4,32,765 KWH for FY2019 till December, 2018.
- iii. Recycling of trade effluent by growth partners for reuse in drilling activities 2,710 KL
- iv. Increased uptime of Vapor Recovery Units (>80%) to minimise the gas flaring resulted in avoidance of flaring approx. 5 MMSCFD and GHG emission reduction of approx. 125,000 tons of CO2e.
- v. Conversion of diesel driven engines to electric driven engines at MS-01 and MWP-18 resulted in reduction of GHG emission by approx. 12,000 tonnes of CO2e.
- vi. Replacement of conventional lights with LED at ESS1A & ESS2 with saving potential of 85,000 KWH/year.
- vii. Utilisation of associated gas for power generation and thereby reducing GHG emission by avoiding flaring of gas. Gas based engine generators installed at satellite fields, 1.1 MW at NI-02 and 500 KVA at Kaam West resulted in reduction of GHG emission by ~4,945 tonnes of CO2e.
- viii. 29 nos. of 25W solar LED lights installed at 8 oil fields: Total power savings due to the initiative was 366.85 KWH for 46 days.
- ix. 75 nos. of 250W LED Street Lights & 25 nos. of 100 W LED Street Lights installed at RGT & Gas Well Pads: Total power savings due to the initiative was 5,541.25 KWH for 31 days.
- x. 120 nos. of 36W tube lights replaced with 18W tube lights & 65 nos. of 18W tube lights replaced with 10W tube lights: Total power savings due to the initiative was 11,706.24 KWH for 182 days.

#### **Copper Business:**

- Compressor replacement with screw type, kaeser make - (644 KWH per day reduction)
- ii. Holding furnace VFD drive installation (50847 KWH per annum reduction)
- iii. Boiler specific fuel consumption reduction from 74L/ MT to 73.6L/MT – (0.4 L FO consumption reduction)

# Iron Ore Business: VAB:

- Replacement of blower motors (2 nos.) with the energy efficient blower motors at PID 1, achieving power saving of 38 KW.
- Usage of blast furnace waste dust in sinter mix and oxygen enrichment in sinter combustion burner to reduce coke breeze consumption from 60 kg/TS to 58 Kg/TS resulting in saving of 10.76 Million K Cal.

- Pulverised coal injection 35 Kg/THM in PID-1 which is a replacement fuel to Coke.
- iv. Introduced oxygen enrichment at BF-1 at a rate of 0.3% in blast furnace, resulting in pulverised coal injection increase from 35 Kg/THM to 40 Kg/THM.
- v. Production of foundry grade pig iron outside the blast furnace (Qty. 162,375 T) by using ferro-silicon compound resulting in saving of 40Kg/THM coke consumption
- vi. Oxygen enrichment in sinter plant resulting in reduction in internal return fines and coke breeze consumption.
- vii. Stock-house and PCM bucket elevator elimination by making direct unloading arrangement, achieving power saving of 20 KW.
- viii. Installation of lighting automation boxes (38 nos.) in PID-1. (Saving 20 KW)
- ix. Replacement of conventional lamps with the LED lamps in Value Addition Business in phase manner. (Saving 40 KW).
- x. Introduction of energy efficient compressor in Blast furnace-3. (Saving 15 KW)

#### IOK

- i. Replacement of around 250 nos. 250W replaced with LED 90W resulting in cost saving of ₹1,68,000/month and energy saving of 7,200 KWh/month.
- Replacement of 1,000W metal halide lights with LED 300W in IR lights resulting savings of 0.8Lts/day/IR.
- iii. Grid power supply to new workshop and gate 2 resulting in savings of ₹ 2,000/day.

# Power Business: 2400MW Jharsuguda:

# Implemented Projects:

- i. Reduce pressure drop across the flue gas path in all boilers by conducting CFD test, saving of 28.6 MU.
- Arrest compressed air leakages in the plant, saving of 0.766 MU.
- iii. Reduce the pressure setting of instrument air compressor, saving of 0.674 MU.
- iv. Replace fluorescent and metal halide lamps with LED, saving of 0.011 MU.
- Optimise the usage of artificial lighting in the plant, saving of 0.002 MU.
- vi. Operate the raw water pumps with equal throttling in both pumps, saving of 0.0001 MU.

#### **Under Implementation Projects:**

- Optimise performance of CEP's in all units.
- ii. Replace timer based drain valves with level sensor based drain valves.
- iii. Optimise seal air fan performance by installing VFD.
- iv. Optimise the operation of LDO Pump by installing VFD.
- v. Optimise instrument air system by avoiding desiccant type drying.
- vi. Install VFD for chilled water pumps.

#### **CPP 1215MW Jharsuguda:**

- Cooling tower fan blade angle correction in order to increase airflow in 22 fans. Improvement of air flow from 16.7 lacm<sup>3</sup>/Hr. to 18.9 Lacm<sup>3</sup>/Hr resulting improvement in turbine heat rate by 9.9 Kcal/Kwh.
- ii. Sliding pressure operation during partial load to save 5.2 Kcal/Kwh in heat rate and 200 Kw in BFP consumption.
- iii. Reduction of unaccounted loss by 10 Kcal and reduce turbine heat rate from 2,098 to 2,088 Kcal.
- iv. Establish mill operating window to improve air fuel ratio up to 1.1.
- v. Periodic condenser tube cleaning by bullet to reduce condenser differential pressure up to design level and improve vacuum
- vi. Optimisation of RH spray and RH steam temperature, water chemistry, running of drives & stopping idle equipment.
- vii. U#5,6,9,2,1 partial FF bag replacement with new bag (emission reduced from 42 Mg/m³ to 30 Mg/m³)
- viii. Sp. Raw consumption reduce from 2.03 to 2.00 by maintaining COC (cycle of concentration) and leakage arresting in raw water pipeline.
- ix. Stopping of one CW pump load <90MW.

#### **Aluminium Business: Smelter Plant Jharsuguda: Electrical Energy:**

# DC Energy saving

- Cell lining design modification carried out for energy saving.
- ii. 100% graphitised cathode pot implementation.

#### AC auxiliary Energy saving

- Variable frequency drive installed in cast house cooling tower with temperature feedback control.
- ii. Variable frequency drive installed in pump house for flow control and optimisation.
- iii. Implementation of 100% LED street lights in Smelter Plant-1.
- iv. Replacement of conventional lights with LED lights in office and MCC area.
- Installation of 10 KW capacity Solar Power Plant.

#### Lanjigarh - Refinery:

The following major energy conservation measures are taken at Lanjigarh:-

- Conversion of conventional light to LED.
- ii. Downsizing the MP Blower.

#### Lanjigarh - CGPP:

- Cooling tower fan hub modification.
- ii. Replacement of recirculation valve in BFP.
- iii. LED conversion from conventional lighting system in switchyards.

#### (B) ADDITIONAL INVESTMENTS AND PROPOSALS, IF ANY, BEING IMPLEMENTED FOR REDUCTION OF **CONSUMPTION OF ENERGY**

# Oil & Gas Business:

#### **Rajasthan Operations:**

- Installation of 2 MW GEGs at NI-02 field.
- Conversion of second diesel driven engine to electric driven engine at MS-01.
- iii. Installation of 29 25W Solar LED lights in 8 Oil Fields.
- iv. Installation of LED Street lights at RGT & Gas Well Pads.
- Installation of LED tube lights at RGT & Gas Well pads.

#### **Ravva Operations:**

- Installation of 24V, 0.37KW DC Motor instead motive fluid of existing gas lift to reduce gas consumption and cold venting at offshore platforms.
- Procured and installed 150nos of 60W LED light fittings for replacing of existing 70W HPSV lamps in Plant installed 500nos of 20W LED light fittings for replacing of existing 40W fluorescent lamps in LQ & plant procured and installed 40nos. of 150W LED light fittings for replacing of existing 250W HPSV Lights in Plant.

#### **Cambay Operations:**

Installation of LED lights at Perimeter wall.

#### **Copper Business:**

- VFD for SAP-1 SFO-14 and SFO-9 blower (500KW).
- Vapor absorption machine for chilled water application.
- iii. Replacement of conventional lights into LED lights.
- iv. Alternate green fuel for furnace oil.
- Planning to setup sewage treatment plant to treat municipal sewage to generate fresh water for plant & nearby villages' usage.
- vi. Planning to setup desalination plant to self-sustain on the water requirement.

# **Iron Ore Business:**

#### VAB:

- Replacement of conventional light fixtures with LED across Value Addition Business.
- Replacement of cooling tower pump at PID-1 with energy efficient pump.
- iii. Replacement of return water pump at PID-1 with energy efficient pump.
- iv. Replacement of compressor at PID-2 with energy efficient compressors.

Utilising 40 KVA DG in place of 125KVA and keeping 125KVA as stand-by - 80% load factories diesel savings of 8L/hr. i.e. 64L/day.

# Power Business: 2400MW Jharsuguda:

- i. New design eco tube replaced in boiler to reduce forced outage.
- Generator health monitoring device installed in Unit#3 to detect premature failure of generator hence improved reliability.
- iii. CFD analysis & implementation of its recommendation for APC reduction by 750KW & SHR improvement by 5Kcal/Kwh.

#### 1215MW Jharsuguda:

- i. Installation of VFD's for HT DRIVES.
- ii. Green cooling tower installation.
- iii. Automatic condenser ball cleaning system for condenser.
- iv. Additional Economiser coil installation.
- v. Installation of energy efficient motors.

# **Aluminium Business:** Refinery:

SI. No.	Project	Target Area	Estimated Savings (KWH)
1	Replacement or Maintenance of Faulty Steam traps	DIG, EVAP, White 1, Red 2	1,359,000.00
2	Installation of rooftop 100 KWp Solar Power panel	Admin building	128,109.60
3	VFD conversion of Good Quality Condensate pump: 29-PU-0001B	Evaporation	60,924.60
4	Installation of Test Liquor VFD: 26-PU-0010	Evaporation	163,080.00
5	Running combination of most efficient pumps I & II in Raw water pumping station at Lanjigarh	Lanjigarh Pump House	452,600.00
6	Pulley replacement of oversized pumps to attain BEP	White 1	3,146,400.00
7	Energy management system and SCADA implementation in entire refinery	Refinery	-
8	Replacement of conventional lighting system with LED	Area lighting, Office lighting and Floodlight	272,160.00
9	Use of blowers instead of compressed air in Sump pumps	PDS, DIG	7,455.577.00
CG	PP:		
10	Turbine #1 vacuum improvement	Turbine #1	13,453,085.00
11	Increase in pump efficiency by applying corrosion resistance coating in CW pump impellers	CW Pump	82,992.00
12	Cooling Tower performance improvement	Cooling Tower	162,000.00
13	Installation of LED lights	Boiler & AVR	9,597.60

# (C) IMPACT OF ABOVE MEASURES IN A) AND B) FOR REDUCTION OF ENERGY CONSUMPTION AND CONSEQUENT IMPACT OF COST OF PRODUCTION OF GOODS

#### Oil & Gas Business:

#### **Rajasthan Operations:**

- Recovery of Hydrocarbon (associated gas) by VRU operations.
- Conservation of diesel and electricity by installation of GEGs at satellite fields.
- iii. Reduction in consumption of power, due to installation of solar LED lights.

#### **Ravva Operations:**

- i. 24V, 0.37KW DC motor installed for OSI chemical pumping at RC platform and corresponding cold venting gas reduced per day by 100SCM approx. same amount of gas exports as sales and saving per annum is ₹ 4 lakh per annum.
- ii. Procured and installed 150 nos. of 60W LED light fittings for replacing of existing 70 W HPSV lamps in plant and would corresponding to saving of 6,570 KWH/year and cost saving is ₹ 32,850/Annum.
- iii. Procured and installed 500 nos. of 20W LED light fittings for replacing of existing 40W fluorescent lamps in LQ & plant and would corresponding to saving of 43,800 KWH/year and cost saving is ₹ 2,19,000/annum.
- iv. Procured and installed 40nos of 150 W LED light fittings for replacing of existing 250 W HPSV Lights in plant and would corresponding to saving of 17,520 KWH/year. And cost saving is ₹87,600/annum.

#### **Cambay Operations:**

i. Installation of LED lights at Perimeter wall: Total power savings due to the initiative would be 36,800 KWH/year and cost savings of ₹ 2.8 lakh/year.

## **Iron Ore Business:**

#### VAB:

- The energy conservation measures undertaken in various areas in 2018-19 have an annual saving potential of 1,117 MWh of electricity per annum for VAB.
- The energy conservation measures proposed in various areas in 2019-20 have an annual saving potential of 2,688 MWh of electricity per annum for VAB.

#### IOK:

- The energy conservation measures undertaken in various areas in 2018-19 have an annual saving potential of 19.51 KL of diesel & 86.4 MWh of electricity for IOK.
- ii. The proposals being implemented for energy conservation measures have an annual saving potential of 22.59 KL of diesel for IOK.

# Power Business: 2400MW Jharsuguda:

- i. Lower SOC achieved 0.135 ml/Kwh in Q1 FY19.
- ii. Lower % DM makeup achieved 0.40 % in Q1 FY19.
- iii. Lower SCC achieved 761 gm/Kwh in July, 2018.
- iv. Lower DM Makeup achieved 0.32% in February, 2019.

#### 1215MW Jharsuguda:

0.28% APC (auxiliary power consumption) improvement

Achieved best figures in APC since commissioning

Yearly	9.23	FY-19
Half Yearly	9.05	H2-19
Quarterly	8.94	Q4 FY-18
Month	8.93	Jan-19

#### **Aluminium Business: CPP Plant Jharsuguda:**

- i. 0.12% Auxiliary Power Reduction at power plant
- Reduction of 0.05 ml/MWh specific oil consumption in power business.

#### (D) THE STEPS TAKEN BY THE COMPANY FOR UTILISING **ALTERNATE SOURCES OF ENERGY**

# Oil & Gas Business:

#### **Rajasthan Operations:**

A proposal for setting up a 20 MW solar power generation plant is under consideration.

#### **Copper Business:**

- Planning to Setup 9 MW solar power plant
- ii. Purchased Renewable Energy Certificates of non-solar 23,019 certificates as per Tamil Nadu Electricity Regulatory Commission regulations.
- iii. Planning to setup sewage treatment plant to treat municipal sewage to generate fresh water for plant & nearby villages' usage.
- iv. Planning to setup a natural gas terminal for alternate usage of FO & LPG.
- Planning to setup desalination plant to self-sustain on the water requirement.

#### **Aluminium Business:** Lanjigarh Refinery:

SI.	Project Description	Targeted Area of	Estimate Annual
No.		Improvement	Savings (KWH)
1	Solar plant installation	Solar plant for supply to admin offices	128,110

#### Form of Disclosure of Particulars with Respect to **Technology Absorption Research and Development** (R & D)

#### **Copper Business:**

#### Specific areas in which R&D carried out by the Company

- Alternate Material for pig iron
- Recovering of copper sulphate from the electrolyte
- iii. Minor metals recovery from concentrate

#### **Iron Ore Business:**

#### VAB:

#### Specific areas in which R&D carried out by the Company

- Sinter plant reduction in coke breeze consumption by utilisation of blast furnace waste dust.
- ii. Oxygen enrichment in sinter plant.
- iii. Pulverised coal injection in Blast furnace-1 & 2.

#### Benefits as a result of R&D

- Reduction in coke breeze consumption by 2 kg/ton of sinter.
- Reduction in coke breeze consumption and reduction in internal return fines generation.
- iii. Replacement of coal with coke at a ratio of 0.8.

#### **Aluminium Business: CPP Plant Jharsuguda:**

i. LED Installation in CPP all over the plant.

#### **Technology Absorption, Adaptation and Innovation**

Efforts in brief made towards Oil & Gas Business: technology absorption, adaptation and innovation

#### **Rajasthan Operations:**

- · Proactive and non-destructive inspection of 33KV OHL line poles and conductors using drone technology as part of electrical safety.
- · Real time plant employee head count system has been implemented at MPT, AW#8, BH#6, BWP#15, SUPP, PSY, CPF and RGT. This system provides display of relevant plant employee head count in real time. Client/user displays for monitoring/information is provided in MPT CCR Control room and access control room desk at reception building outside Gate 1 of MPT. RGT display is provided at RGT control room and RGT security control room.
- · Real time plant head count information will be of immense use during the HSE mustering exercise.

#### **Iron Ore Business:**

#### VAB:

- a) Pulverised coal injection in blast furnace 1 & 2.
- b) Oxygen enrichment in sinter plant and blast furnace 1 & 2.
- c) Use of high thermal conductivity bricks for oven bed.
- d) Hydraulic compacting station in Met coke division.

#### **Power Business:**

#### 2400MW Jharsuguda:

• Implementation of online boiler tube leakage detection system

#### 1215MW Jharsuguda:

- Automatic online condenser ball cleaning system
- Economiser coil addition
- · Green cooling tower

#### **Aluminium Business:**

#### **CPP Plant Jharsuguda:**

- · Selective soot blowing in boilers
- · Condenser bullet cleaning
- · Isolation of SWAS grab sample
- · Condenser tube cleaning

Benefits derived as a result of above efforts e.g. product VAB: improvement, cost reduction, a) Reduction in coke rate resulting reduced COP. product development, import substitution

#### **Iron Ore Business:**

- b) Increase in productivity and reduction in coke rate.
- c) Improvement in coke oven productivity.
- d) Reduction in fines generation.

#### **Power Business:**

# 2400MW Jharsuguda:

- Reduction in forced outage time.
- · Increase in station availability.

#### 1215MW Jharsuguda:

- Improvement in condenser vacuum from 87.5 to 88 KPA.
- Reduction in turbine heat rate by 10 Kcal & DM Make up.
- Reduction of APC from 9.51% to 9.23%.

#### **Aluminium Business:**

## **CPP Plant Jharsuguda:**

- · Reduction in specific raw water consumption & DM Make up.
- · Reduction of APC from 9.51% to 9.23%.
- · Condenser tube cleaning for vacuum improvement

#### In case of imported technology (imported during the last 5 years reckoned from the beginning of the financial year), the following information may be furnished:

	Technology imported Year of import	Has technology been fully absorbed
Oil & Gas Business	Ravva Operations: • Fluid based sealant technology 2014-15	Yes
	<ul> <li>Formation Isolation Valves (FIVs).</li> </ul>	
Copper Division	No	
Iron Ore - Value Addition Business:	Hydraulic compacting station in MCD Battery-1. 2017 [MCD]	Yes
	Pulverised coal injection in Blast furnace 1& 2. 2017 [PID-1]	
Power Business	No	
Aluminium Business	No	

Disclosure of particulars with respect to conservation of energy

Mark																						
Part	Particulars	Unit		Year Ended March 31, 2018	Year Ended March 31, 2019									Year Inded March 2018	Year inded March 2018		Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018
National   National	Business Unit		9	as	Copp						lron-0						Power			Aluminium	ium	
Optionality options         State of pages         1 month options         1 month							Met Coke Division	Pig Iron Division	Power Plant (WHR)			Met Coke Division	Pig Iron Division	Power Plant (WHR)		Mining (arnataka			Lanjigarh	Æ	Jharsuguda	epr
Page	A. POWER AND FUEL CONSUMPTION																					
	Electricity																					
	Purchase Unit	MWH		03754.98		105072.26		1,89,488	155	2,696	150	893	1,59,950	102	17,154	207	311856	129067.76	3573.00	5642.00 2	2890432.34	1117767.00
	Total Amount (Exc Demand Chgs)	₹crore	109.60	77.31	23.74	45.18	0.31	7.77	0.05	1.34	0.15	0.40	6.85	0.04	7.97	0.17	141.05	61.82	2.04	3.22	1803.32	672.07
WINTH   68741154   6404402   3.86 5 31011   62	Rate/Unit	₹/KWH	7.65	7.45	4.35	4.30	0.41	0.41	2.94	4.97	10.27	0.58	0.43	3.93	4.65	8.22	4.52	4.79	5.70	5.70	6.24	6.01
Figure   F	Own generation Unit*	MWH		349449.26		531011.62	0.35	113.10	434185	,		0.01		3,88,893	1315		781505 10	1029608.99	435291	402228.00	19152282 16	16668667.00
KIL   KIL	Unit per unit of fuel	₹/Unit, gms/Unit			268.36	499.80						,		,	,		810		2.76	2.52	802	
Kit   Kit	Cost/Unit	₹/MWH, ₹/KWH			19.90	4.50	22.43	18.40				20.12	16.07		18.27		4.28	2.82	3.46	3.18	3.78	2.88
Kt   Kt   Kt   Kt   Kt   Kt   Kt   Kt	Furnace Oil																					
Frince   F	Quantity**	₹			5094.00	18518.25												3.50	107328.67	84753.52	34865.72	30365.82
	Total Amount	₹crore			17.21	53.90												0.02	379.40	215.99	130.36	85.97
KL   ML   ML   ML   ML   ML   ML   ML	Average Cost per litre	₹/Lit	•		33.78	29.11											٠	51.81	35.35	25.48	37.39	28.31
	Diesel Oil																					
Vinit   Vini	Quantity	M	9751	10567.29	116.67	630.18	19.00	75.944	3.720	673	4,997	3.835	45.994	1.800	15,124	2,436	511	445.58	1017.05	414.71	8692.54	5001.81
	Total Amount	₹crore	49.80	52.14	0.73	3.97	0.12	0.48	0.02	4.24	28.29	0.02	0.26	0.01	80.56	13.16	2.74	1.76	6.45	1.57	49.91	19.38
IPA   IMT   IMT	Average Cost per litre / Unit per litre of Oil	₹/Lit	51.07	49.34	62.43	62.93	65.24	62.98	61.04	62.91	56.61	55.04	55.55	53.80	53.00	54.00		39.58	63.43	37.74	57.41	38.75
MIT   1.0   4.230.64   9303.58   94.57     65.97   .	Cost per Unit		*				,	,						٠				٠	•			•
\$\frac{7}{8}\triangle \text{Kircle}\$         \$\frac{7}{2}\triangle \text{Circle}\$         \$\frac{7}{2}\triangle \text{Circle}\$         \$\frac{7}{2}\triangle \text{Circle}\$         \$\frac{4}{2}\triangle \tr	L.P.G./LNG/Propane/IPA																					
E crore         1 43.96         40.80         0.52         .         6.29         .         0.29         . </td <td>Quantity-(LPG)</td> <td>™</td> <td>٠</td> <td></td> <td>4230.64</td> <td>9303.58</td> <td></td> <td>94.57</td> <td>٠</td> <td></td> <td></td> <td></td> <td>63.97</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Quantity-(LPG)	™	٠		4230.64	9303.58		94.57	٠				63.97									
\$\frac{7}{8}\triangle \text{A}\$         \$\frac{2}{8}\triangle \text{A}\$         \$\frac{5}{8}\triangle \text{A}\$         \$\frac{5}{8}\t	Total Amount	₹crore		•	18.59	40.80		0.52					0.29				•	•	•		•	•
A/IPA         MT         S66.15         S6.15         S	Average Cost per Kg	₹/Kg			43.95	43.85		55.51					45.56									
MI	L.P.G./LNG/Propane/IPA																					
\$ crore         . </td <td>Quantity(LNG)</td> <td>ΕM</td> <td></td> <td></td> <td></td> <td>556.15</td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>•</td> <td></td>	Quantity(LNG)	ΕM				556.15											•				•	
\$\frac{1}{3}\$   NT         \$\frac{1}{4}\$   NOO.00         \$\frac{1}{4}\$   NT         \$\frac{1}{4}\$   NOO.00	Total Amount	₹crore	•			2.61										•	•				•	•
#IPA         MT         . <td>Average Cost per MT</td> <td>H~</td> <td>•</td> <td></td> <td>•</td> <td>47000.00</td> <td>,</td> <td>,</td> <td>,</td> <td>,</td> <td>,</td> <td>٠</td> <td>٠</td> <td>٠</td> <td>٠</td> <td></td> <td></td> <td></td> <td></td> <td>٠</td> <td></td> <td>•</td>	Average Cost per MT	H~	•		•	47000.00	,	,	,	,	,	٠	٠	٠	٠					٠		•
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	L.P.G./LNG/Propane/IPA																					
₹ loore         .         3.19         . <th< td=""><td>Quantity-(IPA)</td><td>™</td><td>٠</td><td></td><td>415.29</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td></th<>	Quantity-(IPA)	™	٠		415.29												•					
	Total Amount	₹ crore			3.19									٠			٠		٠		•	•
MT	Average Cost per Kg	₹/Kg	•		76.78		,	,		r				٠					•			•
MT         .         .         246224.40         .	Natural Briqutte/ Coal																					
₹crore	Quantity	™	1			246224.40	1	,										802329.52	783270.83	751279.95 13	13609055.24 14005625.45	1005625.45
H H	Total Amount	₹crore				159.13												158.68	303.77	255.75	5163.47	4026.18
	Average Cost per MT	H~	•		•	6462.70					•						•	1977.70	3878.16	3404.13	3794.14	2874.69

Particulars	Unit	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018	Year Ended March 31, 2019	Year Ended March 31, 2018								
Business Unit		Oil & Gas	as	Copper	yer.					Iron-Ore	Ore					Power			Aluminium	ium	
						Met Coke Division	Pig Iron Division	Power Plant (WHR)	Mining Goa k	Mining Karnataka	Met Coke Division	Pig Iron Division	Power Plant (WHR)	Mining Goa	Mining Karnataka			Lanjigarh	ے	Jharsuguda	lda
B. CONSUMPTION PER MT OF PRODUCTION																					
Copper /Iron-Ore																					
Electricity	MWH/MT				1.57	0.016	0.277	9.4%		0.00003	0.016	0.248	10.2%	0.005	0.00010						
Furnace Oil	KL/MT	•			0.05												,				
Diesel	KL/MT			•																	
L.P.G./Propane/IPA	TM/MT				0.02												,				
Production of Cathode	MT			87128.00	404086.00																
Alumina																					
Electricity	KWH/MT																	235.49	273.14		
Coal for Steam	TM/MT																	0.261	0.258		
Furnance Oil for Calcinaton	Kg/MT									٠								71.23	69.92		
Hot Metal																					
Electricty (Total AC for electrolysis and auxillary energy	KWH/MT	*			,					•			,	,						14035.52	14450.84
Billet (including alloy rods)																					
Electricity	KWH/MT																			305.32	331.70
Furnace Oil	¥									•											
Ingots																					
Electricity	KWH/MT									•										32.96	28.37
Furnace Oil	¥									•								•			
Wire Rods																					
Electricity	KWH/MT	•	•	1	•					•								•	•	187.79	147.04
Furnace Oil	∀									•								•			

\* This includes the WHRB Generation also. \*\*This includes the FO consumed in CPP also. \*\*\* This includes generation from DG set also.

# **Report on Corporate Governance**

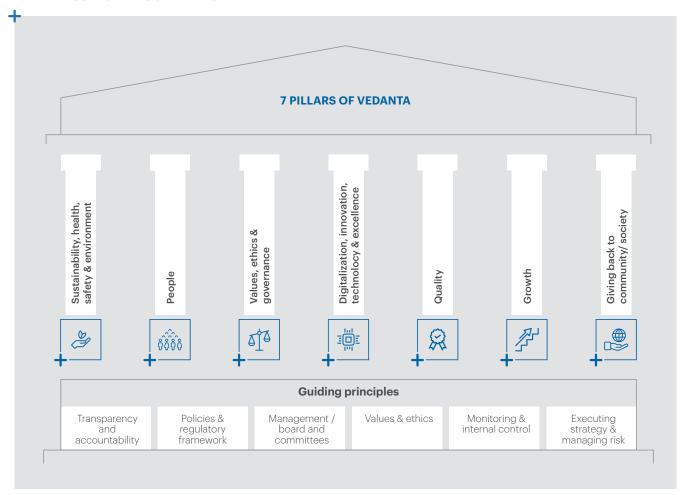
#### **COMPANY'S PHILOSOPHY ON CODE OF GOVERNANCE**

Collective consciousness of the organisation to excel in all management practices to enable wealth maximisation in an all encompassing manner for society in entirety is the hallmark of governance at Vedanta.

Our corporate governance is a reflection of our value system and seven pillars. Through effective corporate governance, your Board seeks to embed and sustain a culture that will enable Vedanta to fulfil its purpose and achieve its long-term strategic objectives, by building durable partnerships and upholding its core values of safety, teamwork, excellence, respect and integrity.

As a good corporate citizen, the Company is dedicated towards following the global best practices built through conscience, fairness, transparency and accountability in building confidence of its various stakeholders in it, thereby paving the way for its enduring success.

# **VEDANTA CORPORATE GOVERNANCE**



#### **Compliance with Global Guidelines and Best Practices**

Vedanta has been a front runner in complying with global best practices in corporate governance.

The Securities and Exchange Board of India ('SEBI') accepted some of the recommendations with or without modifications on March 28, 2018 of the Kotak Committee on Corporate Governance and consequently amended the SEBI (Listing Obligations and Disclosure Requirements), Regulations, 2015 (Listing Regulations). Your Company welcomes this progressive step of SEBI and is substantially in compliance with the recommendations.

During the year we were ranked among the top companies in "India Disclosure Index", 2018, an annual report released by FTI Consulting. The report tracks corporate disclosure practices among India's top 100 publicly listed corporations in terms of voluntary disclosures, board quality and risk disclosures.

The Company focuses at following the global best practices. The governance standards are benchmarked globally and we strive to adopt the emerging best practices being followed worldwide.

Besides complying with the statutory guidelines, the Company has voluntarily adopted and evolved various practices of governance conforming to highest ethical and responsible standards of business. These practices reflect the way business is conducted and value is generated.

#### **Integrated Reporting**

Since its inception, Vedanta Limited has taken conscious efforts to operate in a manner responsible to all stakeholders. The organisation has maintained the highest standards of corporate governance all through its operations. Every decision and action at the Company is taken after considering the impact they may have on the Company's relevant stakeholder groups. This is a true reflection of the organisation's integrated thinking, which takes into account all the resources and relationships that affects Company's ability to create sustained value. These resources and relationships, termed 'Capitals', are stocks of value enabling Company's operations.

While operating, your Company actively considers its external environment, the opportunities and challenges, the organisational strategy to respond to these externalities and the outputs and outcomes it produces basis its business activities. Starting FY 2018, the Company has proactively commenced reporting its annual performance and strategy using an integrated report, using content elements and guiding principles outlined in the International Integrated Reporting framework. The organisation has continued its Integrated Reporting journey and its FY 2019 performance and forward-looking strategy have been elucidated in the current Integrated Annual Report. The report takes into account the following six capitals while reporting:





#### **FINANCIAL CAPITAL**

The Company is focussed on optimising capital allocation and maintaining a strong balance sheet while generating strong FCFs. It also reviews all investments, taking into account the Group's financial resources with a view to maximising returns to shareholders.



#### **NATURAL CAPITAL**

India and Africa have favourable geology and mineral potential and these regions provide the Company with world-class mining assets, which are structurally at low cost and have extensive R&R. Additionally, operating the Company's mines requires a range of resources, including water and energy, which the Company aims to use prudently and sustainably.



# **HUMAN CAPITAL**

The Company has employees from across the world and it is committed to provide them with a safe and healthy work environment. In addition, by creating a culture that nurtures innovation, creativity and diversity, it enables them to grow personally and professionally while also helping to meet our business goals.



## INTELLECTUAL CAPITAL

As a relatively young Company, the Company is keen to embrace technological developments. The Company is setting up a centre of technological excellence in South Africa, enabling them to nurture and implement innovative ideas across the business, which lead to operational improvements.



### **SOCIAL AND RELATIONSHIP CAPITAL**

The Company aims to forge strong partnerships by engaging with its key stakeholders, including shareholders and lenders, suppliers and contractors, employees, governments, communities and the society in general. These relationships help maintain and strengthen Vedanta's licence to operate.



# **MANUFACTURED CAPITAL**

The Company invests in assets including best-in-class equipment and machinery to ensure it operates as efficiently and safely as possible both at its current operations and in its expansion projects. This also supports its strong and sustainable cash flow generation.

#### **Vedanta's Sustainability Reporting Journey**

Our sustainable development journey continues to create value for our stakeholders. We have invested our time and resources in introspecting our actions; we have achieved our targets and formulated ambitious new ones; we have adopted global best practices and taken innovative leaps; we have aligned our standards with industry benchmarks and charted some of our own. We have done all this and continue to do it with a singular agenda: ensuring long-term growth for all stakeholders.

We have been publishing the Sustainability Report for over a decade now. The reports are structured around our Sustainable Development Model's pillars of Responsible Stewardship, Building Strong Relationships, Adding and Sharing Value, and Strategic Communications.

Vedanta applies its sustainability performance reporting criteria based on Sustainability Reporting Standards of Global Reporting Initiative (GRI Standards) including the Mining and Metals and Oil & Gas Sector Disclosures, National Voluntary

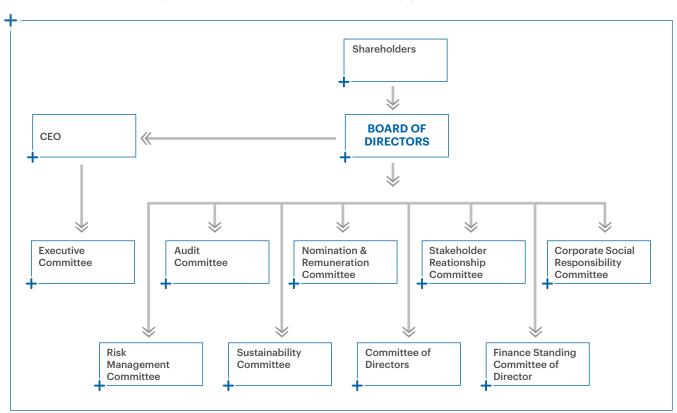
# **Report on Corporate Governance continued**

Guidelines on Social, Environmental and Economic Responsibilities of Business (NVG) framed by the Ministry of Corporate Affairs (MCA), Government of India, United Nations Global Compact (UNGC) principles, International Council on Mining and Metals (ICMM) and Sustainable Development Goal frameworks for the Company as detailed in the 'Scope, Boundary and Limitations'. It reports our approach and disclosure towards triple bottom line principles - People, Planet and Profit.

The Sustainability Report of the Company can be accessed at https://www.vedantalimited.com

#### **BOARD OF DIRECTORS**

The Company's Board of Directors provides entrepreneurial leadership for the Group and strategic direction to the management. It is collectively responsible for promoting the long-term success of the Group through the creation and delivery of sustainable shareholder value. The reporting structure, as shown below, between the Board, Board Committees and Management Executive Committees forms the backbone of the Group's Corporate Governance framework. As part of its decision-making processes, the Board considers the long-term consequences of its decisions, the interests of various stakeholders including employees, the impact of the Group's operations on the environment and the need to conduct its business ethically. This is achieved through a prudent and robust risk management framework, internal controls and strong governance processes.



#### Size, Composition and Tenure of the Board

It is vital to have a well-balanced Board with a combination of Executive, Non-Executive and Independent Directors on the Board of the Company to ensure Board's independence and to distinct its functions of management and governance.

Effective management and good stewardship are led by the Board. The Board believes there is an appropriate balance between Executive and Non-Executive Directors to promote shareholder interests and govern Vedanta effectively. As at March 31, 2019, the Board comprises of ten members, consisting of one Executive Chairman, three Executive Directors, one Non-Executive Woman Director and five Non-Executive Independent Directors including one Woman Director.

Executive Chairman	10%	
Executive Director	30%	
Non- Executive Director	10%	
Independent Director	50%	
Men	80%	
Women	20%	

#### INTEGRATED REPOR

#### The details of tenure of the Directors as on March 31, 2019 is given below:

Name of Director	Initial Date of Appointment	Current Tenure From	Current Tenure Till	Tenure as on March 31, 2019 (in years) (Months / 12)
<b>Executive Directors</b>				
Mr. Navin Agarwal	August 17, 2013	August 1, 2018	July 31, 2023	5.58
Mr. Tarun Jain (1)	April 1, 2014	April 1, 2019	March 31, 2020	5.00
Mr. G. R. Arun Kumar	November 22, 2016	November 22, 2016	November 21, 2019	2.33
Mr. S. Venkatakrishnan	March 1, 2019	March 1, 2019	August 31, 2021	0.08
Non-Executive Independ	ent Directors			
Mr. Ravi Kant (2)	January 29, 2015	January 29, 2018	May 31, 2019	4.17
Mr. K. Venkataramanan	April 1, 2017	April 1, 2017	March 31, 2020	2.00
Ms. Lalita D. Gupte (2)	January 29, 2015	January 29, 2018	August 10, 2021	4.17
Mr. Aman Mehta	May 17, 2017	May 17, 2017	May 16, 2020	1.83
Mr. U. K. Sinha	March 13, 2018	March 13, 2018	August 10, 2021	1.00
<b>Non-Executive Directors</b>				
Ms. Priya Agarwal	May 17, 2017	May 17, 2017	NA	1.83

## **TENURE OF DIRECTORS**



#### **Diversity and Inclusion**

The Board continues to recognise that an appropriate mix of diversity and skills is key for introducing different perspectives into Board debate and for better anticipating the risks and opportunities in building a long-term sustainable business. As set out in the charts below, each member of the Board offers a range of core skills and experience that is relevant to the successful operation of the Group.

The below table summarises the key qualifications, skills and attributes which are taken into consideration while nominating to serve on the Board.

Business Leadership	Sustainable success in business at a senior executive level
Financial Expertise	Proficiency in financial accounting and reporting, corporate finance and internal controls, corporate funding, and associated risks
Natural Resources	Senior executive experience in a large, global mining and oil & gas organisations involved in the discovery, acquisition, development and marketing of natural resources
Capital Projects	Experience working in an industry with projects involving large-scale long-cycle capital outlays
Global Experience	Experience in multiple global locations, exposed to a range of political, cultural, regulatory and business environments
ESG	Familiarity with issues associated with workplace health and safety, asset integrity, environment and social responsibility, and communities
Corporate Governance	Experience with a major organisation that demonstrates rigorous governance standards
Mergers & Acquisition	Experience in corporate transactions and actions and joint ventures
Government & International Relations	Interaction with government and regulators and involvement in public policy decisions
Technology/Digital	A strong understanding of technology and innovation, and the development and implementation of initiatives to enhance production

<sup>(1)</sup> W.e.f. April 1, 2019, Mr. Tarun Jain has been re-appointed as a Non-Executive Director;

<sup>(2)</sup> Mr. Ravi Kant (on January 28, 2014) and Ms. Lalita D. Gupte (on March 29, 2014) were appointed in 'casual vacancy' as Independent Directors. On January 29, 2015, they were appointed as Independent Directors under Section 149 of the Companies Act, 2013 for a fixed term of 3 years. Further, the appointment was confirmed by the Shareholders by way of resolution passed through Postal Ballot on March 30, 2015.

# **Report on Corporate Governance continued**

In the table below, the specific areas of focus or expertise of individual board members have been highlighted. However, the absence of a mark against a member's name does not necessarily mean the member does not possess the corresponding qualification or skills:

					Areas of E	xpertise				
Name of Director	Business Leadership	Financial Expertise	Natural Resources	Capital Projects	Global Experience	ESG	Corporate Governance	Mergers & Acquisition	Government & International relations	Technology/ Digital
Mr. Navin Agarwal	<b>√</b>	<b>√</b>	<b>V</b>	$\sqrt{}$	√	$\sqrt{}$	√	V	$\sqrt{}$	
Mr. Tarun Jain	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Mr. S. Venkatakrishnan	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Mr. G. R. Arun Kumar	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$		$\sqrt{}$
Ms. Priya Agarwal	$\sqrt{}$		$\sqrt{}$		$\sqrt{}$		$\sqrt{}$			$\sqrt{}$
Ms. Lalita D. Gupte	$\sqrt{}$	$\sqrt{}$					$\sqrt{}$			
Mr. Ravi Kant	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Mr. K. Venkataramanan	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\checkmark$		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$
Mr. U. K. Sinha	$\sqrt{}$	$\sqrt{}$				$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	
Mr. Aman Mehta	$\sqrt{}$	$\sqrt{}$			$\sqrt{}$		$\sqrt{}$	$\sqrt{}$		

Detailed profile of the Directors can be viewed on the website at https://www.vedantalimited.com

#### **Process for Board Appointments**

The Board recognises the benefit that diversity in all its forms, including but not limited to age, gender, race, ethnic origin, cultural and educational background, can bring to Board debate and perspective. The Board is responsible for the selection of new directors and has delegated the selection process to the Nomination & Remuneration Committee (NRC). The NRC has a prescribed process for the selection and appointment of new Directors and Key Managerial Personnel (KMP). The Committee, based on a well-defined criterion, makes recommendations to the Board on the induction of new directors and KMPs.

## **Board Familiarisation and Induction Programme**

To meet our responsibilities, it is imperative for each of our Board Members to understand their role and duties. On being appointed to the Board, each Director undergoes a comprehensive induction programme which is tailored to their individual needs and also intends to provide an introduction to the Company's vision, mission, values, operations, challenges, structure and risks. Further, through regular formal reporting process and timely sharing of updates on the Company, it ensures that our Directors stay updated about any significant changes therein on a continual basis.

#### **ORIENTATION PROGRAMME UPON INDUCTION OF NEW DIRECTORS**



Visits to plants and business locations are organised periodically to provide an insight of the Company's operations.



Interactive sessions with senior management, business & functional heads.



Familiarisation pack is uploaded on a secured online portal which can be accessed only by the Board members. The pack includes various documents viz. a viz. Organisational structure, the Company's history and milestones, Memorandum & Articles of Association, latest Annual Report including Form 20F, Code of Conduct, Investor Presentations, CEO/ CFO reports, Minutes of previous meetings, Policies & Charters etc.

#### OTHER INITIATIVES TO UPDATE THE DIRECTORS **ON A CONTINUAL BASIS**



An active communication channel with executive management which allows free flow of communication among directors.



Presentations on regulatory and business environment, business plan, risk management framework, internal audit & controls, cyber security, HSE, compliance reports, tax & treasury reports, key accounting matters, CSR, HR initiatives, Digitalisation & Technology initiatives and company policies and other relevant issues.



Update on Company's and its subsidiaries performance/ operations/ updates/ major developments affecting the business by various reports on quarterly basis along with major stock exchange announcements, press releases etc.

The detailed familiarisation programme can be accessed on the Company's website at https://www.vedantalimited.com/CorporateGovernance

#### **Membership Term**

The Board constantly evaluates the contribution of members and periodically shares updates with the shareholders about reappointments consistent with the applicable laws.

#### **Succession Planning**

Succession Planning is essential for an organisation since it benefits in identifying key roles and mapping out ways to ensure that the organisation has the right people with the right blend of skills, aptitude, expertise and experiences, in the right place and at the right time.

As per the NRC Policy of the Company, the NRC recommends to the Board a succession plan for the appointments made to the Board of Directors as well as of KMPs. The NRC reviews such plans on an annual basis and recommend revisions, if any, to the Board.

The NRC works with the management and follows the following process for effective succession planning:

- Assessment of potential employees and creation of a leadership pool:
- 2. Development of the talent pool through actions such as involvement in strategic meetings, leadership workshops with top management, coaching, anchoring, job rotations, role enhancement, council memberships and involvement in cross function projects etc.

#### Directors'/KMPs conflicts of interest

The Board has an established procedure for the disclosure of interests and other related matters in line with published guidance under Companies Act, 2013 and Listing Regulations. Each Director/KMP must promptly disclose actual or potential conflicts and any changes, to the Board which are noted at each Board meeting. The Board considers and authorises potential or actual conflicts, as appropriate. Directors with a conflict do not participate in the discussion or vote on the matter in question.

Further, there are no material pecuniary relationships or transactions between the Independent Directors and the Company, except for sitting fees and commission drawn by them for attending the meeting of the Board and Committee(s) thereof.

#### **Separate Meeting of Independent Directors**

Regulation 25 of the Listing Regulations and Section 149 read with Schedule IV of Companies Act, 2013 mandates that the Independent Directors of the Company shall hold at least one meeting in a year, without the presence of Non-Independent Directors and members of the management and requires all the Independent Directors to be present at such meeting.

Your Company recognises the crucial role that the Independent Directors play in ensuring an efficient and transparent work environment, hence all the Independent Directors of the Company separately met twice during the FY 2019 without the presence of any of Non-Independent Directors and/or any of the members of the management on January 31, 2019 and March 28, 2019.

At such meetings the Independent Directors discuss, among other matters flow of information to the Board, governance, compliances, various other Board related matters, identify areas where they need clarity or information from management and to annually review the performance of Non-Independent Directors, the Board as a whole and the Chairman.

In addition to this, the Independent Directors also meet separately with the Statutory Auditors to discuss matters such as key accounting issues, risks, overall control environment and to invite their overall feedback.

The Independent Directors update the Audit and the Board about the outcome of the meetings and actions, if any, required to be taken by the Company.

#### **Performance Evaluation**

The effectiveness of the Board is crucial to the overall success of the Group and the Company undertakes a formal assessment of the operation of the Board, Board Committees and individual Directors & Chairman annually. The evaluation is an important part of the Board's corporate governance framework. In terms of the requirements of the Companies Act, 2013, Listing Regulations and in consonance with Guidance Note on Board Evaluation issued by SEBI in January 2017, the Company carries out a comprehensive externally facilitated Board effectiveness review every year.

This year as well, we engaged the services of a leading consulting firm to conduct the evaluation independently through a secured online IT platform. The involvement of an independent third party has ensured that the process is rigorous and fair, and thereby ensuring continuous improvement in the operation of the Board and committees, as well as the contributions of individual Directors.

The evaluation was based on the criteria and framework adopted by the Nomination and Remuneration Committee (NRC) and the evaluation was led by the Chairman of the NRC.

The evaluation was carried out through tailored questionnaires which were pragmatically structured to draw out significant issues that were relevant to the Board and each of the Board Committees and the individual directors to assist in identifying any areas for improvement as given below:-

## **BOARD AS A WHOLE**

- Assessment of Company as a whole, its performance, its goals etc.;
- Composition and structure;
- · Practices and quality;
- Board Environment;
- · Progress against development areas.

#### **BOARD COMMITTEES**

- Committee Meeting & Information;
- Committee Composition & Operation;
- Specific Committee responsibilities;
- Progress against development areas.

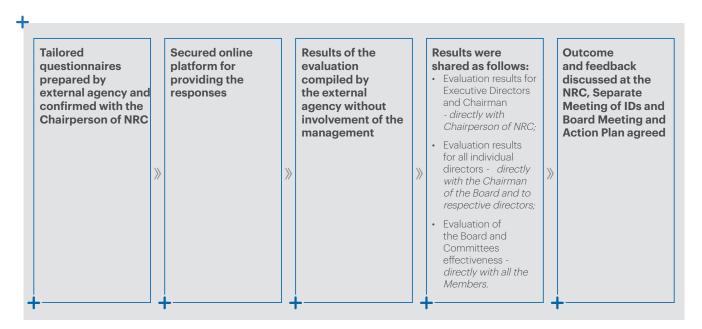
#### INDIVIDUAL **DIRECTORS**

- Preparedness and participation of the Director for the meetings;
- · Understanding of Company's mission, vision, industry, business etc.;
- · Quality of discussions during meetings;
- Effectiveness of Director;
- Quality of the value additions made.

#### **CHAIRMAN**

- Demonstration of effective Leadership;
- Objectivity in discussions;
- Constructive communication & relationship with other directors:
- Contribution in enhancing Company's image;
- Availability and approachability to discuss sensitive matters.

# Report on Corporate Governance continued



#### **Outcome of Performance Evaluation**

An internal review of the progress made on the prior year's planned actions was also undertaken and discussed. And it was noted that the suggestions from the last year evaluation process have been actioned by the Company.

A report in respect of the feedback from the Directors in the Board evaluation questionnaires and suggested recommendations for areas to focus on in the coming year was briefed by the NRC Chairperson and presented to the Board for consideration, following which an action plan was agreed.

Overall, the review determined that the Board as a whole has been functioning as a cohesive body which is well engaged with different perspectives. There is a good balance of skills and experience on the Board to ensure the delivery of stakeholder goals. It was suggested that given the changing external environment, there is need for better allocation of time for discussion on risk and strategy matters. The Board

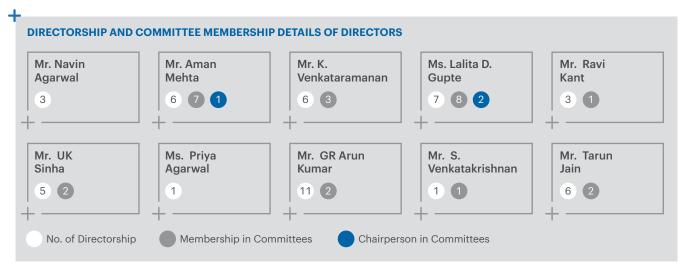
observed that there is a significant value in conducting an annual strategic meeting with business heads and senior management for the same.

The Committees are functioning well and besides the Committee's terms of reference as mandated by law, important issues are being brought up and discussed in the Committee Meetings. However, given the change in the investor profile, the Company may evaluate enhancing the role of Stakeholder Relationship Committee to include stakeholder engagement.

The Members recorded their overall satisfaction on the board evaluation process.

#### **Time commitment & other Directorships**

The Directors are required to commit sufficient time to fulfil their responsibilities. The Directors may serve on a number of other boards provided they continue to demonstrate their commitment to their role as Directors of the Company.



- · The no. of Directorships excludes foreign companies but includes Private Companies and Companies under Section 8 of Companies Act 2013.
- For the membership and chairpersonship in Committees only Audit Committee and Stakeholder Relationship Committee have been considered as per Regulation 26 of the Listing Regulations. Also, all public limited companies, whether listed or not, have been included and all other companies including private limited companies, foreign companies and companies under Section 8 of the Companies Act, 2013 have been excluded.

#### Directorship in other Listed Companies in India:

W (D)	Name of the Listed Entity including Debt Listed Entities	
Name of Director	Name of Entity	Category
Mr. Navin Agarwal (00006303)	Hindustan Zinc Limited	Director
Mr. Aman Mehta (00009364)	Wockhardt Limited	Independent Director
	Tata Consultancy Services Limited	Independent Director
	Tata Steel Limited	Independent Director
	Godrej Consumer Products Limited	Independent Director
	Max Financial Services Limited	Independent Director
Mr. K. Venkataramanan (00001647)	<ul> <li>Kirloskar Pneumatic Company Limited</li> </ul>	Independent Director
	Nilkamal Limited	Independent Director
Ms. Lalita D. Gupte (00043559)	Godrej Properties Limited	Independent Director
	Bharat Forge Limited	Independent Director
	India InfraDebt Limited	Chairperson & Independent Director
	ICICI Lombard General Insurance Company Limited	Chairperson & Independent Director
	TVS Motor Company Limited	Independent Director
Mr. Ravi Kant (00016184)	Hawkins Cooker Limited	Independent Director
Mr. U. K. Sinha (00010336)	Havells India Limited	Independent Director
	Housing Development Finance Corporation Limited	Independent Director
Ms. Priya Agarwal (05162177)	-	_
Mr. Tarun Jain (00006843)	Bharat Aluminium Company Limited	Director
Mr. S. Venkatakrishnan (08364908)	-	-
Mr. G. R. Arun Kumar (01874769)	<ul> <li>Vizag General Cargo Berth Private Limited</li> </ul>	Director

Further, w.r.t. directorship and membership of the Directors, it is hereby confirmed that:

- 1. None of the Directors:
  - a) is a Director in more than 20 companies out of which directorship in public limited companies does not exceed 10 in terms of Section 165 of Companies Act, 2013;
  - b) holds directorship in more than 8 listed entities pursuant to Regulation 17A(1) of Listing Regulations;
  - c) acts as an Independent Director in more than 7 listed entities pursuant to Regulation 17A(1) of Listing Regulations;
  - d) is serving as an Independent Director in more than 3 listed entities incase they are Whole-Time Director of the Company pursuant to Regulation 17A(2) of Listing Regulations;
  - e) is a member of more than 10 board level committees of Indian public limited companies;
  - f) is a Chairperson of more than 5 committees, across all companies in which they are directors;
  - g) who is serving as a Non-Executive Director has attained the age of seventy-five years;
  - h) is related to other Director except Ms. Priya Agarwal. Ms. Agarwal is the daughter of Mr. Navin Agarwal's elder brother, Mr. Anil Agarwal:
  - i) who is serving as an Independent Director has resigned before the expiry of his tenure.
- 2. The Company has received declarations from all the Independent Directors of the Company confirming that they meet the criteria of independence prescribed under the Act and the Listing Regulations and in the opinion of the Board, the Independent Directors fulfill the said criteria and are independent of the management.
- 3. The certificate from Practicing Company Secretary issued as per requirements of Listing Regulations, confirming that none of the Directors in the Board of the Company have been debarred or disqualified from being appointed or continuing as Director of Companies by SEBI/ Ministry of Corporate Affairs or any such statutory authority is endorsed to this Report as **Annexure III.**

#### **MEETINGS OF THE BOARD & COMMITTEES**

**Scheduling of meetings** and agenda matters



- The Board meets at regular intervals to discuss and decide on Company/business policy and strategy in addition to the statutory and other matters. The Board and Committee meetings are pre-scheduled and an annual calendar of the meetings is circulated to the Directors well in advance to facilitate planning of their schedule and to ensure meaningful participation in the meetings. However, in case of business exigencies/urgencies resolutions are passed through circulation or additional meetings are conducted.
  - The Board, the Audit Committee and the NRC are facilitated with annual agenda plan in advance in order to enable the members to focus on key areas of organisational performance and designing the future strategy. The annual agenda plans are finalised with the inputs from the board members and are approved by the Board. Additional agenda matters are taken up on requirement basis.

**Circulation of Agenda** 



- The Agenda papers are finalised by the Chairman and the Company Secretary, in discussion with the CEO & CFO.
  - All the Agenda papers are disseminated electronically on a real-time basis. The papers are uploaded on a secured online platform specifically designed for this purpose, thereby eliminating circulation of printed agenda papers. The online platform also enables the Board to access the historical agendas, minutes, constitutional documents, committee charters, etc. It enables the participants to make notes and exchange notes amongst each other under a secured
  - The Agenda papers other than in nature of Unpublished Price Sensitive Information (UPSI) are circulated well in advance as per statutory requirements and those in nature of UPSI are circulated at least 24 hours in advance with the approval of the

Information presented at meetings



- 3 The Board business generally includes consideration of important corporate actions and events including:
  - a) Quarterly and annual result announcements;
  - b) Oversight of the performance of the business;
  - c) Development and approval of overall business strategy;
  - d) Board succession planning;
  - e) Review of the functioning of the Committees and
  - f) Other strategic, transactional and governance matters as required under the Companies Act, 2013, Listing Regulations and other applicable legislations.

**Conduct and Recording** of meetings



- Majority of the meetings are conducted as physical meetings, however, at times it may not be possible for each one to be physically present at all meetings. Hence, we provide the facility of video conferencing/telepresence to the Board members and invitees at various locations across the globe.
  - All the meetings conducted through telepresence are recorded and stored as per the statutory requirements. The Company Secretary records minutes of the meetings of each Board and Committees. Draft minutes and signed minutes are circulated to Board/Committee members within the timelines prescribed under Secretarial Standards;
  - The management team is invited to present the performance on key areas such as the Company's major business segments and their operations, subsidiary performance and key functions from time to time.

Post Meeting summary/ Follow-up



- Post conclusion of each of the Board/Committee meeting, the Company Secretary circulates the summary of the proceedings of all meetings along with the action points, if any.
  - Various decisions taken at Board/Committee meetings are promptly communicated to the concerned departments/divisions.
  - The matters arising from the previous meetings are taken up at the respective forthcoming Board/Committee meeting.

#### **Chairman and other Key Managerial Personnel (KMPs)**

The Chairman of the Board encourages and promotes a culture where the Board along with its management works towards ensuring that the long-term goals of the Company are in parity with that of its stakeholders. The Chairman being the leader of the Board, facilitates effective communication among Directors and is entrusted with ensuring that the Board as a whole provides effective governance to the Company.

The position of the Chairman of the Board and Chief Executive Officer (CEO) of the Company are held by separate individuals and there is proper segregation of role, responsibilities and duties between them. Apart from this, the Company also has a separately designated Chief Financial Officer and Company Secretary.

During the FY 2019, following were the changes in the position of Directors/Key Managerial Personnel (KMPs) of the Company:



## **Board & Executive Leadership Remuneration Policy**

The key objective of the Remuneration Policy is to ensure that competitive and fair awards are linked to key deliverables and are also aligned with market practice and shareholders' expectations.

The NRC ensures that remuneration policies and practices are designed to attract, retain and motivate the Executive Directors and the senior management group, while focussing on the delivery of the Group's strategic and business objectives. The Committee is also focused on aligning the interests of the Executive Directors and the senior management group with those of shareholders, to build a sustainable performance culture.

The Executive Directors' remuneration has two components: fixed pay and annual variable pay including stock incentives (performance linked incentive). The fixed component is based upon the industry practice and benchmarks considering the skill and knowledge, experience and

job responsibilities. The performance linked incentive is linked to the achievement of the Company and individual performance goals. Such variable compensation is 'at risk', and rewards performance and contributions to both short-term and long-term financial performance of the Company. The remuneration of the Executive Directors is governed by the agreements executed with them, subject to the approval of the Board and of the members in general meetings and such other approvals as may be necessary.

The Non-Executive Independent Directors are paid remuneration by way of commission and sitting fees. The appointment letter covering the terms and conditions of appointment of Non-Executive Independent Directors is available on the Company's website www.vedantalimited.com. The Board decides the payment of commission within the limits approved by the members subject to the limit not exceeding 1% of the net profits of the Company. No stock options were issued to the Non-Executive Independent Directors during the year.

#### Remuneration paid or payable to Directors for the year ended March 31, 2019 and relationship with each other

Name of the Director	Relationship with other Directors	Sitting Fees	Salary and Perquisites	Provident and Superannuation Funds	Commission to Non- Executive Directors / performance incentive for the Executive Directors^	Total	Vedanta Limited ESOS Scheme (Grants till date) <sup>(3)</sup>
<b>Executive Directors</b>							
Mr. Navin Agarwal <sup>(1)</sup>	None	-	235,167,304	12,053,782	59,855,112	307,076,198	-
Mr. Tarun Jain	None	-	179,693,717	-	40,235,919	219,929,636	463,630
Mr. S. Venkatakrishnan <sup>(2)</sup>	None	-	-	-	-	-	-
Mr. G. R. Arun Kumar	None	-	45,620,802	2,689,824	14,683,392	62,994,018	265,410
Total			460,481,823	14,743,606	114,774,423	589,999,852	-
Independent Non-Executiv	ve Directors						
Mr. Aman Mehta	None	1,100,000	-	-	7,500,000	8,600,000	-
Mr. K. Venkataramanan	None	650,000	-	-	7,500,000	8,150,000	-
Ms. Lalita D. Gupte	None	1,100,000	-	-	7,500,000	8,600,000	-
Mr. Ravi Kant	None	1,150,000	-	-	7,500,000	8,650,000	-
Mr. U. K. Sinha	None	900,000	-	-	7,500,000	8,400,000	-
Total		4,900,000	-	-	37,500,000	42,400,000	-
Non-Independent Non-Exe	ecutive Direct	tors					
Ms. Priya Agarwal	None	600,000	-	-	7,500,000	8,100,000	
Grand Total		5,500,000	460,481,823	14,743,606	159,774,423	640,499,852	

#### Notes

Additionally, the Company had paid an annual bonus of ₹ 12,508,755 for FY 2018 to Mr. Thomas Albanese who was the Whole-Time Director & Chief Executive Officer of the Company till August 31, 2017.

Additionally, on account of delisting of Vedanta Resources Limited, UK, all the outstanding shares of Executive Directors were bought by Volcan under Cash Offer Plan and the same has not been included above.

- (1) Sitting fees and commission paid to Mr. Navin Agrawal from HZL was ₹ 2,00,000 and ₹ 1,500,000 respectively during the FY 2019. In addition to the above, Mr. Navin Agarwal received remuneration from Vedanta Resources Limited, UK, the Holding Company amounting to GBP 85,000 (₹ 77.97 lakhs) for the financial year ending March 31, 2019;
- (2) Mr. Srinivasan Venkatakrishnan is not paid any remuneration from the Company. The entire remuneration will be received from the Holding Company i.e. Vedanta Resources Limited. The remuneration received by Mr. Venkatakrishnan through Vedanta Resources Limited for the period from March 1, 2019 till March 31, 2019 is ₹102.31 Lacs.
  - Additionally, Mr. Venkatakrishnan received an amount of GBP 1,467,528 (₹ 1,346 lakhs) from Vedanta Resources Limited, UK in lieu of Anglo Gold Ashanti bonus & LTIP as per agreed terms of appointment.
- (3) ESOS Scheme Grants:
  - The ESOS 2016 options vests after three years from date of grant i.e. on December 15, 2019, based on achievement of performance conditions.
  - · The ESOS 2017 options vests after three years from date of grant i.e. on September 1, 2020, based on achievement of performance conditions.
  - The ESOS 2018 & Cash Plan 2018 options/units will vest/ be exercise after three years from date of grant i.e. on November 1, 2021, based on achievement of performance conditions.

## We hereby confirm that:

- The total managerial remuneration payable in FY 2019 does not exceed 11% of the net profits of the Company;
- The total remuneration received by Whole-Time Directors and Independent Directors of the Company does not exceed 10% and 1% of the Net Profits of the Company respectively;
- No single Non-Executive Director receives remuneration exceeding 50% of the total annual remuneration payable to all Non-Executive Directors;
- Mr. Navin Agarwal, Executive Chairman and member of Promoter Group does not receive remuneration in excess of ₹5 crores or 2.5% of the Net Profits of the Company, whichever is higher.

## **Board Committees**

The Board has established various committees to support it in exercising its authority, including monitoring the performance of the Company and to gain assurance that progress is being made towards the fulfilment of the objectives of the Company and its stakeholders.

The Board is assisted by its principal Committees each of which are responsible for reviewing and dealing with matters within their own terms of reference approved by the Board, which are updated from time to time with reference to best corporate governance practices.

The Company Secretary officiates as the Secretary of these Committees. The minutes of the meetings of all the Committees are placed before the Board for its review and noting.

<sup>^</sup>The Annual Performance bonus to Executive Directors is for FY 2018 which is paid during FY 2019;

#### **Composition of Committees:**

All the Committees have optimum composition pursuant to the Listing Regulations.

Name of Director	Board	Audit Committee	Nomination & Remuneration Committee	Stakeholder Relationship Committee	Corporate Social Responsibility Committee	Committee of Directors	Finance Standing Committee of Director	Risk Management Committee <sup>(1)(2)</sup>	Sustainability Committee <sup>(3)(4)</sup>
Mr. Navin Agarwal	A		<u>,e</u>			A			
Mr. Aman Mehta	æ	<u>A</u>	A		<u>A</u>				
Mr. K. Venkataramanan	Æ			Æ	<u>A</u>				Å
Ms. Lalita D. Gupte	2	<u> </u>	2	Å					
Mr. Ravi Kant	Æ	<u>a</u>	<u>, D</u>		A				
Mr. U. K. Sinha	æ	<u>a</u>		æ	<u>A</u>				æ
Ms. Priya Agarwal	2				<u> </u>				
Mr. G. R. Arun Kumar	Æ			Æ		<u>A</u>	æ	<u>,e</u>	
Mr. S. Venkatakrishnan <sup>(5)</sup>	<u>,</u>			<u>,</u>	<u>A</u>	<u>A</u>	Æ	Æ	<u> </u>
Mr. Tarun Jain	Æ			<u>,e</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>,e</u>	

#### A Member A Chairperson

- (1) For Risk Management Committee, Chairman of each meeting is appointed at the start of each meeting pursuant to Regulation 21(3) of the Listing Regulations;
- (2) In addition to the above board members, Mr. Dilip Golani, Head Management Assurance (MAS) is also a member of the Risk Management Committee and Mr. Deodatta Padgaonkar, SVP MAS is the Risk Officer;
- The Board at its meeting held on January 31, 2019, constituted the Sustainability Committee effective from April 1, 2019;
- In addition to the above board members, Mr. Sunil Duggal, CEO Base Metals and Ms. Deshnee Naidoo, CEO Zinc International are members of the Sustainability Committee;
- (5) Mr. S. Venkatakrishnan has been appointed w.e.f. March 1, 2019

#### **Board and Committee Meetings for FY 2019:**

Meeting	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar
Board	April 2, 2018	July 13, 2018	October 31, 2018	January 31, 2019
	May 3, 2018	July 31, 2018	December 1, 2018	March 6, 2019
	June 26, 2018			March 28, 2019
Audit Committee	May 2, 2018	July 31, 2018	October 30, 2018	January 30, 2019
			December 1, 2018	March 28, 2019
Nomination & Remuneration Committee	-	July 13, 2018	October 31, 2018	January 31, 2019
		July 31, 2018		March 28, 2019
Stakeholder Relationship Committee	-	-	October 31, 2018	-
Corporate Social Responsibility Committee	May 3, 2018	-	-	March 28, 2019
Risk Management Committee	April 12, 2018	August 27, 2018	October 15, 2018	February 21, 2019

- The Board approved eleven matters by passing resolution by circulation
- The Audit Committee approved five matters by passing resolution by circulation
- The maximum interval between any two Board and Audit Committee meetings did not exceed 120 days, as prescribed in the Companies Act, 2013 and Listing Regulations

### Attendance for Board & Committee Meetings held during FY 2019:

		Board Meeting	Audit Committee	NRC	SRC	CSR	RMC <sup>(1)</sup>		
Name of Director	Whether attended AGM on August 24, 2018	(Attended/ Entitled)	(Attended/ Entitled)	(Attended/ Entitled)	(Attended/ Entitled)	(Attended/ Entitled)	(Attended/ Entitled)	Average attendance %	
Mr. Navin Agarwal	Yes	10/10	-	5/5	-	-	-		100
Mr. Aman Mehta	Yes	9/10	6/6	5/5	-	2/2	-		98
Mr. K. Venkataramanan	Yes	10/10	-	-	1/1	2/2	-		100
Ms. Lalita D. Gupte	Yes	10/10	6/6	5/5	1/1	-	-		100
Mr. Ravi Kant	Yes	10/10	6/6	5/5	-	2/2	-		100
Mr. U. K. Sinha	Yes	9/10	6/6	-	1/1	2/2	-		98
Ms. Priya Agarwal	Yes	10/10	-	-	-	2/2	-		100
Mr. G. R. Arun Kumar	Yes	10/10	-	-	1/1	-	4/4		100
Mr. S. Venkatakrishnan <sup>(2)</sup>	NA	2/2	-	-	NA	1/1	NA		100
Mr. Tarun Jain <sup>(3)</sup>	Yes	10/10	-	-	1/1	2/2	4/4		100

- (1) Mr. Dilip Golani attended all four meetings of RMC;
- Mr. S. Venkatakrishnan has been appointed w.e.f. March 1, 2019 on the Board and on Corporate Social Responsibility Committee, Stakeholder Relationship Committee and Risk Management Committee;
- (3) Mr. Tarun Jain has been re-appointed as a Non-Executive Director w.e.f. April 1, 2019.

#### **AUDIT COMMITTEE**

The key responsibilities of the Audit Committee are to assist the Board in fulfilling its oversight responsibilities in relation to: financial reporting; the effectiveness of the system of risk management and robustness of internal financial controls and risk management framework including cyber security, adequacy and effectiveness of the Company's legal, regulatory and ethical compliance & governance programmes, monitoring the qualifications, expertise, resources and independence of both the internal and external auditors; and assessing the auditors' performance and effectiveness each year.

The Committee relies on the expertise and knowledge of the management, the Internal Auditors and the Statutory Auditor, in carrying out its oversight responsibilities. It also uses external expertise, if required. The management is responsible for the preparation, presentation and integrity of the Company's financial statements including consolidated statements, accounting and financial reporting principles. The management is also responsible for internal control over financial reporting and all procedures are designed to ensure compliance with accounting standards, applicable laws and regulations as well as for objectively reviewing and evaluating the adequacy, effectiveness and quality of the Company's system of internal controls. M/s. SR Batliboi & Co. LLP, Chartered Accountants (FRN: 301003E) the Company's Statutory Auditor, is responsible for performing an independent audit of the Financial Statements and expressing an opinion on the conformity of those financial statements.

The Audit Committee covers a variety of topics in its meetings. These include both standing items that the Committee considers as a matter of course, typically in relation to the quarterly unaudited financial statements, control issues, accounting policies and judgements and reporting matters, and a range of topics relevant to Vedanta's control framework. The Committee invites the Chief Executive Officer, the Chief Financial Officer, Group Assurance Head, and the external auditor to attend each meeting. The Business and Operation Heads are also invited to the meetings, as and when required.

The Committee also meets separately with the external auditor without members of management to sought the auditors judgement about the quality and applicability of the accounting principles, the reasonableness of significant judgement and adequacy of disclosures in financial statements.

The Audit Committee reviews on a quarterly basis the confirmation of the Independence made by the Auditors, and also approves of the fees paid to the Auditors by the Company,

or any other company in the Vedanta Group as per the Policy for approval of Audit/Non-Audit Services to be rendered by the Auditors.

The Committee comprises of four Independent Directors whose names and biographies are set out in the Board and Committees section of this Annual Report. The Committee fulfils the requirements as specified under the provisions of the Companies Act, 2013, Listing Regulations and NYSE Guidelines w.r.t composition, independence & financial expertise of its members.

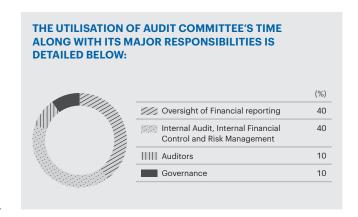
The schedule of Committee meetings held in FY 2019 along with its members' attendance records are disclosed in the earlier sections of this Report.

As part of the Board's annual evaluation of its effectiveness and that of its Committees, as described later in the report, the Committee assessed its own effectiveness. The members of the Audit Committee agreed that its overall performance had been effective during the year.

#### **Review of Financial Results for FY 2019**

The Committee reviewed the Standalone & Consolidated Financial Statements for FY 2019 and based on this review and discussions with management, the Committee was satisfied that the Financial Statements were prepared in accordance with applicable Accounting Standards and fairly present the Group's financial position and results for the year ended March 31, 2019. The Committee therefore recommended the Financial Statements for the year ended March 31, 2019 for approval of the Board.

The Board accepted all the recommendations made by the Audit Committee in FY 2019.



## Oversight of Financial Reporting

- · Overseeing the Company's financial reporting process and disclosure of its financial information to ensure that the financial statements are true, fair, sufficient and credible;
- Discuss and review, with the management and auditors, the annual/quarterly financial statements before submission to the Board;
- Discuss and review earnings press releases and the financial information and guidance provided to analysts and ratings agencies;
- Review of key significant issues, tax & legal reports and management's report;
- · Review of management's analysis of significant issues in financial reporting and judgments made in preparing the financial statements;
- Discuss with the Management regarding pending technical and regulatory matters that could affect the financial statements, and updates on management's plans to implement new technical or regulatory guidelines;
- · Review of off-balance-sheet structures, if any;
- Review of draft limited review/audit reports and qualifications, if any, therein;
- Discuss and review the Form 20 F & Japanese Filings.

#### **Auditors**

- · Appointment of Statutory, Internal, Secretarial, Cost & Tax Auditors, recommending their fees and reviewing their audit reports;
- Review of the independence of the Statutory Auditor and the provision of audit/ non-audit services including audit/non-audit fees paid to the statutory auditor;
- Independent meetings with Statutory Auditors.

## Internal Audit, Internal **Financial Controls, Risk** Management

- Review of internal audit observations and monitoring of implementation of any corrective actions identified;
- · Reviewing the internal financial control framework;
- · Review of the performance of the internal audit function & internal audit plan;
- · Reviewing the risk management framework, cyber security, risk profile, significant risks, risk matrix and resulting action plans;
- Review of the significant audit risks with the Statutory Auditor during interim review and year-end audit;
- · Consideration of statutory audit findings and review of significant issues raised;
- · Reviewing related party transactions;
- Management discussion and analysis of financial condition and results of operations.

#### Governance

- · Reviewing minutes summary reports from subsidiary companies audit committees;
- · Reviewing intercorporate loans, advances, guarantees;
- · Reviewing ethics (whistle blower, sexual harassment, Insider Trading) and statutory compliances;
- · Review of its own charter and processes;
- · Notices received from statutory authorities and the management's response;
- · Regulatory updates;
- Reviewing feedback from the Audit Committee's performance evaluation.

#### NOMINATION AND REMUNERATION COMMITTEE

The Nomination & Remuneration Committee (NRC) comprises three Independent Directors and the Executive Chairman whose names and biographies are set out in the Board and Committees section of this Annual Report. The Committee fulfils the composition requirement as specified under the provisions of the Companies Act, 2013 and Listing Regulations. In the event of a conflict of interest, the Executive Chairman abstains from the discussions and other members of the NRC participate and vote. Other Directors, members of the senior management team and external advisers may attend meetings at the invitation of the Committee, as appropriate. The Chairman of the NRC provides an update to the Board in respect of each of its meetings.

The schedule of NRC meetings held in FY 2019 along with its members' attendance records are disclosed in the earlier sections of this Report.

As part of the Board's annual evaluation of its effectiveness and that of its Committees, as described later in the report, the NRC assessed its own effectiveness. The members of the NRC agreed that its overall performance had been effective during the year.

The Board accepted all the recommendations made by the Committee in FY 2019.

The NRC is responsible for making recommendations to the Board on the structure, size and composition of the Board, ensuring that the appropriate mix of skills, experience, diversity and independence is present on the Board for it to function effectively. The NRC also leads the process for new Board appointments, advises the Board on succession planning arrangements and oversees the development of management talent within the Group.

Another key objective of the Committee is to ensure that competitive and fair awards are linked to key deliverables and are also aligned with market practice and shareholders' expectations. The Committee ensures that remuneration policies and practices are designed to attract, retain and motivate the Executive Directors and the senior management group, while focusing on the delivery of the Group's strategic and business objectives. The Committee is also focused on aligning the interests of the Executive Directors and the senior management group with those of shareholders, to build a sustainable performance culture. When setting remuneration for the Executive Directors, the Committee takes into account the business performance, developments in the natural resources sector and, considering that the majority of the Group's operations are based in India, similar information for high-performing Indian companies. The Committee also carries out the entire process of Board Evaluation.

## THE UTILISATION OF THE COMMITTEE'S TIME ALONG WITH ITS MAJOR RESPONSIBILITIES IS DETAILED **BELOW:** (%) 40 Board Composition and Nomination 25 Compensation ||||| Evaluation Succession Planning & Governance 15

#### **Board Composition** and Nomination

- · Review and recommend the structure, size and composition (including the skills, knowledge, experience and diversity) of the Board and its Committees;
- Formulate the criteria/policy for appointment of Directors, Key Managerial Personnel (KMPs) and Senior Management (as defined by the NRC) in accordance with identified
- · Review and appoint shortlisted candidates as Directors, KMPs and Senior Management (including evaluation of incumbent directors for potential re-nomination) and make recommendations to the Board;
- Evaluate the balance of skills, knowledge, experience and diversity on the Board for description of the role and capabilities, required for an appointment;
- Formulate and recommend to the Board the criteria for determining qualifications, positive attributes and independence of a Director.

#### Compensation

- Recommend to the Board a policy relating to the remuneration of Directors (both Executive and Non-Executive Directors), KMP and Senior Management Personnel;
- Ensuring that the level and composition of remuneration is reasonable and sufficient to attract, retain and motivate Directors of the quality required to run the Company successfully:
- Ensuring relationship of remuneration to performance is clear and meets appropriate performance benchmarks;
- Remuneration to Directors, KMP and senior management involves a balance between fixed and incentive pay reflecting short and long-term performance objectives appropriate to the working of the Company and its goals;
- Determine remuneration based on the Company's financial position, trends and practices on remuneration prevailing in the industry as considered appropriate by the
- Review of the Company's Share Based Employee Benefit Scheme(s), if any, including overseeing the administration of the Scheme(s), formulating the necessary terms and conditions for such Scheme(s) like quantum of options/ rights to be granted, terms of vesting, grant options/ rights to eligible employees, in consultation with management; and allotment of shares/ other securities when options/ rights are exercised etc. and recommend changes as may be necessary.

**Evaluation of the** Board, its Committees and Individual Directors

- To develop, subject to approval by the Board, a process for an annual self-evaluation of the performance of the Board, its Committees and the individual Directors in the governance of the Company and to coordinate and oversee this annual self-evaluation;
- To formulate a criterion for evaluation of Independent Directors and the Board and carry out evaluation of every Director's performance and present the results to the Board;
- To review the performance of all the Executive Directors, on the basis of detailed performance parameters set for each of the Executive Directors at the beginning of the year and present the results to the Board;
- · Action report on suggestions made on evaluation;
- To maintain regular contact with the leadership of the Company. This should include interaction with the Company's Leadership Institute, review of data from the employee survey and regular review of the results of the annual leadership evaluation process.

#### **Succession Planning &** Governance

- · Review succession planning for Executive and Non-Executive Directors and other Senior Management;
- Establishing policies and procedures to assess the requirements for induction of new members to the Board;
- To maintain regular interaction and collaborate with the leadership including the HR team to review the overall HR vision and people development strategy of the Company;
- To review and reassess the adequacy of the NRC's charter as required and recommend changes to the Board;
- · To develop and recommend a policy on Board diversity.

#### **CORPORATE SOCIAL RESPONSIBILITY COMMITTEE**

Vedanta Limited upholds the belief of coexistence of business and communities and has relentlessly attempted to engineer a seamless eco-system of prosperity in the society around operations.

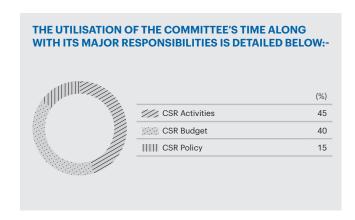
As a responsible corporate citizen, we believe that those who reside in our operational areas are our partners and we seek to foster a mutually benefitting relationship with all our stakeholders. It is this integration of business and CSR which provides us the social licence to operate and ushers in a different developmental paradigm towards sustainable change in society. As part of our CSR policy, we believe in partnering with government agencies, development organisations, corporates, civil societies & community-based organisations to carry our durable and meaningful initiatives.

The CSR Committee was setup to formulate and monitor the CSR Policy of the Company along with recommending the CSR Budget.

The schedule of CSR meetings held in FY 2019 along with its members' attendance records are disclosed in the earlier sections of this Report.

As part of the Board's annual evaluation of its effectiveness and that of its Committees, as described later in the report, the CSR Committee assessed its own effectiveness. The members of the CSR Committee agreed that its overall performance had been effective during the year.

The Board accepted all the recommendations made by the Committee in FY 2019.





#### **CSR POLICY**

- To formulate and recommend to the Board the CSR Policy indicating the activities to be undertaken by the Company pursuant to the provisions of Companies Act, 2013 and the rules made thereunder;
- To review the CSR Policy and associated frameworks, processes and practices.



#### **CSR ACTIVITIES**

- To identify the areas of CSR activities and projects and to ensure that the Company is taking the appropriate measures to undertake and implement CSR projects successfully;
- To assess the performance and impact of CSR activities of the Company;
- To evaluate CSR communication plans.



### **CSR BUDGET**

- To decide and recommend to the Board the amount of expenditure to be incurred on CSR activities;
- To evaluate and monitor actual spent towards CSR activities is in compliance with the Companies Act, 2013.

#### STAKEHOLDERS' RELATIONSHIP COMMITTEE

The Company recognises the worth of sustaining an ongoing relation with the Company's stakeholders to ensure a mutual understanding of the Company's strategy, performance and governance.

The Stakeholder Relationship Committee (SRC) assists the Company and its Board in maintaining strong and long term relationships with all its shareholders. The SRC mainly oversees and reviews the timely redressal of all the Security holders grievance; ways to enhance shareholder experience; performance of Registrar & Transfer Agent; shareholding movement etc.

The details of SRC composition and meetings are given in the earlier section of this report. The SRC is chaired by Ms. Lalita D. Gupte, Non-Executive Independent Director.

As part of the Board's annual evaluation of its effectiveness and that of its Committees, as described earlier in the report, the SRC assessed its own effectiveness. The members of the SRC agreed that its overall performance had been effective during the year.

The Board accepted all the recommendations made by the Committee in FY 2019.





- Review and timely resolving the grievances of the security holders related to issue, allotment, transfer/transmission, dematerialisation, rematerialisation etc. of shares and/ or other securities of the Company;
- Review and timely redressal of all the security holders grievance related to non-receipt
  of information demanded if any, non-receipt of annual report, non-receipt of declared
  dividend, issue of new/duplicate share certificates, general meeting etc.;
- Review from time to time the shares and dividend that are required to be transferred to the IEPF Authority;
- · Review & closure of all Investor cases.

Enhancing shareholder experience/services

- Review of measures taken for effective exercise of voting rights by shareholders;
- Review of the various measures and initiatives taken by the Company for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/ annual reports/ statutory notices by the shareholders of the Company;
- Initiatives for registration of e-mail IDs, PAN & Bank mandates and demat of shares;
- Review reports on shareholder satisfaction surveys, if any;
- Oversight of the performance and services standards of various services being rendered of/by Registrars & Transfer Agent of the Company.

Shareholding pattern

- · Review shareholding distribution;
- · Review movement in shareholding pattern;
- · Comparative details on demat and physical holding.

#### **Investor Complaints**

Company's Registrar & Transfer Agent, Karvy Fintech Private Limited (erstwhile Karvy Computershare Private Limited) (Karvy/RTA) entertains and resolves investor grievances in consultation with the Compliance Officer. All grievances can be addressed either to Karvy or to the Company directly. An update on the status of complaints is quarterly reported to the Board and is also filed with stock exchanges.

#### The details of shareholders' complaints during FY 2019

S. No	o. Nature of complaints/letters and correspondence	Received	Replied	Closing Balance
Co	mplaints received through Stock Exchanges, SEBI and Ministry of Corporate Affairs			
1	Non-receipt of shares	30	30	0
2	Non-receipt of dividends/debenture redemption	38	38	0
3	Non-receipt of Annual Reports	8	8	0
4	Miscellaneous	22	22	0
Otl	ner Correspondence from Shareholders			
1	Letters and correspondence from shareholders	19,329	19,329	0
	Total	19,427	19,427	0

Note: The Company received Nil complaints w.r.t. Non-Convertible Debentures and Redeemable Preference Shares

#### **RISK MANAGEMENT COMMITTEE**

The Company has a duly constituted Risk Management Committee (RMC) which supports the Audit Committee and Board in fulfilling its Corporate Governance oversight responsibilities with regard to identification, evaluation and mitigation of risks impacting the business.

The Board assumes the responsibility to monitor the Company's risk management by carrying out a periodic review of effectiveness of the risk management framework. The Audit Committee aids the Board in this process by assessment of the framework, reviewing changes in risks, review of principal risks, control measures and remedial actions. The Audit Committee is supported by the Group Risk Management Committee in evaluating the design and operating effectiveness of our risk

management programme (including for cybersecurity) and the control systems built in.

The constitution of the Committee is in compliance with the requirements of Listing Regulations. The details of composition have been provided in the earlier section of this report.

# Risk Management Committee is mainly entrusted with the following responsibilities:

- Have oversight over the effective implementation of the risk management framework across various businesses;
- 2. To ensure that the organisation is taking appropriate measures to achieve prudent balance between risk and reward in both ongoing and new business activities;

- 3. Annually review the risk management policy & risk appetite including cyber security and recommends necessary changes to the Audit Committee/Board, if any;
- 4. To evaluate significant & critical risk exposures and assess management's action to mitigate or manage the exposures in a timely manner.

A separate section on principal risks and uncertainties is covered in the Management Discussions & Analysis Report.

#### **SUSTAINABILITY COMMITTEE**

As a Group we have sought to embed a standardised, high-performance sustainability culture across all our businesses. Our emphasis remains on our philosophy of 'Zero Harm, Zero Waste and Zero Discharge'. Sustainability being one of our core values and pillar, means giving utmost priority to health and safety, being environmentally responsible and supporting all our communities. The wellbeing and security of our people, the community and the environment is considered in each of the things that we do.

In our endeavour to follow the global best practices, the Board at its meeting held on January 31, 2019 has constituted a Sustainability Committee effective April 1, 2019 to support the Board for the below:

- 1. To oversee the Company's sustainability performance and the adequacy of the Company's sustainability framework;
- 2. Advise the Board on sustainability policies and management system, clearly setting out the commitments of the Company to manage matters of sustainable development effectively;
- 3. Ensure governance responsibilities related to sustainability;
- 4. Outline initiatives required to institutionalise a sustainability culture through involvement of the employees at all levels;
- 5. Advise the Board to enable it to discharge its responsibilities, having regard to the law and the expected international standards of sustainability & governance.

The details of composition have been provided in the earlier section of this report.

#### OTHER COMMITTEES

The Board has constituted few other committees, for ensuring smooth functioning of the Board. This enables and ensures that prompt and timely decisions are taken on the matters important for the Company and therefore delegated to the respective Committees. Minutes of each Committee meetings are placed before the Board for its noting. The Board also formulates several project specific sub-committees from time to time which ensures speedy implementation and execution of the projects. The Board is updated on each of the meetings of sub-committees as well.

As on March 31, 2019, details of other committees are given below:

## **Finance Standing Committee of Directors**

The Finance Standing Committee (FSC) supports the Board by considering and approving matters relating to finance, investment, banking, treasury etc. within the overall limits approved by the Board.

The committee is broadly entrusted with the following:

- Review and approve all policies related to the financial matters of the Company;
- Review and approve Inter-Corporate Loans, Guarantees and Investments:
- 3. Authorisation for account operations including bank accounts, demat accounts, trading accounts etc.;
- 4. To consider and approve treasury related proposals;
- 5. Approving security related proposals.

The composition of the Committee is detailed in the earlier section of this report. The FSC meets on a requirement basis. During FY 2019, the committee met eight times on May 30, 2018; June 4, 2018; July 23, 2018; September 19, 2018; October 31, 2018; November 19, 2018; December 18, 2018; and March 7, 2019.

#### **Committee of Directors**

The Committee of Directors (COD) supports the Board by considering, reviewing and approving all borrowing related proposals, within the overall limits approved by the Board from time to time. The COD enables seamless flow of procedures and assists the Board by catering to various routine requirements. The Committee meets as and when deemed necessary.

The details of composition of the COD is given in the earlier section to this report. The Committee met three times during the FY2019 on June 27, 2018; July 3, 2018 and March 18, 2019.

## **Share & Debenture Transfer Committee**

The Committee consists of four members, Mr. G. R. Arun Kumar, Whole-Time Director & Chief Financial Officer, Ms. Pooja Yadava, GM Legal, Mr. Anup Agarwal, SVP Corporate Finance and Mr. Jagdeep Singh, Senior Corporate Counsel. During the year the Committee met twenty times.

The role of Share & Debenture Transfer Committee primarily includes the following:

- · Allotment of shares, debentures or any other securities;
- Approval of transfer, transmission, deletion and transposition of shares, debentures or any other securities.

#### **Executive Committee**

The Executive Committee (EXCO) supports in the day-today running of the Company and meets on a monthly basis. It is entrusted with executing the strategy adopted by the Board, allocating resources in line with delegated authorities, managing risk and monitoring the operational and financial performance of the Company. Authority is delegated by the Executive Committee to the respective Chief Executive Officer of each of the businesses. The Group Chief Executive Officer keeps the Board informed of the EXCO's activities through his standing reports to the Board.

#### **GENERAL BODY MEETINGS**

## **Annual General Meetings**

The details of the last three years Annual General Meetings / Court Convened Meeting are as follows:

Year	Location	Date & Time	Special Resolutions passed	Weblink
51st Annual	General Meeting			
2015-16	Main Hall of Institute Menezes Braganza, Panaji, Goa	June 29, 2016 at 11:00 a.m.	<ul> <li>Offer or invitation for subscription of Non-Convertible Debentures up to</li> <li>₹ 20,000 crore on a Private Placement basis.</li> </ul>	Notice Outcome
			Waive the excess remuneration paid to Mr. Navin Agarwal for the FY 2014.	
Court Conv	vened Meeting			
2016-17	Hotel Mandovi,	September 8, 2016 at:	• For approval of the amalgamation	Notice
	D. B. Marg, Panaji, Goa	• 10:00 a.m. for the Equity Shareholders of the Company	embodied in the scheme of arrangement of Cairn India Limited with Vedanta Limited and their respective shareholders	Outcome
		• 2:00p.m. for the Secured Creditors of the Company	and creditors.	
		4:00 p.m. for the Unsecured Creditors of the Company		
52 <sup>nd</sup> Annual	General Meeting			
2016-17	Rangsharda Auditorium, K.C. Marg, Bandra Reclamation, Bandra	July 14, 2017 at 10.30 a.m.	<ul> <li>Appointment of Mr. G. R. Arun Kumar as Whole-Time Director and Chief Financial Officer (CFO).</li> </ul>	Notice Outcome
	(West), Mumbai		Re-appointment of Mr. Thomas Albanese as Whole-Time Director and Chief Executive Officer (CEO).	
			<ul> <li>Offer or invitation for subscription of Non-Convertible Debentures up to ₹ 20,000 crore on a Private Placement basis.</li> </ul>	
			Waive the excess remuneration paid to Mr. Navin Agarwal for the FY 2014	
53 <sup>rd</sup> Annual	General Meeting			
2017-18	Rangsharda Auditorium, K.C. Marg, Bandra Reclamation, Bandra (West), Mumbai	August 24, 2018 at 10:30 a.m.	<ol> <li>Re-appointment of Ms. Lalita D. Gupte as an Independent Director for a second and final term.</li> <li>Re-appointment of Mr. Ravi Kant as an Independent Director for a second and final term.</li> </ol>	Notice Outcome
			<ol> <li>Offer or invitation for subscription of Non- Convertible Debenture up to ₹ 20,000 crore on Private Placement basis.</li> </ol>	

## **Voting Levels**

The voting levels at the Annual General Meeting have increased in 2018, accounting to ~80% of the listed capital of the Company. All resolutions were passed at the meeting with ~98% votes in favour.

### **Postal Ballot**

There were no resolutions passed during the FY 2019 through postal ballot.

Further, there is no immediate proposal for passing any resolution through postal ballot.

#### **SHAREHOLDERS**

**Means of Communication** 





#### **FINANCIAL RESULTS**

- The quarterly/ half-yearly/ annual results along with audit/ limited review report, press release and investor presentation is filed with the stock exchanges immediately after the approval of the Board;
- Within 48 hours of the conclusion of the meeting, the results are published in at least one prominent national and one regional newspaper having wide circulation vis-à-vis. Business Standard, Financial Express, Economic Times and Maharashtra Times;
- The Company also sends its quarterly financial results to shareholders whose e-mail IDs are registered with the Registrar & Transfer Agent;
- · Financial results are also displayed on the Company's website and can be accessed at https://www.vedantalimited.com.



#### **NEWS RELEASES**

- The Company regularly keeps the stock exchanges updated on any of the developments/events and the same are simultaneously displayed on the Company's website as well;
- · All the releases can be accessed on the website of the Company at https://www.vedantalimited.com.



#### PRESENTATIONS MADE TO INSTITUTIONAL INVESTORS AND ANALYSTS

- The schedule of analyst / investor meets and the presentations for the same are filed with the stock exchanges and simultaneously uploaded on the website of the Company at https://www.vedantalimited.com;
- The Company periodically sends an Investor Brief to its shareholders detailing major developments in the Company. The same is also filed with the stock exchanges.



#### **WEBSITE**

The Company has a corporate website https://www.vedantalimited.com under which there is a dedicated section on 'Investor Relations' which contains all the information for the investors like financial results, policies & codes, stock exchange filings, press releases, annual reports, SEC Filings etc.



#### **ANNUAL REPORT & FORM 20F**

The Company sends soft copies of Annual Reports to those shareholders whose email IDs are registered with the Company, and hard copies are sent to those shareholders whose email IDs are not registered. The Form 20F filed with SEC is also available on the website of the Company.



#### **CHAIRMAN COMMUNIQUE**

- Each of the shareholders at the AGM are given copy of the Chairman's Speech. The copies are printed both in Marathi and in English;
- The speech is also placed on the website of the Company and published in the newspaper for better circulation



#### **APPEAL TO SHAREHOLDERS**

- · Regular reminders were sent to shareholders for updating their e-mail IDs, PAN and Bank mandate with the Company to ensure faster communication and credit of amounts. The shareholders can update their details with the Company directly on its website https://www.vedantalimited.com;
- · Reminders are sent to shareholders to encourage them to timely claim their unclaimed dividend and shares before the same is transferred to the IEPF Account;
- · Shareholders are also encouraged to open Demat accounts to eliminate bad delivery, save stamp duty on transfers, ensure faster settlement, ease portfolio management and provide 'on-line' access through internet. The Company had provided exclusive facility to its shareholders to open their Demat accounts with nil annual maintenance charges for first year.

#### **GREEN INITIATIVES BY THE COMPANY:**



In all the communications sent out by the Company to its shareholders it appeals them to support the Green initiative by:

- 1. Registering their e-mail IDs with the Company through which all the communications, annual reports etc. can be promptly sent to the shareholders on real time basis;
- 2. Registering their Bank mandate with the Company which would enable direct credit of any dividends/ amounts to shareholders and can avoid printing of warrants;
- 3. Converting physical holdings in Dematerialised holding so that all the transactions can be undertaken online without printing of physical documents;
- 4. Voting through remote e-voting facility provided by the Company. The Company is also offering insta poll facility to its shareholders present at the AGM which would eliminate printing of ballot papers.

#### **Correspondence Details**

All the Share Transfer and Dividend Payment Requests and Investors Related Karvy Fintech Private Limited (er queries, the shareholders can directly contact our Registrar and Transfer Agent Computershare Private Limited)

Karvy Fintech Private Limited (erstwhile Karvy Computershare Private Limited) Unit: Vedanta Limited

Karvy Selenium Tower B, Plot 31-32, Gachibowli Financial District, Nanakramguda, Hyderabad – 500 032

Tel: +91 40 6716 2222 Fax: +91 40 2300 1153 E-mail: einward.ris@karvy.com

The Shareholders can reach out to the designated persons of any department in case of any query for the matters enumerated below:

Company Secretary and Compliance Officer for queries related to Corporate Governance and Secretarial matters:	Ms. Prerna Halwasiya Company Secretary & Compliance Officer Tel.: +91 124 4593000 E-mail: comp.sect@vedanta.co.in
Queries and Update related to Financial Statement of the Company:	Ms. Rashmi Mohanty Group Head Treasury & Director – Investor Relations Tel: +91 124 459 3000 E-mail: vedantaltd.ir@vedanta.co.in
Corporate Communication related matters of the Company:	Mr. Arun Arora Head, Group Communications Tel.: +91 124 459 3000 E-mail: gc@vedanta.co.in
Sustainability Related Matters:	Mr. Phillip Turner Group Head HSE Tel.: +91 124 459 3000 E-mail: sustainability@vedanta.co.in
Queries and update on ADS issued by the Company:	Overseas Custodian for ADS: Citi- Depositary Receipt Services 388 Greenwich Street, 6th Floor, New York, NY 10013 Tel.: 212 816 6839 Website: www.citi.com/dr
	Indian Custodian for ADS: Citibank N.A. Custody Services FIFC- 11 <sup>th</sup> Floor, G Block Plot C-54 and C-55, BKC, Bandra (East), Mumbai – 400 098
Queries related to Debenture issued by the Company:	<b>Debenture Trustee:</b> Axis Trustee Services Limited 2 <sup>nd</sup> Floor, Wadia International Centre, Pandurang Budhkar Marg, Worli, Mumbai - 400 025

#### **ANNUAL GENERAL MEETING FOR FY 2019**



#### **DATE & TIME**

Thursday, July 11, 2019, 10:30 a.m. IST.



#### VFNUF

Rangsharda Auditorium, K.C. Marg, Bandra Reclamation, Bandra (West), Mumbai - 400 050.



#### **WEB CHECK-IN**

To facilitate smooth and faster registration/entry at the AGM, the Company has also provided a web check-in facility, which would help the members enter the AGM hall expeditiously.



#### **WEBCAST**

Your Company is pleased to provide the facility of live webcast of proceedings of AGM. Members who are entitled to participate in the AGM can view the proceedings of AGM by logging on the e-voting website of Karvy at https://evoting.karvy.com/ using their secure login credentials.



#### **ONLINE QUERY PORTAL**

The Company is pleased to inform that a new Online Query Module is provided to enable the members to seek informations/clarifications pertaining to this report in advance. Members can post their queries related to this Annual Report by using their secure login credentials on the e-voting website of Karvy at https://evoting.karvy.com.



## **INSTA POLL FACILITY**

- · The shareholders present at AGM who have not cast their votes through remote e-voting facility can instantly cast their votes through the insta poll facility being provided at the AGM.
- · This would enable faster voting without printing of ballot papers and would ensure faster calculation of results.



#### KIOSK FOR OPENING DEMAT ACCOUNT

- · Facility to open a demat account will also be provided by the Company at the AGM.
- Annual maintenance charges for the first year for Vedanta shareholders would be waived off.

#### **Financial Year**

The Financial Year of Company commences from April 1 and concludes on March 31 of each year. Each quarter the Company reviewed and approved its financials. The previous and tentative dates for approval of the financials are as follows:

S. No. Results for the period ended	FY 2019	Tentative Dates for FY 2020
1 First Quarter	July 31, 2018	End of July 2019
2 Second Quarter and Half Year Ended	October 31, 2018	End of October 2019
3 Third Quarter	January 31, 2019	End of January 2020
4 Fourth Quarter and Year Ended	May 7, 2019	End of April 2020

#### Dividend

For the period under review, the Company has declared and paid dividends as detailed below:

Date of Board Meeting	Type of Dividend	Amount of Dividend	Record Date
<b>Equity Shares</b>			
October 31, 2018	First Interim Dividend	₹17 per share	Saturday, November 10, 2018
March 6, 2019	Second Interim Dividend	₹1.85 per share	Thursday, March 14, 2019
Preference Shares			
October 10, 2018	Redemption and Dividend as per terms of issuance	₹0.75 per share (on pro rata basis)	Monday, October 22, 2018

The payments of the above mentioned dividends were made within the statutory timelines.

Further, the Board has not recommended any final dividend.

#### **Listing Details**

Particular		Scrip Code	ISIN code
Indian Stock Exchange	<b>BSE Limited (BSE)</b> Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai - 400 001	500295	INE205A01025
	National Stock Exchange of India Limited (NSE) Exchange Plaza, Plot No. C/1, G-Block, Bandra-Kurla Complex, Bandra (East), Mumbai - 400 051	VEDL	INE205A01025
Global Stock Exchange	New York Stock Exchange (NYSE)	VEDL	CUSIP 92242Y100
	American Depository Shares (ADS)		

#### Notes:

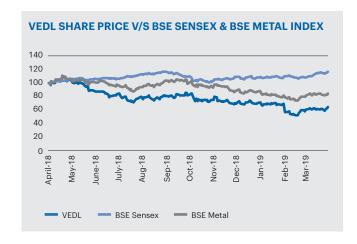
- Non-Convertible Debentures of the Company are also listed on the BSE Limited (BSE), details of the same are provided later in this report;
  During the FY 2019, the Company had redeemed its Redeemable Preference Shares (RPS) pursuant to their terms of issuance which were listed on BSE (Scrip Code: 700134 ISIN: INE205A04011) and NSE (Scrip Code: VEDL P1 ISIN: INE205A04011).
  Company has paid annual listing fees for the FY 2019 to all the Stock Exchanges (Indian & Global), where the securities of the Company are listed.

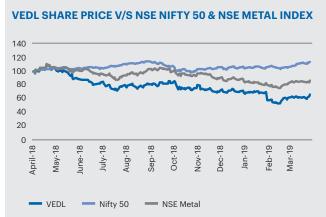
#### **STOCK PRICE DATA FOR FY 2019**











#### **SHARE TRANSFER SYSTEM**

#### **REQUEST RECEIVED BY KARVY**

 Requests relating to transfer, transmission, deletion are received from shareholders having physical shareholding.

#### **DOCUMENT VERIFICATION**

- Karvy checks the authenticity of documents:
- · Sends the request to the Company for processing.

#### **APPROVAL**

- The Company also checks the validity of documents;
- Requests are then approved by the duly constituted Share & Debenture Transfer Committee.

#### COMMUNICATION **TO SHAREHOLDER**

- Post Committee approval, Karvy completes the process and the same is communicated to the shareholders;
- · Requests are generally processed within 15 days of receipt of the documents, if documents are clear and valid in all respects.

A certificate by a Practicing Company Secretary is issued on a half yearly basis pursuant to Regulation 40(9) of Listing Regulations confirming due compliance of share transfer formalities by the Company.

Quarterly audits are also carried out by the Practicing Company Secretary to reconcile the total admitted capital with NSDL and CDSL confirming that the total issued/paid up and listed capital is in agreement with the aggregate of the total number of shares in physical form and the total number of shares in dematerialised form. The reports for the same were timely filed with BSE Limited and NSE.

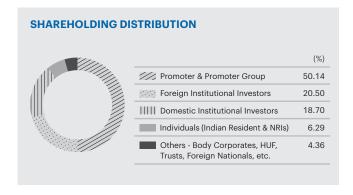
#### **Capital Evolution**

The details of capital evolution of the Company can be accessed on the website of the Company at https://www.vedantalimited.com

#### **Shareholding Distribution**

Shareholding according to shareholders class as on March 31, 2019								
Shareholding of Nominal value of ₹1/-	No. of shareholders	% of Total shareholders	No. of shares held	Shareholding (%)				
1 – 5000	599,706	98.77	149,037,261	4.01				
5001 – 10000	4,224	0.70	30,377,440	0.82				
10001 - 20000	1,709	0.28	23,807,374	0.64				
20001 - 30000	461	0.08	11,299,346	0.30				
30001 - 40000	212	0.03	7,273,996	0.20				
40001 - 50000	130	0.02	5,909,606	0.16				
50001 - 100000	208	0.03	15,035,128	0.40				
100001 & Above	512	0.09	3,474,456,488	93.47				
Total	607,162	100.00	3,717,196,639	100.00				

- Twinstar Holdings Limited (Promoter) holds 24,823,177 American Depository Shares (ADS) representing 99,292,708 equity shares. One ADS represents four equity shares.
- 308,232 equity shares are pending for allotment and listing hence, are kept under abeyance category since they are under dispute



# **HOLDING DISTRIBUTION** (%) /// NSDL 88.88 CDSL 10.80 0.32 Physical

## **Dematerialisation of Shares and Liquidity**

The shares of the Company are compulsorily traded in dematerialised form on the stock exchanges. As on March 31, 2019, ~ 99% shares of the Company are held in dematerialised form.

Pursuant to the amendment in Listing Regulations, post April 1, 2019, except in case of transmission or transposition of securities, requests for effecting transfer of securities shall not be processed unless the securities are held in the dematerialised form with a depository.

The equity shares of the Company are freely tradable in the market and are among the most liquid and actively traded shares in the stock exchanges.

## **Outstanding GDRs/ ADRs/ Warrants/ Options**

In June 2007 and July 2009, Vedanta Limited (erstwhile Sterlite Industries (India) Ltd.) had issued 150,000,000 and 131,906,011 ADS, which are listed and traded on the New York Stock Exchange (NYSE). Pursuant to the Scheme of Amalgamation and Arrangement, ADS were listed with NYSE of which 62,194,863 representing ADS were outstanding as on March 31, 2019. As of the year end, there were nine registered holders of the ADS.

Citibank N.A., New York acts as the Depository for the ADS / ADR issued by the Company.

## **Listing of Debt Securities**

The following Secured Redeemable Non-Convertible Debentures (NCDs) are listed with the BSE Limited and ISIN number with National Securities Depositories Limited:

S. No.	ISIN Number	Issuance date	Maturity date	Coupon rate	Payment frequency	No. of NCDs (face value of ₹10 lakh each)	Amount (in Crores)
1	INE205A07030	17-Aug-15	17-Aug-20	9.45%	Annual	20,000	2,000
2	INE205A07048	30-Sep-16	20-Apr-20	8.70%	Interest Compounded Annually and payable at Maturity	6,000	600
3	INE205A07055	30-Sep-16	27-Sep-19	8.65%	Interest Compounded Annually and payable at Maturity	1,500	150
4	INE205A07063	7-Oct-16	15-Apr-21	8.75%	Interest Compounded Annually and payable at Maturity	2,500	250
5	INE205A07071	7-Oct-16	15-Sep-21	8.75%	Interest Compounded Annually and payable at Maturity	2,500	250
6	INE205A07089	28-Oct-16	28-Oct-19	8.25%	Annual	3,000	300
7	INE205A07097	22-Nov-16	22-Apr-20	7.95%	Annual	3,000	300
8	INE205A07105	30-Nov-16	29-Nov-19	7.50%	Annual	2,000	200
9	INE205A07113	31-May-17	31-May-19	7.60%	Annual	3,500	350
10	INE205A07121	20-Dec-17	4-Dec-20	7.80%	Annual	5,000	500
11	INE205A07139	5-Apr-18	5-Apr-21	8.50%	Annual	23,500	2,350
12	INE205A07147	5-Apr-18	15-Jun-21	8.50%	Annual	16,500	1,650
13	INE205A07154	4-Jul-18	2-Jul-21	9.18%	Annual	10,000	1,000

#### **Credit Ratings**

	Status as on	March 31, 2018	Status as on March 31, 2019		Date of Action		
	CRISIL	India Ratings	CRISIL	India Ratings	CRISIL	India Ratings	
Bank Loans	CRISIL AA/ Outlook Positive	IND AA/ Outlook Positive	CRISIL AA/ Outlook Stable	IND AA/ Outlook Stable	Change in outlook on February 19, 2019. The lower profitability, softer commodity prices and addition of Electrosteel acquisition debt elongated company's deleveraging plans vis-a-vis CRISILs earlier expectation resulting in change in outlook to Stable from Positive.	Change in Outlook on February 26, 2019. India Ratings changed the rating outlook to Stable from Positive while affirming the ratings due to delay in deleveraging on account of acquisition outflows and higher-than-expected dividend distribution.	
Working Capital Lines	CRISIL AA/ Outlook Positive/ CRISIL A1+	-	CRISIL AA/ Outlook Stable/ CRISIL A1+	-	Same as above	NA	
Non-Convertible Debentures	CRISIL AA/ Outlook Positive	-	CRISIL AA/ Outlook Stable	-	Same as above	NA	
Commercial Paper	CRISIL A1+	IND A1+	CRISIL A1+	IND A1+	No Change	No Change	

#### **Plant Locations**

Division	Location					
Copper Anodes (Smelter), Refinery, Continuous Cast Copper Rods	SIPCOT Industrial Complex, Madurai By-pass Road, T.V. Puram PO, Tuticorin – 628 002 Tamil Nadu, India					
Copper Cathodes (Refinery) and	• 1/1/2 Chinchpada, Silvassa – 396 230 Union Territory of Dadra and Nagar Haveli, India					
Continuous Cast Copper Rods/ Wire	<ul> <li>Pune Old Highway, Takwe Khurd. Post Kamshet. Taluka Maval. Dist. Pune – 410 405 Maharashtra, India **</li> </ul>					
Continuous Cast Copper Rods	<ul> <li>209-B, Piparia Industrial Estate, Piparia, Silvassa – 396 230, Union Territory of Dadra and Nagar Haveli, India</li> </ul>					
Iron Ore – Mining	<ul> <li>Megalahally Office Complex, Megalahally Village, Hireguntanur, Hobli, Chitradurga Taluk and district, Karnataka, India*</li> </ul>					
Pig Iron Division 1	<ul> <li>Sy No. 39,41,36/1 (p) 37 (P), 42/1 (p) 43/1 (p) Amona, P.O. Marcel, Bicholim, Goa – 403 107, India</li> </ul>					
Metallurgical Coke (Met Coke)	• 207, Navelim, Sankhalim, Bicholim Goa – 403 505, India					
PIG Iron Division 2	SY No. 177 N 120 (P) Navelim P.O. Sanquelim Bicholim Goa 403 505, India					
Aluminium Smelters	PMO Office, Bhurkahamuda, PO-Sripura, Dist – Jharsuguda, Odisha – 768 202, India					
Alumina Refinery	<ul> <li>Alumina Refinery Project, At/PO – Lanjigarh, Via – Viswanathpur, Kalahandi, Lanjigarh, Odisha – 766 027, India</li> </ul>					
Aluminium	Post Box No. 4, Mettur Dam R.S 636 402, Salem District, Tamil Nadu, India					
	• Gat No. 924 to 927. Sanaswadi Taluka Shirur. Dist. Pune - 412 208 Maharashtra, India **					
Power	Bhurkahamunda, PO -Sripura, Dist- Jharsuguda,     Odisha -768 202, India					
	<ul> <li>Power Plant 1, Plot s/y No 44/4 &amp; 44/5, Amona Village, Navellim, Bicholim – Goa - 403107, India</li> </ul>					
	SIPCOT Industrial Complex, Meelavitan, Tuticorin, Tamil Nadu- 628 002, India					
Oil & Gas	• Assets					
	-RJ-ON-90/1 - Barmer Basin - India					
	-CB/OS-2 - Cambay Basin - India					
	-PKGM-1 Ravva - Krishna Godavari Basin - India					
	-KG-ONN-2003/1- Krishna Godavari Basin - India					
	-KG-OSN-2009/3 - Krishna Godavari Basin - India					
	-Block-01- Orange Basin - South Africa					
	• Pipeline					
	-Radhanpur Terminal, Patan, Gujarat					
	-Viramgam Terminal, Ahmedabad					
	-Bhogat Terminal, Dwarka, Gujarat					
	• Plant					
	- Mangala Processing Terminal, Barmer, Rajasthan					
	-Raageshwari Gas Terminal, Rajasthan					
	-Suvali Onshore terminal, Gujarat					
	-Raava Onshare terminal, Andhra Pradesh					
Paper **	GIDC Doswada, Ta. Fort Songadh, District Tapi, Gujarat – 394 365, India					

\*The Supreme Court passed its final order in SLP (C) 32138/2015 (with connected matters), the M/s. Goa Foundation v/s Sesa Sterlite Limited & Others on February 7, 2018 wherein it quashed the second renewals granted for the mining leases by the State of Goa. The court directed all lease holders operating under a second renewal to stop all mining operations with effect from March 16, 2018 until fresh mining leases (not fresh renewals or other renewals) are granted and fresh environmental clearances are granted.

<sup>\*\*</sup> Non-Operation Unit

# Commodity Price Risk or Foreign Exchange Risk and Hedging Activities

#### Fluctuation in commodity prices

**Impact:** Prices and demand for the Group's products are expected to remain volatile / uncertain and strongly influenced by global economic conditions. Volatility in commodity prices and demand may adversely affect our earnings, cash flow and reserves.

Mitigation: Our Group has a well-diversified portfolio, which acts as a hedge against fluctuations in commodities and delivers cash flows through the cycle. We consider exposure to commodity price fluctuations to be an integral part of our Group's business and its usual policy is to sell its products at prevailing market prices, and not to enter into long-term price hedging arrangements. However, to minimise price risk for finished goods where price of raw material is also determined by same underlying base metal prices (e.g. purchase of alumina, copper concentrate for manufacturing and selling copper and aluminium products, respectively) we employ back-to-back hedging. In exceptional circumstances, we may enter into strategic hedging with prior approval of the Executive Committee. The Group monitors the commodity markets closely to determine the effect of price fluctuations on earnings, capital expenditure and cash flows.

#### **Currency exchange rate fluctuations**

**Impact:** Our assets, earnings and cash flows are influenced by a variety of currencies due to the diversity of the countries in which we operate. Fluctuations in exchange rates of those currencies may have an impact on our financials. Although the majority of the Group's revenue is tied to commodity prices that are typically priced by reference to the US dollar, a significant part of its expenses are incurred and paid in local currency. Moreover, some of the Group borrowings are denominated in US dollars, while a large percentage of cash

and liquid investments are held in other currencies, mainly in the Indian rupee. Any material fluctuations of these currencies against the US dollar could result in lower profitability or in higher cash outflows towards debt obligations.

**Mitigation:** We do not speculate in forex. We have developed robust controls in forex management to monitor, measure and hedge currency risk liabilities. The Finance Standing Committee (FSC), a committee of the Board, reviews our forex-related matters periodically and suggests necessary courses of action as may be needed by businesses from time to time, and within the overall framework of our forex policy.

Exposures on foreign currency loans are managed through the Group wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange rates are appropriately managed. The Group strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged. The Group uses forward exchange contracts, currency swaps and other derivatives to hedge the effects of movements in exchange rates on foreign currency denominated assets and liabilities. The sources of foreign exchange risk are outstanding amounts payable for imported raw materials, capital goods and other supplies as well as financing transactions and loans denominated in foreign currencies. The Group is also exposed to foreign exchange risk on its net investment in foreign operations. Most of these transactions are denominated in US dollars. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. However, all new long-term borrowing exposures are being hedged. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

		Function on an author		Eveneure in avantity	% of such exposure hedged through commodity of				ives
	Commodity	Exposure in amount towards the particular		Exposure in quantity – towards the particular _	Domes	Domestic market		International market	
S. No.	Name <sup>1</sup>	commodity (₹ in Crore)	Units	commodity	OTC	Exchange	OTC	Exchange	
1	Aluminium <sup>2</sup>	20,609	KT	1,340	0	0	0	62	62
2	Oil <sup>2</sup>	6,838	mmboe	15	0	0	0	0	0
3	Gas <sup>2</sup>	227	mmscf	3,027	-	-	-	-	-
4	Copper <sup>3</sup>	16,098	KT	372	0	0	0	92	92
5	Silver <sup>3</sup>	168	OZ	1,659,005	0	0	89	0	89
6	Gold <sup>3,4</sup>	1,057	OZ	123,124	0	73	9	0	82

- Commodity means a commodity whose price is fixed by reference to an international benchmark and having a material effect on the financial statements
- 2. Exposure for Aluminium and Oil is based on sales and closing stock and that for Gas is based on sales.
- 3. Gold and Silver are sold in the form of anode slime/copper concentrate. Anode slime is the residue formed while refining copper. Exposure for Copper (including Gold and Silver) is based on opening stock, purchases and sales. Percentage of exposure not hedged represents unpriced transactions as at March 31, 2019 as the same will be hedged as per the Company's policy and contractual terms once price period is fixed.
- 4. During the year, with respect to gold, some of the derivatives purchased through international OTC market were later migrated to domestic exchange market. These have been presented under the domestic exchange market above.

#### Total fees for all services on a consolidated basis to the statutory auditor

Note: All amounts are exclusive of GST

#### **OTHER DISCLOSURES**

#### Framework for monitoring Subsidiary Companies

With respect to the FY under review, the Company has no material unlisted subsidiary pursuant to the provisions of Regulation 24(1) of the Listing Regulations.

Confirming with the Listing Regulations, the Company has a policy on **Determining Material Subsidiary**, approved by the Board. The policy can be accessed at https://www.vedantalimited.com.

The subsidiary companies have their separate Board of Directors who are authorised to exercise all the responsibilities, duties and rights for effective monitoring and management of the subsidiaries. The Company supervises and monitors the performance of subsidiary companies by:

- Reviewing by the Audit Committee of the financial statements and, in particular, the investments made by the subsidiary companies;
- ii. Placing before the Board, the minutes of each of the Board meetings of the subsidiary companies and a statement of all significant transactions of the subsidiary companies for their review and noting;

#### **Materially Significant Related Party Transactions**

All the Related Party Transactions were in consensus with the provisions of Companies Act, 2013 and Listing Regulations and were in ordinary course of business and at arm's length basis. A detailed information note on material significant related party transactions forms a part of Director's Report.

The Company has a policy on Related Party Transactions, which regulates all the Related Party Transaction entered into by the Company. This policy has been approved by the Board and displayed on the Company's website at https://www.vedantalimited.com

Non-Compliance by the Company, Penalties, Strictures imposed by Stock Exchange or SEBI or any Statutory Authority on any matter related to capital markets during the last three years

No penalty or strictures have been imposed by stock exchange or SEBI or any statutory authority on any matter related to capital markets on your Company during the last three years.

## Vigil Mechanism/Whistle-Blower policy

Your Company promotes utmost standards of moral behaviour and legal business conduct. The employees have been given access to provide any complaint w.r.t. the Company's accounting, internal accounting controls, auditing matters

or any such suspected incidents of fraud or violation of the Company's Code of Conduct that could adversely impact the Company's operations, business performance and/or reputation.

All the employees of the Company and its subsidiaries are encouraged and expected to raise their concern. The Audit Committee has laid down procedure governing the receipt, retention and treatment of complaints. Your Company has in place a Whistle-Blower Policy, as part of vigil mechanism and can be accessed at https://www.vedantalimited.com.

As per the Policy adopted by various businesses in the Group, all complaints are reported to the Director - Management Assurance, who is independent of operating management and the businesses. In line with global practices, dedicated e-mail ID (sgl.whistleblower@vedanta.co.in), a centralised database, a 24X7 whistle-blower hotline and a web-based portal (www.vedanta.ethicspoint.com) have been created to facilitate receipt of complaints.

It is also affirmed that no personnel has been denied access to the Audit Committee.



Disclosure in relation to the Sexual Harassment of Women at workplace (Prevention, Prohibition and Redressal) Act, 2013 The detailed disclosure forms part of the Directors' Report.

#### **Compliances DISCRETIONARY REQUIREMENTS:**

A Non-Executive A half-yearly To move towards a Internal auditor may declaration of regime of financial Chairperson may be report directly to the entitled to maintain financial performance statements with **Audit Committee** including summary of the significant a chairperson's unmodified audit office at the listed opinion entity's expense events in last sixand also allowed months, may be sent reimbursement of to each household of expenses incurred shareholders in performance of his duties The Board of the Quaterly Financial There was no qualification The same is reported Company is chaired by Results were sent to the by the auditors on the by briefing the Audit an Executive Director shareholders whose financial statements Committee through who maintains the e-mail Id was registered of the Company. discussion and Chairman's office at the with the Company. presentation of the Company's expense. observations, review, comments and recommendations, amongst others in the Internal Audit presentation by the Company's Internal Auditor.

Corporate Governance requirements specified in Regulation 17 to 27 and clauses (b) to (i) of sub-regulation (2) of regulation 46 of Listing Regulations:

S. No.	Particulars Particulars	Regulation	Compliance Status (Yes/No/NA)	Complied with the following
1.	Board of Directors	17	Yes	<ul> <li>Composition {17(1), 17(1A)}</li> <li>Frequency of Meetings {17(2)}</li> <li>Review of Compliance Report {17(3)}</li> <li>Plans for orderly succession for appointments {17(4)}</li> <li>Code of Conduct {17(5)}</li> <li>Fees/compensation to Non-Executive Directors {17(6)}</li> <li>Minimum information to be placed before the Board {17(7)}</li> <li>Compliance Certificate {17(8)}</li> <li>Risk assessment and management {17(9)}</li> <li>Performance evaluation of Independent Directors {17(10)}</li> <li>Annexure in Notice for each Special item to be transacted at AGM {17(11)}</li> </ul>
2.	Maximum Number of Directorship	17A	Yes	Other directorship of Directors {17A (1) and (2)}
3.	Audit Committee	18	Yes	<ul> <li>Composition {18(1)}</li> <li>Meetings {18(2)(a) and (b)}</li> <li>Powers of the Committee {18(2)(c)}</li> <li>Role of the Committee and review of information by the Committee {18(3)}</li> </ul>

S. No.	Particulars	Regulation	Compliance Status (Yes/No/NA)	Complied with the following
4.	Nomination and	19	Yes	Composition {19(1)}
	Remuneration Committee			• Chairperson {19(2) and (3)}
	Committee			• Quorum {19(2A)}
				<ul><li>Meeting {19(3A)}</li></ul>
				Role of the Committee {19(4)}
5.	Stakeholder Relationship	20	Yes	Composition {20(1)}
	Committee			Chairperson {20(2)}
				Other Members {20(2A)}
				<ul><li>Meeting {20(3A)}</li></ul>
				Role of the Committee {20(4)}
6.	Risk Management	21	Yes	<ul> <li>Composition {21(1) and (2)}</li> </ul>
	Committee			Chairperson {21(3)}
				<ul> <li>Meeting {21(3A)}</li> </ul>
				Role of the Committee {21(4)}
7.	Vigil Mechanism	22	Yes	• Formulation of Vigil Mechanism for Directors and employees {22(1)}
				Direct access to Chairperson of Audit Committee {22(2)}
8.	Related Party Transactions	23	Yes	<ul> <li>Policy on Materiality of Related Party Transactions and dealing with Related Party Transactions {23(1)}</li> </ul>
				• Payments made to related party w.r.t brand usage or royalty {23(1A)}
				<ul> <li>Approval including omnibus approval of Audit Committee {23(2) and (3)}</li> </ul>
				Review of Related Party Transactions
				There were no material Related Party Transactions
9.	Subsidiaries of the Entity	24	Yes	There was no material subsidiary of the Company and as a result the other compliance in respect of material subsidiary were not applicable {24(1)}
				<ul> <li>Review of financial statements of unlisted subsidiary by the Audit Committee {24(2)}</li> </ul>
				<ul> <li>Minutes of Meetings of Board of unlisted subsidiary placed at meeting of the listed entity {24(3)}</li> </ul>
				• Significant transactions and arrangements of unlisted subsidiary {24(4)}
10.	Secretarial Audit	24A	Yes	Secretarial audit report {24A}
11.	Obligations with respect	25	Yes	Alternate Directorship for Independent Director {25(1)}
	to Independent Directors			• Tenure of Independent Director (25 (2))
				<ul> <li>Meetings of Independent Directors {25(3) and (4)}</li> </ul>
				Replacement {25(6)}
				Familiarisation of Independent Directors {25(7)}
				Declaration of Independence {25(8)}
				Director and Officers Insurance {25(10)}
12.	Obligations with respect	26	Yes	Memberships/Chairmanships in Committees {26(1) and (2)}
	to Employees including Senior Management,			Affirmation on compliance with Code of Conduct by Directors and Senior Management {26(3)}
	Key Managerial Persons, Directors and Promoters			• Disclosure of shareholding by Non-Executive Directors {26(4)}
	Directors and Fromotors			<ul> <li>Disclosures by Senior Management about potential conflicts of interest {26(5)}</li> </ul>
13.	Other Corporate	27	Yes	Compliance with discretionary requirements {27(1)}
	Governance Requirements			• Filing of quarterly compliance report on Corporate Governance {27(2)}
14.	Website	46	Yes	Maintaining Functional Website {46(1)}
				Details disseminated on website {46(2)}
				Contents on website and updating the website {46(3)}

#### **Corporate Policies of the Company**

Your Company is inclined towards following highest levels of ethical standards in all our business transactions. To ensure the same, the Company has adopted various policies, codes and practices. The policies are reviewed periodically by the Board and are updated in line with amended laws and requirements. The key policies adopted are detailed below:

Category of Policy/Code	Brief summary	Web link	Amendments during FY 2019	
Code of Conduct and Ethics	The Code details on uncompromising business ethics which is an integral part of Company's values and method of conducting business. It's based on the core values of Trust, Entrepreneurship, Innovation, Excellence, Integrity, Respect and Care.	https://www.vedantalimited.com/ CorporateGovernance	There has been no change in the Code.	
	The Whistle-Blower Policy also forms part of the Code.			
	The Code also covers areas such as Conflict of Interest, Gift, Competition and Fair dealings, Protection and use of Company Assets etc.			
Corporate Social Responsibility Policy	The policy ensures that the conduct of Company's business impacts the society through major thrust areas of education, women empowerment, sport & culture, drinking water & sanitation, agriculture & animal husbandry, community infrastructure, health care and disaster management and rescue and relief operations.	https://www.vedantalimited.com/ CorporateGovernance	There has been no change in the policy.	
Nomination & Remuneration Policy	The policy details the guidelines on identification and appointment of individual as a Director, KMP and Senior Management Personnel including the criteria on their qualification and independence, manner and criteria for effective evaluation of the performance.	https://www.vedantalimited.com/ CorporateGovernance	The Board on the recommendation of the NRC had amended the Policy on March 28, 2019 to include the responsibilities of senior management, recommendation for their appointment, removal, remuneration and succession planning.	
	The Policy also details the compensation principles.			
Insider Trading Prohibition Code	The Code is a guideline to regulate, monitor and report trading in securities of the Company, Policy & Procedures for inquiry in case of leak of Unpublished Price Sensitive Information and Code of Practices and Procedures for Fair Disclosure & Policy for determination of Legitimate Purpose.	https://www.vedantalimited.com/ CorporateGovernance	The Board on recommendation of the Audit Committee had amended the Code on March 28, 2019 effective April 1, 2019 to include the recent SEBI Regulations amendments.	
Dividend Distribution	The Policy Details Guidelines For Dividend Distribution for Equity Shareholders as per the requirements of the Listing Regulations.	https://www.vedantalimited.com/ CorporateGovernance	There has been no change in the policy.	
Related Party Transaction Policy	This Policy sets out the philosophy and processes that is to followed for approval and review in respect of transactions entered into by the Company with the identified Related Parties.	https://www.vedantalimited.com/ CorporateGovernance	There has been no change in the policy.	
Material Subsidiaries	The policy determines the guidelines for material subsidiaries of the Company and also provides the governance framework for such material subsidiaries.	https://www.vedantalimited.com/ CorporateGovernance	There has been no change in the policy.	
Policy for determination of Materiality for Fair Disclosure of Material Events	The policy determines the requirements for disclosing material events including deemed material events for the Company and its subsidiary companies which are in nature of Unpublished Price Sensitive Information.		There has been no change in the policy.	
/ Unpublished Price Sensitive Information to Stock Exchange(s) and Archival Policy	The policy also lays the guidelines on archival and retention of records of the Company.			
Policy on Prevention, Prohibition and Redressal of Sexual Harassment at Workplace	The purpose to this policy is to create and maintain a healthy and conducive work environment, free of discrimination. This includes discrimination on any basis, including gender and any form of sexual harassment.	https://www.vedantalimited.com/ CorporateGovernance	There has been no change in the policy.	

#### **Awareness Sessions/Workshops on Governance practices**

Vedanta as an organisation strongly supports transparency and openness and believes in zero tolerance for unethical practices. Employees across the Company as well as the group are regularly sensitised about the various policies and governance practices of the Company through various interactive tools. Additionally, the Company also drives a group-wide 'Ethics Compliance Month' as part of its special annual initiative wherein it conducts awareness and training sessions covering on governance and internal policies such as prevention of insider trading, prevention of sexual harassment, anti-bribery and anti-corruption, anti-trust laws etc. Further, the Company has also developed an automated training module for a mandatory annual training for all its employees across the group and reinforce the principles under the Code of Business Conduct and Ethics, the Whistle-Blower Policy etc.

Moreover, the senior management places great emphasis on good governance practices by setting the tone at the top and encouraging employees to educate themselves and to ensure transparency and integrity in their day-to-day activities.

#### **Statutory Compliance System**

The Company has an internal standard operating procedure to manage statutory compliances across all businesses and has also deployed a top of the line automated compliance management system. This ensures best in class compliance monitoring and reporting with regular updates on checklists of all applicable statutory requirements including corporate laws, environmental laws, labour laws, industry laws amongst others. As a best practice, we have also made it mandatory for all CEOs to issue and sign-off compliance certificates for their respective businesses.

#### **Annexure I**

Declaration by Chief Executive Officer on Code of Business Conduct and Ethics of the Company

In accordance to the provisions of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, I, Srinivasan Venkatakrishnan, Whole-Time Director & Chief Executive Officer of Vedanta Limited, hereby declare that all members of the Board and Senior Management Personnel have affirmed compliance with the Code of Business Conduct and Ethics of the Company for FY 2019.

For Vedanta Limited

Place Mumbai Date May 7, 2019 **Srinivasan Venkatakrishnan**Whole-Time Director & Chief Executive Officer

#### **Annexure II**

#### **CERTIFICATION**

We, Srinivasan Venkatakrishnan, Whole-Time Director & Chief Executive Officer and GR Arun Kumar, Whole-Time Director & Chief Financial Officer, certify that:

- A. We have reviewed financial statements and the cash flow statement for the year and that to the best of our knowledge and belief:
  - (1) These statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading:
  - (2) These statements together present a true and fair view of the Company's affairs and are in compliance with existing accounting standards, applicable laws and regulations.
- B. There are, to the best of our knowledge and belief, no transactions entered into by the Company during the year, which are fraudulent, illegal or violative of the Company's code of conduct.
- C. We accept responsibility for establishing and maintaining internal controls for financial reporting. We have evaluated the effectiveness of internal control systems of the Company pertaining to financial reporting, and we have not noticed any deficiency in the design of operation of such internal controls, or of which we are aware that needs to be rectified or informed to the auditors and the Audit Committee.
- D. During the year it was disclosed to the Auditors and the Audit Committee that:
  - (1) There were no significant changes in internal control over financial reporting;
  - (2) No significant changes in accounting policies were made during the year that require disclosure in the notes to the financial statements; and
  - (3) No instances of significant fraud and the involvement therein, if any, of the management or an employee having a significant role in the Company's internal control system over financial reporting, has come to our notice.

#### Srinivasan Venkatakrishnan

G. R. Arun Kumar

Whole-Time Director & Chief Executive Officer DIN: 08364908

Whole-Time Director & Chief Financial Officer DIN: 01874769

Place: Mumbai Date: May 7, 2019

## **Annexure III**

## Certificate under Regulation 34(3) and Schedule V Part C of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015

The Members Vedanta Limited 1st Floor, C wing, Unit 103, Corporate Avenue Atul Projects, Chakala, Andheri (East) Mumbai 400093, Maharashtra

To the best of our information and according to explanation given to us and on the basis of written Confirmation received from Directors of Vedanta Limited ("Company"), we hereby Certify that as on March 31, 2019, None of the Directors on the Board of the Company have been debarred or disqualified from being appointed or continuing as director of the Company by SEBI, MCA or any such statutory authority.

For Chandrasekaran Associates

Company Secretaries

Dr. S. Chandrasekaran

Senior Partner Membership No. FCS No.: 1644 Certificate of Practice No.: 715

Date: May 7, 2019 Place: New Delhi

Independent Auditor's Report on compliance with the conditions of Corporate Governance as per provisions of Chapter IV of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements)
Regulations, 2015

The Members Vedanta Limited 1st Floor, 'C' Wing Unit 103, Corporate Avenue, Atul Projects Chakala, Andheri (E) Mumbai

1. The Corporate Governance Report prepared by Vedanta Limited (hereinafter the "Company"), contains details as required by the provisions of Chapter IV of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended ("the Listing Regulations") ('Applicable criteria') with respect to Corporate Governance for the year ended March 31, 2019. This report is required by the Company for annual submission to the Stock exchange and to be sent to the Shareholders of the Company.

#### MANAGEMENT'S RESPONSIBILITY

- 2. The preparation of the Corporate Governance Report is the responsibility of the Management of the Company including the preparation and maintenance of all relevant supporting records and documents. This responsibility also includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Corporate Governance Report.
- 3. The Management along with the Board of Directors are also responsible for ensuring that the Company complies with the conditions of Corporate Governance as stipulated in the Listing Regulations, issued by the Securities and Exchange Board of India.

#### **AUDITOR'S RESPONSIBILITY**

- 4. Pursuant to the requirements of the Listing Regulations, our responsibility is to express a reasonable assurance in the form of an opinion whether the Company has complied with the specific requirements of the Listing Regulations referred to in paragraph 1 above.
- 5. We conducted our examination of the Corporate Governance Report in accordance with the Guidance Note on Reports or Certificates for Special Purposes and the Guidance Note on Certification of Corporate Governance, both issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note on Reports or Certificates for Special Purposes requires that we comply with the ethical requirements of the Code of Ethics issued by the Institute of Chartered Accountants of India.
- 6. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 7. The procedures selected depend on the auditor's judgement, including the assessment of the risks associated in compliance of the Corporate Governance Report with the applicable criteria. Summary of key procedures performed include:
  - Reading and understanding of the information prepared by the Company and included in its Corporate Governance Report:
  - ii. Obtained and verified that the composition of the Board of Directors w.r.t Executive and Non-Executive directors has been met throughout the reporting period;
  - iii. Obtained and read the Directors Register as on March 31, 2019 and verified that at least one women director was on the Board during the year;
  - iv. Obtained and read the minutes of the following meetings held from April 1, 2018 to March 31, 2019:
    - (a) Board of Directors;
    - (b) Audit committee;
    - (c) Annual General meeting;
    - (d) Nomination and remuneration committee;
    - (e) Stakeholders Relationship Committee;
    - (f) Risk management committee; and
    - (g) Corporate Social Responsibility Committee

- v. Obtained necessary representations and declarations from directors of the Company including the independent directors; and
- vi. Performed necessary inquiries with the management and also obtained necessary specific representations from management.

The above-mentioned procedures include examining evidence supporting the particulars in the Corporate Governance Report on a test basis. Further, our scope of work under this report did not involve us performing audit tests for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

#### **OPINION**

8. Based on the procedures performed by us as referred in paragraph 7 above, and according to the information and explanations given to us, we are of the opinion that the Company has complied with the conditions of Corporate Governance as stipulated in the Listing Regulations, as applicable for the year ended March 31, 2019, referred to in paragraph 1 above.

#### OTHER MATTERS AND RESTRICTION ON USE

- 9. This report is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.
- 10. This report is addressed to and provided to the members of the Company solely for the purpose of enabling it to comply with its obligations under the Listing Regulations with reference to compliance with the relevant regulations of Corporate Governance and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care or for any other purpose or to any other party to whom it is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For S.R. Batliboi & Co. LLP

**Chartered Accountants** 

ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal

Partner

Membership Number: 82028 UDIN No.: 19082028AAAAAB6854

Place: Mumbai Date: May 7, 2019

# **Independent Auditor's Report**

#### To the Members of Vedanta Limited

#### REPORT ON THE AUDIT OF THE STANDALONE IND AS **FINANCIAL STATEMENTS**

#### **OPINION**

We have audited the accompanying standalone Ind AS financial statements of Vedanta Limited ("the Company"), which comprise the Balance sheet as at March 31, 2019, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone Ind AS financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2019, its profit including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

#### **BASIS FOR OPINION**

We conducted our audit of the standalone Ind AS financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Standalone Ind AS Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the standalone Ind AS financial statements.

#### **KFY AUDIT MATTERS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the standalone Ind AS financial statements for the financial year ended March 31, 2019. These matters were addressed in the context of our audit of the standalone Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the standalone Ind AS financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the standalone Ind AS financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying standalone Ind AS financial statements.

## Key audit matters

How our audit addressed the key audit matter

Recoverability of carrying value of property plant and equipment, capital work in progress, exploration intangible assets under development and investments being carried at cost (as described in note 3c(A)(ii), 3c(A)(iii), 3c(A)(x), 5, 6A and 31 of the standalone Ind AS financial statements)

As at March 31, 2019, the carrying value of property, plant and equipment, capital work in progress, exploration intangible assets under development and investment being carried at cost was ₹ 120,941 Crore. We focused our efforts on the Cash Generating Units ("CGUs") of (a) Tuticorin within the copper segment; and (b) Krishna Godavri basin within the oil and gas segment; as they had impairment and/or impairment reversal indicators. Recoverability of property plant and equipment, capital work in progress, exploration intangible assets and investment being carried at cost has been identified as a key audit matter due to:

- · The significance of the carrying value of assets being assessed.
- The size of impairment charges and reversals in earlier years.
- The fact that the assessment of the recoverable amount of the Company's CGUs and investments involves significant judgements about the future cash flow forecasts and the discount rate that is applied.
- The withdrawal of the Company's licenses to operate in current year in one of the jurisdictions' and consequential litigation.

Our audit procedures included the following:-

- · Critically assessed through an analysis of internal and external factors impacting the Company, whether there were any indicators of impairment (or reversal of impairment) in line with
- Specifically in relation to the CGUs where impairment and impairment reversal indicators were identified, obtained and evaluated the valuation models used to determine the recoverable amount by challenging the key assumptions used by the management including:
  - Considering forecasted volumes in relation to asset development plans.
  - Critically assessing management's forecasting accuracy by comparing prior year forecasts to actual results and assessing the potential impact of any variances.
  - Corroborating the price assumptions used in the models against analyst consensus.
  - Testing the appropriateness of the weighted average cost of capital used to discount the impairment models through engaging our internal valuations experts.
  - Testing the integrity of the models together with their clerical

#### Key audit matters

## The key judgements and estimates centered on the likely outcome of the litigations, cash flow forecasts, prices and discount rate assumptions. An impairment reversal of ₹ 313 Crore was recorded in opinions in respect of the merits of the case and critically assessed the oil and gas segment during the year (refer note 31).

#### How our audit addressed the key audit matter

Additionally, wherever impairment trigger arose due to withdrawal of Company's license to operate, we inspected the external legal management's position through discussions with the legal counsel to determine the basis of their conclusion.

- · Assessed the competence and objectivity of the Company's external experts, to satisfy ourselves that these parties are appropriate in their roles within the estimation process.
- Assessed the adequacy of the disclosures made by the Company in this regard.

### Revenue recognition (as described in note 3a(A), 3c(A)(xi), 3c(B)(ii) and 26 of the standalone Ind AS financial statements)

For the year ended March 31, 2019 the Company has recognized revenue from operations of ₹ 38,098 Crore.

Revenue recognition has been recognized as a key audit matter due to diverse and complex revenue streams across the Company. We have identified following key areas for consideration:

- · Complexity associated with the calculation of profit petroleum within the Oil & Gas segment.
- · Complex calculation of power tariff agreements with Grid Corporation of Odisha Limited (GRIDCO).
- Cut-off: The variety of terms in the copper, iron ore and aluminum segments that define when control is transferred to the customer, as well as the high value of the transactions, give rise to the risk that revenue is not recognized in the correct period.

Our audit procedures included the following:-

- Our audit procedures included considering the appropriateness of the Company's revenue recognition accounting policies and assessing compliance with the policies in terms of Ind AS 115.
- · Performed walkthroughs and test of controls, assisted by IT specialists, of the revenue recognition processes and assessed the design and operating effectiveness of key controls.
- Inspected the terms of production sharing contracts in the Oil & Gas segment and tested the underlying cost recovery and profit petroleum calculations used by the management. Also, inspected external legal opinions (where considered necessary) to evaluate the merits of the claims made by the Company in computing government's share of revenue. We also assessed the adequacy of disclosures made by the Company relating to calculation of profit petroleum within the Oil & Gas segment.
- Inspected the terms of the power purchase agreement to assess the reasonability of the inputs used in the calculation of the power tariff in respect of the revenue recognized for GRIDCO. Other procedures relating to the revenue of the Power division are mentioned in the recoverability of disputed receivables section.
- Selected a sample of sales, in the copper, iron ore and aluminum segments, made pre and post year end, agreeing the date of revenue recognition to third party support, such as bills of lading, to confirm sales are recognized according to contract conditions.
- Examined invoice samples with various shipping terms to ensure that revenue has been recognized appropriately.

## Recoverability of disputed receivables (as described in note 3c(B)(i) and note 7 of the standalone Ind AS financial statements)

- As of March 31, 2019 the value of disputed receivables in the power segment aggregated to ₹ 1,248 Crore.
- Due to disagreements over the quantification or timing of the receivable, the recovery of said receivables are subject to increased risk. Some of these balances are also subject to litigation. The risk is specifically related to receivables from GRIDCO. These receivables include long outstanding balances as well and are also subject to counter party credit risk.
- · Accordingly, the same has been considered as a key audit matter. · Examined management's assessment of recoverability of

- Our audit procedures included the following:-
- · Examined the underlying power purchase agreements.
- Inspected the relevant state regulatory commission, appellate tribunal and court rulings.
- Inspected external legal opinions in respect of the merits of the case and critically assessed management's position through discussions with the management's in-house legal team to determine the basis of their conclusion.
- receivables
- Assessed the adequacy of the disclosures made by the Company in this regard.

# **Independent Auditor's Report** continued

#### Key audit matters

#### How our audit addressed the key audit matter

Claims and exposures relating to taxation and litigation (as described in note 3c(B)(ii) and 35 of the standalone Ind AS financial statements)

- The Company is subject to a large number of legal and tax related claims which have been disclosed / provided for in the financial statements based on the facts and circumstances of each case
- Taxation and litigation exposures have been identified as a key audit matter due to the complexities involved in these matters, timescales involved for resolution and the potential financial impact of these on the financial statements. Further, significant management judgement is involved in assessing the exposure of each case and thus a risk that such cases may not be adequately provided for or disclosed.

Our audit procedures included the following:-

- Gained an understanding of the process of identification of claims, litigations and contingent liabilities and identified key controls in the process. For selected controls we have performed tests of controls.
- Obtained the summary of Company's legal and tax cases and critically assessed management's position through discussions with the Legal Counsel, Head of Tax and operational management, on both the probability of success in significant cases, and the magnitude of any potential loss.
- Inspected external legal opinions (where considered necessary) and other evidence to corroborate management's assessment of the risk profile in respect of legal claims.
- Engaged tax specialists to technically appraise the tax positions taken by management with respect to local tax issues.
- · Assessed whether management assessment of similar cases is consistent across the divisions or that differences in positions are adequately justified.
- Assessed the relevant disclosures made within the financial statements to address whether they appropriately reflect the facts and circumstances of the respective tax and legal exposures and the requirements of relevant accounting

Recoverability of unutilized Minimum Alternate Tax (MAT) credits included under deferred tax assets (as described in note 3c(A)(ix) and 32 of the standalone Ind AS financial statements)

- As of March 31, 2019, the Company has recognized MAT credits of ₹ 3,971 Crore, included under deferred tax assets that can be utilized against future tax liabilities.
- The analysis of the recoverability of such deferred tax assets has been identified as a key audit matter because the assessment process involves judgement regarding the future profitability and the likelihood of the realization of these assets, in particular whether there will be taxable profits in future periods that support the recognition of these assets. This requires assumptions regarding future profitability, which is inherently uncertain. Accordingly, the same is considered as a key audit matter.
- Of the above MAT credits, we focused our effort on MAT assets of ₹ 1,161 Crore which are expected to be utilized during the last two years of the stipulated fifteen year carry forward period from the year in which, the same arose.

Our audit procedures included the following:-

- Obtained and analysed the future projections estimated by management, assessing the key assumptions used, including the analysis of the consistency of the actual results obtained by the various segments with those projected in the previous year. We further obtained evidence of the approval of the budgeted results included in the current year's projections, and the reasonableness of the future cash flow projections and the consistency of those projections with those used in other areas of estimation such as those used for assessing the recoverability of assets
- Tested the completeness and accuracy of the MAT credits recognized as deferred tax assets.

#### INFORMATION OTHER THAN THE FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the standalone Ind AS financial statements and our auditor's report thereon.

Our opinion on the standalone Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the standalone Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be

materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### **RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE STANDALONE** IND AS FINANCIAL STATEMENTS

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these standalone Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies

(Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the standalone Ind AS financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are also responsible for overseeing the Company's financial reporting process.

#### **AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE** STANDALONE IND AS FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the standalone Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone Ind AS financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- · Identify and assess the risks of material misstatement of the standalone Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- · Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls system in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- · Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the standalone Ind AS financial statements, including the disclosures, and whether the standalone Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the standalone Ind AS financial statements for the financial year ended March 31, 2019 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

## **OTHER MATTER**

We did not audit the financial statements and other financial information, in respect of 1 unincorporated joint venture not operated by the Company, whose Ind AS financial statements include total assets of ₹ 109 Crore as at March 31, 2019. The unauadited financial information of the said unincorporated joint venture not operated by the Company has been furnished to us by the management of the Company. Our opinion on the standalone Ind AS financial statements, in so far as it relates to the amounts and disclosures included in respect of this unincorporated joint venture, is based solely on such unaudited information furnished to us by the management. Our opinion is not modified in respect of this matter.

#### **REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS**

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.

# **Independent Auditor's Report** continued

- 2. As required by Section 143(3) of the Act, we report that:
- (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;
- (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;
- (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;
- (d) In our opinion, the aforesaid standalone Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;
- (e) On the basis of the written representations received from the directors as on March 31, 2019 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164 (2) of the Act;
- (f) With respect to the adequacy of the internal financial controls over financial reporting of the Company with reference to these standalone Ind AS financial statements and the operating effectiveness of such controls, refer to our separate Report in "Annexure 2" to this report;
- (g) In our opinion, the managerial remuneration for the year ended March 31, 2019 has been paid / provided by the

- Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;
- (h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:
- i. The Company has disclosed the impact of pending litigations on its financial position in its standalone Ind AS financial statements - Refer Note 35 to the standalone Ind AS financial statements;
- ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;
- iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company.

For S.R. Batliboi & Co. LLP

**Chartered Accountants** 

ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal

Place: Mumbai

Partner Membership Number: 82028 Date: May 07, 2019

## Annexure 1 referred to in paragraph 1 under the heading "Report on Other Legal and Regulatory Requirements" of our report of even date

#### Re: Vedanta Limited ('the Company')

- (i) (a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets
- (b) All fixed assets have not been physically verified by the management during the year but there is a regular programme of verification which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.
- (c) According to the information and explanations given by the management, the title deeds of immovable properties included in fixed assets are held in the name of the Company except for the title deeds of immovable properties in oil and gas blocks, jointly owned with other joint venture partners, which are held in the name of the licensee of the block. The written down value of such immovable properties in the accompanying financial statement aggregates to ₹ 63.80 Crore.
- (ii) The management has conducted physical verification of inventories at reasonable intervals during the year except for inventories aggregating of ₹ 586 Crore lying at Tuticorin plant which is under suspension (refer note 3c(A)(x)). No material discrepancies were noticed on physical verification of inventories, wherever such verifications were carried out. Inventories lying with third parties have been confirmed by them as at March 31, 2019 and no material discrepancies were noticed in respect of such confirmations.
- (iii) (a) The Company has granted loans to 6 companies covered in the register maintained under section 189 of the Act. In our opinion and according to the information and explanations given to us, the terms and conditions of the grant of such loans are not prejudicial to the Company's interest.
- (b) The Company has granted loans that are either re-payable on demand or have a schedule for repayment of interest and principal, to companies covered in the register maintained under section 189 of the Act. We are informed that (a) repayment of loan was received as and when the demands were raised, during the year; and (b) loans which had a schedule for repayment were not due during the current year; and thus, there has been no default on the part of the parties to whom the monies have been lent. The payment of interest has been regular in all cases.

- (c) There is no amounts of loans granted to companies listed in the register maintained under section 189 of the Act which are overdue for more than ninety days.
- (iv) In our opinion and according to the information and explanations given to us, provisions of sections 185 and 186 of the Act in respect of loans to directors including entities in which they are interested and in respect of loans and advances given, investments made and guarantees given have been complied with by the Company. The Company has not granted any security in terms of sections 185 and 186 of the Act.
- (v) In our opinion and according to information and explanations given to us, the Company has not accepted any deposit from the public during the year. In respect of unclaimed deposits, the Company has complied with the provisions of sections 73 to 76 of the Act and the Companies (Acceptance of Deposits) Rules, 2014 (as amended).
- (vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Act, related to the manufacture of goods and generation of electricity, and are of the opinion that prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.
- (vii) (a) The Company is generally regular in depositing with appropriate authorities undisputed statutory dues including provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of custom, value added tax, goods and service tax, cess and other statutory dues applicable to it.
- (b) According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, employees' state insurance, income-tax, service tax, sales-tax, duty of custom, value added tax, goods and service tax, cess and other statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable.
- (c) According to the records of the Company, the dues of income-tax, sales-tax, service tax, customs duty, excise duty and value added tax on account of any dispute, are as follows:

Name of the statute	Nature of the dues	Amount (₹ In Crore)	Period to which the amount relates	Forum where the dispute is pending
Central Excise Act, 1944	Excise Duty	0.40	November 07 to July 08	Additional Commissioner
Central Excise Act, 1944	Excise Duty	0.42	2011-12 to 2015-16	Assistant Commissioner
Central Excise Act, 1944	Oil Cess and NCCD demand	53.49	2003-04 and December 2013 to February 2015	CESTAT/ Supreme Court
Central Excise Act, 1944	Excise Duty	179.02	1997-98 to 2015-16	CESTAT
Central Excise Act, 1944	Excise Duty	16.70	1997-2010	Commissioner
Central Excise Act, 1944	Excise Duty	0.72	2015-17	Commissioner Appeals
Central Excise Act, 1944	Excise Duty	98.29	2000-2006 and 2017-18	High Court
Central Sales Tax 1956	Sales Tax	11.09	2004-05 to 2014-15	Additional Commissioner
Central Sales Tax 1956	Sales Tax	19.25	1998-99 to 2016-17	High Court

## Independent Auditor's Report continued

Name of the statute	Nature of the dues	Amount (₹ In Crore)	Period to which the amount relates	Forum where the dispute is pending
Customs Act, 1962	Custom Duty	47.95	2011-14 to 2013-14	CESTAT
Customs Act, 1962	Custom Duty	31.16	2004-05 to 2009-10 and 2012-13 to 2016-17	Commissioner
Customs Act, 1962	Custom Duty	8.27	2007-14 and 2012-13	Commissioner, Appeals
Customs Act, 1962	Customs Duty	7.99	2012-13	Deputy Commissioner
Customs Act, 1962	Custom Duty	12.26	2005-06 to 2006-07	High Court
Customs Act, 1962	Custom Duty	0.18	1996-97, 2005-10	Supreme Court
Finance Act, 1994	Service Tax	0.01	2011-12 to 2015-16	Assistant Commissioner
Finance Act, 1994	Service Tax	213.49	2002-03 to 2014-15	CESTAT
Finance Act, 1994	Service Tax	0.13	2007-13	Commissioner
Finance Act, 1994	Service Tax	3.35	2009-10 to 2017-18	Commissioner Appeals
Finance Act,1994	Service Tax	24.32	2006-07, 2007-08, 2016-17 & 2017-18	High Court
Sales Tax	Sales Tax	11.49	2014-15 and 2018-19	Additional Commissioner
Sales Tax	Sales Tax	47.40	2007-08	Commissioner
Sales Tax	Sales Tax	0.08	2012 to 2015	Deputy Commissioner/ Tribunal
Sales Tax	Sales Tax	322.00	2008-09 to 2010-11, 2012-13 , 2013-14, 2014-15, 2015-16 and 2016-17	High Court
Sales Tax	Sales Tax	0.12	2014-15 and 2015-16	Joint Commissioner
Sales Tax	Sales Tax	1.40	2008-12	Tribunal
Income Tax Act,1961	Income tax	554.30	2005-06, 2008-09 to 2013-14	Commissioner of Income Tax (Appeals)
Income Tax Act,1961	Income tax	1,575.62	2007-08 to 2013-14	High Court
Income Tax Act,1961	Income tax	875.14	2002-03, 2004-05, 2005-06, 2006-07, 2007-08, 2008-09, 2011-12	Income Tax Appellate Tribunal
Income Tax Act,1961	Income tax	30.35	1999-00, 2008-09, 2009-10	Not applicable as application filed for rectification
Income Tax Act,1961	Witholding Tax demand	18,774.81	2006-07	Income Tax Appellate Tribunal

<sup>\*</sup> Net of amounts paid under protest/ adjusted against refunds.

(viii) In our opinion and according to the information and explanations given by the management, the Company has not defaulted in repayment of loans or borrowing to bank or government or dues to debenture holders. The Company did not have any outstanding dues to financial institutions.

(ix) In our opinion and according to the information and explanations given by the management, the Company has utilized the monies raised by way of debt instruments in the nature of debentures and term loans for the purposes for which they were raised. According to the information and

explanations given to us, the Company has not raised monies by way of initial public offer or further public offer.

(x) Based upon the audit procedures performed for the purpose of reporting the true and fair view of the financial statements and according to the information and explanations given by the management, we report that no fraud by the Company or no material fraud on the Company by the officers and employees of the Company has been noticed or reported during the year.

- (xi) According to the information and explanations given by the management, the managerial remuneration has been paid / provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Act.
- (xii) In our opinion, the Company is not a Nidhi Company. Therefore, the provisions of clause 3(xii) of the Order are not applicable to the Company and hence not commented upon.
- (xiii) According to the information and explanations given by the management, transactions with the related parties are in compliance with sections 177 and 188 of the Act where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.
- (xiv) According to the information and explanations given to us and on an overall examination of the balance sheet, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review and hence, reporting

- requirements under clause 3(xiv) of the Order are not applicable to the Company and hence not commented upon.
- (xv) According to the information and explanations given by the management, the Company has not entered into any non-cash transactions with directors or persons connected with them as referred to in section 192 of the Act.
- (xvi) According to the information and explanations given to us, the provisions of section 45-IA of the Reserve Bank of India Act, 1934 are not applicable to the Company.

For S.R. Batliboi & Co. LLP

**Chartered Accountants** 

ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal

Partner

Place: Mumbai

Date: May 07, 2019

Membership Number: 82028

## **Independent Auditor's Report** continued

Annexure 2 referred to in para 2(f) under the heading "Report on Other Legal and Regulatory Requirements" to the independent Auditor's Report of even date on the Standalone Ind AS Financial Statements of Vedanta Limited

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Vedanta Limited ("the Company") as of March 31, 2019 in conjunction with our audit of the standalone Ind AS financial statements of the Company for the year ended on that date.

#### MANAGEMENT'S RESPONSIBILITY FOR INTERNAL **FINANCIAL CONTROLS**

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated under the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) ("COSO 2013"),. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Companies Act, 2013.

#### **AUDITOR'S RESPONSIBILITY**

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting with reference to these standalone financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing as specified under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting with reference to these standalone financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls over financial reporting with reference to these standalone financial statements and their operating effectiveness. Our audit of internal financial controls over financial reporting

included obtaining an understanding of internal financial controls over financial reporting with reference to these standalone financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls over financial reporting with reference to these standalone financial statements.

#### **MEANING OF INTERNAL FINANCIAL CONTROLS OVER** FINANCIAL REPORTING WITH REFERENCE TO THESE **FINANCIAL STATEMENTS**

A company's internal financial control over financial reporting with reference to these standalone financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting with reference to these standalone financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements

#### **INHERENT LIMITATIONS OF INTERNAL FINANCIAL** CONTROLS OVER FINANCIAL REPORTING WITH REFERENCE TO THESE STANDALONE FINANCIAL STATEMENTS

Because of the inherent limitations of internal financial controls over financial reporting with reference to these standalone financial statements, including the possibility of collusion or improper management override of controls, material

misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting with reference to these standalone financial statements to future periods are subject to the risk that the internal financial control over financial reporting with reference to these standalone financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

#### **OPINION**

In our opinion, the Company has, in all material respects, adequate internal financial controls over financial reporting with reference to these standalone financial statements and such internal financial controls over financial reporting with reference to these standalone financial statements were

operating effectively as at March 31, 2019, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in COSO 2013.

For S.R. Batliboi & Co. LLP

Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

per **Raj Agrawal** 

Place: Mumbai Partner
Date: May 07, 2019 Membership Number: 82028

## **Balance Sheet**

as at March 31, 2019

(₹ in Crore)

			(₹ in Crore
Particulars	Note	As at March 31, 2019	As a March 31, 2018
ASSETS			
Non-current assets			
Property, Plant and Equipment	5	40,972	37,132
Capital work-in-progress	5	14,148	10,386
Intangible assets	5	34	44
Exploration intangible assets under development	5	1,583	7,983
Financial assets			
Investments	6A	64,204	62,473
Trade receivables	7	1,248	47
Loans	8	197	
Others	9	619	44:
Deferred tax assets (net)	32	3	
Income tax assets (net)	32	2,175	2,42
Other non-current assets	10	3,027	2,57
Total non-current assets		1,28,210	1,23,93
Current assets			
Inventories	11	7,657	8,14
Financial assets			
Investments	6B	4,378	5,53
Trade receivables	7	1,966	1,96
Cash and cash equivalents	12	3,209	1,14
Other bank balances	13	682	45
Loans	8	118	1.
Derivatives	20	46	10
Others	9	2,630	3,00
Other current assets	10	1,971	2,86
Total current assets		22,657	23,23
Total Assets		1,50,867	1,47,169
EQUITY AND LIABILITIES			
Equity	4.4	070	07
Equity Share Capital	14 15	372	37
Other Equity  Table Foreign	15	77,508	78,94
Total Equity Liabilities		77,880	79,31
Non-current liabilities			
Financial liabilities			
Borrowings	17A	20,521	14,81
Other financial liabilities	19	20,321	14,01
Provisions	22	988	85
Deferred tax liabilities (net)	32	300	2
Other non-current liabilities	21	2,468	2,47
Total non-current liabilities	Ζ1	24,258	18,21
Current Liabilities		24,200	10,21
Financial liabilities			
Borrowings	17B	17,180	18,32
Trade payables	18	17,100	10,02
(a) Total outstanding dues of micro, small and medium enterprises	10	59	8
(b) Total outstanding dues of milors, small and micro, small and medium enterprises		11,203	13,98
Derivatives	20	343	10,30
Other financial liabilities	19	11,483	12,24
Provisions	22	140	12,24
Income tax liabilities (net)		46	4
Other current liabilities	21	8,275	4,81
Other darrent habilities	۷. ا		
Total current liabilities		48,729	49,64

See accompanying notes to the financial statements

As per our report of even date

For **S.R. Batliboi & Co. LLP** Chartered Accountants ICAI Firm Registration No. 301003E/E300005

per Raj Agrawal

Partner

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of the Board of Directors

Navin Agarwal Executive Chairman DIN 00006303

**GR Arun Kumar** Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

**Srinivasan Venkatakrishnan** Whole-Time Director and Chief Executive Officer

DIN 08364908

Prerna Halwasiya

Company Secretary ICSI Membership No. A20856

## **Statement of Profit and Loss**

for the year ended March 31, 2019

(₹ in Crore except otherwise stated)

		(CITICIOTE EXCE	pt otnerwise stated)
Particulars	Note	Year ended March 31, 2019	Year ended March 31, 2018*
Revenue from operations (Net of excise duty)		38,098	45,046
Add: Excise duty		-	450
Revenue from operations (Gross of excise duty)	26A	38,098	45,496
Other operating income	26B	546	478
Other income	27	6,152	3,559
Total Income		44,796	49,533
Expenses:			
Cost of materials consumed		15,508	25,209
Purchases of stock-in-trade		505	426
Changes in inventories of finished goods, work-in-progress and stock-in-trade	28	307	(11)
Power and fuel charges		9,179	6,643
Employee benefits expense	24	862	802
Excise duty on sales		-	450
Finance costs	29	3,757	3,353
Depreciation, depletion and amortisation expense	5	3,243	2,842
Other expenses	30	5,585	4,998
Share of expenses in producing oil and gas blocks		1,227	1,004
Total expenses		40,173	45,716
Profit before exceptional items and tax		4,623	3,817
Net exceptional gain	31	324	5,407
Profit before tax		4,947	9,224
Tax expense/(benefit):	32	1,011	-,
On other than exceptional items			
Net current tax expense		5	_
Net deferred tax (benefit)/expense		(245)	1,026
On exceptional items		(2.0)	1,020
Net current tax expense		_	_
Net deferred tax expense		112	942
Net tax (benefit)/expense:		(128)	1,968
Net Profit for the year (A)		5,075	7,256
Other Comprehensive Income		0,070	7,200
Items that will not be reclassified to profit or loss			
Re-measurements (loss)/gain of defined benefit plans		(4)	1
Tax credit		1	5
(Loss)/gain on FVOCI equity investment		(45)	90
(LOSS)//Gairt Offit VOOr equity investment		(48)	96
Items that will be reclassified to profit or loss		(40)	30
Net gain/(loss) on cash flow hedges recognised during the year		78	(24)
		(27)	` ′
Tax (expense)/credit		` ,	9
Net (gain)/loss on cash flow hedges recycled to profit or loss		(183)	19
Tax credit/(expense)		64	(7)
Exchange differences on translation		520	49
Tax credit/(expense)		13	(7)
Total Other Communication Income for the community		465	39
Total Other Comprehensive Income for the year (B)		417	135
Total Comprehensive Income for the year (A+B)	00	5,492	7,391
Earnings per share after tax and exceptional items (in ₹)	33	40.07	40.47
- Basic & Diluted		13.65	19.47
Earnings per share after tax but before exceptional items (in ₹)		40.05	- · · ·
- Basic & Diluted  * Restated refer note 2(b)		13.08	7.46

<sup>\*</sup> Restated refer note 2(b)

See accompanying notes to the financial statements

As per our report of even date

For S.R. Batliboi & Co. LLP Chartered Accountants

ICAI Firm Registration No. 301003E/E300005

per **Raj Agrawal** Partner

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of the Board of Directors

Navin Agarwal Executive Chairman DIN 00006303

**GR Arun Kumar GR Arun Kumar**Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

**Srinivasan Venkatakrishnan** Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya Company Secretary ICSI Membership No. A20856

## **Statement of Cash Flows**

for the year ended March 31, 2019

(₹ in Crore)

		(KIII CIOIE)
Particulars	Year ended March 31, 2019	Year ended March 31, 2018*
CASH FLOWS FROM OPERATING ACTIVITIES		,
Profit before tax	4.947	9,224
Adjustments for:	.,	-,
Depreciation, depletion and amortization	3,271	2,869
Impairment reversal (net)	(265)	(5,520
Other exceptional items	(59)	113
Provision for doubtful debts/advances/ Bad debts written off	-	38
Exploration costs written off	48	-
Fair value gain on financial assets held for trading	(96)	(615
Loss on sale/ discard of property, plant and equipment (net)	76	11
Foreign exchange loss/(gain) (net)	71	(78
Unwinding of discount on decommissioning liability	30	27
Other non-operating income	-	18
Share based payment expense	51	27
Interest and dividend income	(5,947)	(2,798
Interest expense	3,727	3,326
Deferred government grant	(72)	(69
Changes in assets and liabilities:	(0.7.1)	/
Increase in trade and other receivables	(844)	(313
Decrease/(Increase) in inventories	490	(2,623
Increase in financial and other assets	(853)	(1,078
Decrease in trade and other payable	(512)	(1,025
Increase in other current and non-current liabilities	3,331	1,265
Cash generated from operations	7,394	2,799
Income taxes refund/(paid)  Net cash generated from operating activities	305 7.699	(59
CASH FLOWS FROM INVESTING ACTIVITIES	7,099	2,740
Purchases of property, plant and equipment (including intangibles)	(2,498)	(2,198
Proceeds from sale of property, plant and equipment	60	(2,130
Loans given to related parties	(380)	(225
Loans repaid by related parties	30	223
Proceeds from redemption of short-term deposits	840	392
Short-term deposits made	(1,068)	(336
Proceeds from sale of short term investments	26,571	55,873
Short-term investments made	(25,321)	(41,353
Interest received	370	610
Dividend received	7,147	8,101
Investment made in Subsidiary	(1,770)	(18
Payments made to site restoration fund	(27)	(43
Net cash from investing activities	3,954	21,033
CASH FLOWS FROM FINANCING ACTIVITIES		
(Repayment)/Proceeds from short term loan (net)	(1,833)	3,815
Proceeds from current borrowings	3,407	3,650
Repayment of current borrowings	(2,739)	(3,482
Proceeds from long-term borrowings	10,270	1,143
Repayment of long-term borrowings	(7,658)	(10,721
Interest paid	(4,042)	(3,489
Payment of dividends to equity holders of the parent, including dividend distribution tax	(7,005)	(14,461
Net cash used in financing activities	(9,600)	(23,545
Net increase in cash and cash equivalents	2,053	228
Cash and cash equivalents at the beginning of the year	1,231	1,003
Cash and cash equivalents at the end of the year (Note 12)	3,284	1,231

- 1. The figures in bracket indicates outflow.
- 2. The cash flow statement has been prepared using the indirect method as set out in Ind-AS 7

See accompanying notes to the financial statements

As per our report of even date

For S.R. Batliboi & Co. LLP

Chartered Accountants ICAI Firm Registration No. 301003E/E300005

per Raj Agrawal

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of the Board of Directors

Navin Agarwal

Executive Chairman DIN 00006303

**GR Arun Kumar** 

Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

Srinivasan Venkatakrishnan

Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya

Company Secretary ICSI Membership No. A20856

<sup>\*</sup> Restated refer note 2(b)

## **Statement of Changes in Equity**

for the year ended March 31, 2019

#### **A. EQUITY SHARE CAPITAL**

Equity shares of ₹ 1/- each issued, subscribed and fully paid up	Number of shares (in Crore)	Amount (₹ in Crore)
As at March 31, 2019 and March 31, 2018	372	372

#### **B. OTHER EQUITY**

(₹ in Crore)

		Reserves a	nd Surplus		Items of Othe	er comprehens	sive income	
				Other	Equity		Foreign	
	Capital	Securities premium	Retained	reserves (Refer	instruments through	Hedging	Currency Translation	Total other
Particulars	reserve	reserve	earnings	below)	OCI	Reserve	Reserve	equity
Balance as at April 01, 2017	26,027	19,009	15,796	17,549	59	17	939	79,396
Profit for the year	-	-	7,256	-	-	-	-	7,256
Other comprehensive income for the year, net of tax	-	-	6	-	90	(3)	42	135
Total Comprehensive Income for the year	-	-	7,262	-	90	(3)	42	7,391
Transfer from Debenture redemption reserve (net)	-	-	249	(249)	-	-	-	-
Recognition of share based payment	-	-	-	47	-	-	-	47
Stock options cancelled during the year	-	-	3	(3)	-	-	-	-
Exercise of stock options	-	-	10	(22)	-	-	-	(12)
Dividends including tax (Refer Note 34)	-	-	(7,881)	-	-	-	-	(7,881)
Balance as at March 31, 2018	26,027	19,009	15,439	17,322	149	14	981	78,941
Profit for the year	-	-	5,075	-	-	-	-	5,075
Other comprehensive income for the year, net of tax	-	-	(3)	-	(45)	(68)	533	417
Total Comprehensive Income for the year	-	-	5,072	-	(45)	(68)	533	5,492
Transfer from Debenture redemption reserve (net)	-	-	190	(190)	-	-	-	-
Recognition of share based payment	-	-	-	82	-	-	-	82
Stock options cancelled during the year	-	-	7	(7)	-	-	-	-
Exercise of stock options	-	-	1	(3)	-	-	-	(2)
Dividends including tax (Refer Note 34)	-	-	(7,005)	-	-	-	-	(7,005)
Balance as at March 31, 2019	26,027	19,009	13,704	17,204	104	(54)	1,514	77,508

#### Other reserves comprise of:

(₹ in Crore)

							(( 111 01016)
			Preference				
	Capital	Debenture	share			Share Based	
	redemption	redemption	redemption	Amalgamation	General	Payment	
Particulars	reserve	reserve	reserve	Reserve	reserve	Reserve	Total
Balance as at April 01, 2017	38	1,679	77	3	15,597	155	17,549
Transfer to retained earnings	-	(249)	-	-	-	-	(249)
Recognition of share based payment	-	-	-	-	-	47	47
Stock options cancelled during the year	-	-	-	-	-	(3)	(3)
Exercise of stock options	-	-	-	-	-	(22)	(22)
Balance as at March 31, 2018	38	1,430	77	3	15,597	177	17,322
Transfer from/(to) general reserve/retained	-	(190)	-	-	-	-	(190)
earnings							
Redemption of preference shares (Refer Note 15(c))	-	-	3,010	-	(3,010)	-	-
Recognition of share based payment	-	-	-	-	-	82	82
Stock options cancelled during the year	-	-	-	-	-	(7)	(7)
Exercise of stock options	-	-	-	-	-	(3)	(3)
Balance as at March 31, 2019	38	1,240	3,087	3	12,587	249	17,204

See accompanying notes to the financial statements

As per our report of even date

For S.R. Batliboi & Co. LLP

Chartered Accountants
ICAI Firm Registration No. 301003E/E300005

per Raj Agrawal

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of the Board of Directors

**Navin Agarwal** 

Executive Chairman DIN 00006303

**GR Arun Kumar** 

Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai

Srinivasan Venkatakrishnan

Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya

Company Secretary ICSI Membership No. A20856

as at and for the year ended March 31, 2019

#### 1. COMPANY OVERVIEW:

Vedanta Limited ("the Company") is a diversified natural resource company engaged in exploring, extracting and processing minerals and oil and gas. The Company engages in the exploration, production and sale of oil and gas, aluminium, copper, iron ore and power.

The Company was incorporated on September 08, 1975 under the laws of the Republic of India. The registered office of the Company is situated at 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai-400092, Maharashtra. The Company's shares are listed on National Stock Exchange and Bombay Stock Exchange in India. In June 2007, the Company completed its initial public offering of American Depositary Shares, or ADS, each representing four equity shares, and listed its ADSs on the New York Stock Exchange. In July 2009, the Company completed its follow-on offering of an additional 131,906,011 ADSs, each currently representing four equity shares, which are listed on the New York Stock Exchange.

The Company is majority owned by Twin Star Holdings Limited ("Twin Star"), Finsider International Company Limited ("Finsider"), West Globe Limited ("West Globe") and Welter Trading Limited ("Welter") which are in turn wholly-owned subsidiaries of Vedanta Resources PLC ("VRPLC"), which was a public limited company incorporated in the United Kingdom and listed on the London Stock Exchange (VRPLC has been delisted from London Stock Exchange on October 01, 2018 and is renamed as "Vedanta Resources Limited" ("VRL") with effect from October 29, 2018). Twin Star, Finsider, West Globe and Welter held 37.1%, 10.8%, 1.2% and 1.0% respectively of the Company's equity as at March 31, 2019.

Details of Company's various businesses are as follows:

- The Company's oil and gas business (prior to merger was owned and operated by erstwhile Cairn India Limited) is engaged in business of exploration and development and production of oil and gas.
- The Company's iron ore business consists of iron ore exploration, mining and processing of iron ore, pig iron and metallurgical coke. The Company has iron ore mining operations in the States of Goa and Karnataka. Pursuant to Honourable Supreme Court of India order, operations in the state of Goa are currently suspended.
- The Company's copper business is principally one of custom smelting and includes captive power plants at Tuticorin in Southern India. The Company's copper business at Tuticorin has received an order from the Tamil Nadu Pollution Control Board ("TNPCB") on April 09, 2018, rejecting the Company's application for renewal of consent to operate under the Air and Water Acts for the 400,000 tpa copper smelter plant in Tuticorin for want of further clarification and consequently the operations were suspended. The Company has filed an appeal with TNPCB Appellate authority against the said order. During the pendency of the appeal, TNPCB through its order dated May 23, 2018 ordered for disconnection of electricity supply and closure of copper smelter plant. Post such order, the state government on May 28, 2018 ordered the permanent closure of the plant. (Refer note3(c)(A)(x)).
- · The Company's aluminium business include a refinery and captive power plant at Lanjigarh and a smelter and captive

- power plants at Jharsuguda both situated in the State of Odisha in India.
- The Company's power operations include a thermal coal-based commercial power facility of 600 MW at Jharsuguda in the State of Odisha in Eastern India.

Besides the above the Company has business interest in zinc, lead, silver, iron ore, steel and other products and services through its subsidiaries in India and overseas.

These are the Company's separate financial statements. The details of Company's material subsidiaries, associates and joint ventures is given in note 38.

#### 2. BASIS OF PREPARATION AND BASIS OF MEASUREMENT **OF FINANCIAL STATEMENTS**

#### (a) Basis of preparation

These financial statements have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 and other relevant provisions of the Companies Act, 2013 (the Act) (as amended from time to time) and Guidance Note on Accounting for Oil and Gas Producing Activities issued by the Institute of Chartered Accountants of India.

These financial statements have been prepared in accordance with the accounting policies, set out below and were consistently applied to all periods presented unless otherwise stated.

These financial statements are approved for issue by the Board of Directors on May 07, 2019.

Certain comparative figures appearing in these financial statements have been regrouped and/or reclassified to better reflect the nature of those items.

All financial information presented in Indian Rupee has been rounded off to the nearest Crore. Amounts less than ₹ 0.50 Crore have been presented as "0".

#### (b) Reclassification/Restatement

(i) The Company has revised the presentation of forward premium relating to derivative instruments to present it along with the mark-to-market gain/loss on these instruments, as these more appropriately reflect the substance of the forward premiums on derivative transactions. As a result of the change, forward premium expense amounting to ₹ 547 Crore (year ended March 31, 2019: ₹ 244 Crore) has been reclassified from 'Finance cost' to 'other income/ other expense' for the comparative year ended March 31, 2018. Similarly, net cash flows from operating activities in the statement of cash flows has reduced by an equivalent amount with corresponding effect on the net cash used in financing activities.

(ii) The classification of export incentives from government has also been revised to present it under 'other operating income', as the revised classification is more appropriate. As a result of the change, export incentives amounting to ₹ 263 Crore has been reclassified from 'revenue' to 'other operating income' for the comparative year ended March 31, 2018. Similarily, scrap sales and miscellaneous income amounting to ₹ 100 Crore and ₹ 115 Crore respectively have also been reclassified from 'revenue' to 'other operating income' for the comparative year ended March 31, 2018.

as at and for the year ended March 31, 2019

#### (c) Basis of measurement

The financial statements have been prepared on a going concern basis using historical cost convention and on an accrual method of accounting, except for certain financial assets and liabilities which are measured at fair value as explained in the accounting policies below.

## 3(a) SIGNIFICANT ACCOUNTING POLICIES

#### (A) Revenue recognition

#### · Sale of goods/rendering of services (Revenue from contracts with customers)

The Company's revenue from contracts with customers is mainly from the sale of oil and gas, aluminium, copper, iron ore and power. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer which usually is on delivery of the goods to the shipping agent at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Revenue is recognised net of discounts, volume rebates, outgoing sales taxes/ goods and service tax and other indirect taxes excluding excise duty. Revenues from sale of by-products are included in revenue

Certain of the Company's sales contracts provide for provisional pricing based on the price on the London Metal Exchange (LME) and crude index, as specified in the contract. Revenue in respect of such contracts is recognised when control passes to the customer and is measured at the amount the entity expects to be entitled - being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, provisional pricing features are accounted in accordance with Ind AS 109 'Financial Instruments' rather than Ind AS 115 and therefore the Ind AS 115 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control are included in Revenue on the face of the statement of profit and loss and disclosed by way of note to the financial statements. Final settlement of the price is based on the applicable price for a specified future period. The Company's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Company's share of oil, gas and condensate production, recognised on a direct entitlement basis, when control is transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived at after reducing government's share of profit petroleum which is accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at a rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Company performs part of its obligation by transferring

goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on the Company's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognised when the payment is received. Contract liabilities are recognised as revenue when the Company performs under the contract.

The Company does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Company does not adjust any of the transaction prices for the time value of money.

#### · Interest income

Interest income from debt instruments is recognised using the effective interest rate method. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. When calculating the effective interest rate, the Company estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses.

#### Dividends

Dividend income is recognised in the statement of profit and loss only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Company, and the amount of the dividend can be measured reliably.

#### (B) Property, plant and equipment i) Mining properties and leases

When a decision is taken that a mining property is viable for commercial production (i.e. when the Company determines that the mining property will provide sufficient and sustainable return relative to the risks and the Company decided to proceed with the mine development), all further pre-production primary development expenditure other than that on land, buildings, plant, equipment and capital work in progress is capitalized as property, plant and equipment under the heading "Mining properties and leases" together with any amount transferred from "Exploration and evaluation" assets. The costs of mining properties and leases include the costs of acquiring and developing mining properties and mineral rights.

The stripping cost incurred during the production phase of a surface mine is deferred to the extent the current period stripping cost exceeds the average period stripping cost over the life of mine and recognised as an asset if such cost provides a benefit in terms of improved access to ore in future periods and certain criteria are met. When the benefit from the stripping costs are realised in the current period, the stripping costs are accounted for as the cost of inventory. If the costs of inventory produced and the stripping activity asset are

as at and for the year ended March 31, 2019

not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. The Company uses the expected volume of waste compared with the actual volume of waste extracted for a given value of ore/mineral production for the purpose of determining the cost of the stripping activity asset.

Deferred stripping costs are included in mining properties within property, plant and equipment and disclosed as a part of mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body.

In circumstances where a property is abandoned, the cumulative capitalised costs relating to the property are written off in the period in which it occurs i.e. when the Company determines that the mining property will not provide sufficient and sustainable returns relative to the risks and the Company decides not to proceed with the mine development.

Commercial reserves are proved and probable reserves as defined by the 'JORC' Code, 'MORC' code or 'SAMREC' Code. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

#### ii) Oil and gas assets- (developing/producing assets)

For oil and gas assets a successful efforts based accounting policy is followed. Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the statement of profit and loss.

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated are capitalised within property, plant and equipment development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/ producing asset or replaces part of the existing development/ producing asset. Any remaining costs associated with the part replaced are expensed.

Net proceeds from any disposal of development/producing assets are credited against the previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the statement of profit and loss to the extent that the net proceeds exceed or are less than the appropriate portion of the net capitalised costs of the asset.

#### iii) Other property, plant and equipment

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Land acquired free of cost or at below market rate from the government is recognized at fair value with corresponding credit to deferred income.

If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as

separate items (major components) of property, plant and equipment. All other expenses on existing property, plant and equipment, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the statement of profit and loss for the period during which such expenses are incurred.

Gains and losses on disposal of an item of property, plant and equipment computed as the difference between the net disposal proceeds and the carrying amount of the asset is included in the statement of profit and loss when the asset is derecognised. Major inspection and overhaul expenditure is capitalized, if the recognition criteria are met.

#### iv) Assets under construction

Assets under construction are capitalized in the assets under construction account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset and any obligations for decommissioning costs are capitalised until the period of commissioning has been completed and the asset is ready for its intended use.

#### v) Depreciation, depletion and amortisation expense

Mining properties and other assets in the course of development or construction and freehold land are not depreciated or amortised.

#### · Mining properties

The capitalised mining properties are amortised on a unit-of-production basis over the total estimated remaining commercial proved and probable reserves of each property or group of properties and are subject to impairment review. Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future capital expenditure required to access the commercial reserves. Changes in the estimates of commercial reserves or future capital expenditure are dealt with prospectively.

Leasehold land and buildings are depreciated on a straight-line basis over the period of the lease or, if shorter, their useful economic life.

#### Oil and gas assets

All expenditures carried within each field are amortised from the commencement of production on a unit of production basis, which is the ratio of oil and gas production in the period to the estimated quantities of depletable reserves at the end of the period plus the production in the period, generally on a field-by-field basis or group of fields which are reliant on common infrastructure.

Depletable reserves are proved reserves for acquisition costs and proved and developed reserves for successful exploratory wells, development wells, processing facilities, distribution assets, estimated future abandonment cost and all other related costs. These assets are depleted within each cost centre. Reserves for this purpose are considered on working interest basis which are reassessed atleast annually. Impact of changes to reserves are accounted for prospectively.

#### Other assets

Depreciation on other property, plant and equipment is calculated using the straight-line method (SLM) to allocate their cost, net of their residual values, over their

as at and for the year ended March 31, 2019

estimated useful lives (determined by the management) as given below.

Management's assessment takes into account, inter alia, the nature of the assets, the estimated usage of the assets, the operating conditions of the assets, past history of replacement and maintenance support.

Estimated useful lives of assets are as follows:

Asset	Useful Life (in years)
Buildings (Residential, factory etc.)	3-60
Plant and equipment	15-40
Railway siding	15
Office equipment	3-6
Furniture and fixture	8-10
Vehicles	8-10

Major inspection and overhaul costs are depreciated over the estimated life of the economic benefit derived from such costs. The carrying amount of the remaining previous overhaul cost is charged to the statement of profit and loss if the next overhaul is undertaken earlier than the previously estimated life of the economic benefit.

The Company reviews the residual value and useful life of an asset at least at each financial year-end and, if expectations differ from previous estimates, the change(s) is accounted for as a change in accounting estimate.

#### (C) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Subsequently, intangible assets are measured at cost less accumulated amortisation and accumulated impairment losses, if any.

Intangible assets are amortised over their estimated useful life on a straight line basis. Software is amortised over the estimated useful life ranging from 0-5 years. Amounts paid for securing mining rights are amortised over the period of the mining lease ranging from 16-25 years.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the statement of profit and loss when the asset is derecognised.

The amortization period and the amortization method are reviewed at least at each financial year end. If the expected useful life of the asset is different from previous estimates, the change is accounted for prospectively as a change in accounting estimate.

#### (D) Exploration and evaluation intangible assets

Exploration and evaluation expenditure incurred prior to obtaining the mining right or the legal right to explore are expensed as incurred.

Exploration and evaluation expenditure incurred after obtaining the mining right or the legal right to explore are capitalised as exploration and evaluation assets (intangible assets) and stated at cost less impairment, if any. Exploration and evaluation intangible assets are transferred to property, plant and equipment when the technical

feasibility and commercial viability has been determined. Exploration intangible assets under development are assessed for impairment and impairment loss, if any, is recognised prior to reclassification.

Exploration expenditure includes all direct and allocated indirect expenditure associated with finding specific mineral resources which includes depreciation and applicable operating costs of related support equipment and facilities and other costs of exploration activities:

- Acquisition costs costs associated with acquisition of licenses and rights to explore, including related professional fees
- · General exploration costs costs of surveys and studies, rights of access to properties to conduct those studies (e.g., costs incurred for environment clearance, defence clearance, etc.), and salaries and other expenses of geologists, geophysical crews and other personnel conducting those studies.
- Costs of exploration drilling and equipping exploration and appraisal wells.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised within "Exploration and evaluation assets" (intangible assets) and subsequently allocated to drilling activities. Exploration drilling costs are initially capitalised on a well-bywell basis until the success or otherwise of the well has been established. The success or failure of each exploration effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated, then the related capitalised exploration costs are transferred into a single field cost center within property, plant and equipment - development/ producing assets after testing for impairment. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written off to the statement of profit and loss.

Expenditure incurred on the acquisition of a license interest is initially capitalised on a license-by-license basis. Costs are held, undepleted, within exploration and evaluation assets until such time as the exploration phase on the license area is complete or commercial reserves have been discovered.

Net proceeds from any disposal of an exploration asset are initially credited against the previously capitalised costs. Any surplus/ deficit is recognised in the statement of profit and loss.

#### (E) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date

as at and for the year ended March 31, 2019

of classification.

Non-current assets and disposal groups classified as held for sale are not depreciated and are measured at the lower of carrying amount and fair value less costs to sell. Such assets and disposal groups are presented separately on the face of the balance sheet.

#### (F) Impairment of non-financial assets

Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The Company assesses at each reporting date, whether there is an indication that an asset may be impaired. The Company conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognised impairment losses. Internal and external factors, such as worse economic performance than expected, changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognised impairment losses.

If any such indication exists then an impairment review is undertaken and the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general. Fair value for mineral and oil and gas assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Company's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined.

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the statement of profit and loss.

Any reversal of the previously recognised impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised.

#### **Exploration and evaluation assets:**

In assessing whether there is any indication that an exploration and evaluation asset may be impaired, the Company considers, as a minimum, the following indicators:

- the period for which the Company has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Company has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale; and
- · reserve information prepared annually by external experts

When a potential impairment is identified, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration and evaluation assets is attributed. Exploration areas in which reserves have been discovered but require major capital expenditure before production can begin, are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is underway or planned. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the statement of profit and loss.

#### (G) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

## (i) Financial Assets - recognition & subsequent measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

For purposes of subsequent measurement, financial assets are classified in four categories:

#### · Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

as at and for the year ended March 31, 2019

b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in interest income in the statement of profit and loss. The losses arising from impairment are recognised in the statement of profit and loss.

#### · Debt instruments at fair value through other comprehensive income (FVOCI)

A 'debt instrument' is classified as at FVOCI if both of the following criteria are met:

- a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
- b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognized in the other comprehensive income (OCI). However, interest income, impairment losses and reversals and foreign exchange gain or loss are recognised in the statement of profit and loss. On derecognition of the asset, cumulative gain or loss previously recognised in OCI is reclassified from the equity to statement of profit and loss. Interest earned whilst holding FVOCI debt instrument is reported as interest income using the EIR method.

#### · Debt instruments at fair value through profit or loss (FVTPL)

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVOCI, is classified as at FVTPL.

In addition, the Company may elect to designate a debt instrument, which otherwise meets amortized cost or FVOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Company has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes being recognized in the statement of profit and loss.

#### · Equity instruments

All equity investments in the scope of Ind AS 109 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS 103 applies are classified as at FVTPL. For all other equity instruments, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Company makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Company decides to classify an equity instrument as at FVOCI, then all fair value changes on the instrument, excluding dividends, are recognized in the OCI. There is no recycling of the amounts from OCI to the statement of profit or loss, even on sale of investment. However, the Company may transfer the cumulative gain or loss within equity. For equity instruments which are classified as FVTPL all subsequent fair value changes are recognised in the statement of profit and loss.

#### (ii) Financial Assets - derecognition

The Company derecognises a financial asset when the contractual rights to cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

#### (iii) Impairment of financial assets

In accordance with Ind AS 109, the Company applies expected credit loss (ECL) model for measurement and recognition of impairment loss on the following financial assets:

- a) Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities and deposits
- b) Financial assets that are debt instruments and are measured as at FVOCI
- c) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of Ind AS 115.

The Company follows 'simplified approach' for recognition of impairment loss allowance on trade receivables, contract assets and lease receivables.

The application of simplified approach does not require the Company to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Company determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognising impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12 months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the entity expects to receive (i.e., all cash shortfalls), discounted at the original EIR.

as at and for the year ended March 31, 2019

ECL impairment loss allowance (or reversal) recognized during the year is recognized as income/ expense in the statement of profit and loss. The balance sheet presentation for various financial instruments is described below-

a) Financial assets measured at amortised cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets in the balance sheet. The Company does not reduce impairment allowance from the gross carrying amount.

b) Debt instruments measured at FVOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Company combines financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

The Company does not have any purchased or originated credit-impaired(POCI) financial assets, i.e., financial assets which are credit impaired on purchase/ origination.

#### (iv) Financial liabilities - Recognition & Subsequent measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or as loans, borrowings and payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

The Company's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as described below:

· Financial liabilities at fair value through profit or loss Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the statement of profit and loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL,

fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ loss are not subsequently transferred to profit and loss. However, the Company may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the statement of profit or loss. The Company has not designated any financial liability as at fair value through profit or loss.

#### Financial liabilities at amortised cost (Loans & Borrowings and Trade and Other payables)

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the statement of profit and loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.

#### (v) Financial liabilities - Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the statement of profit and loss.

#### (vi) Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract - with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of Ind AS 109, the Company does not separate embedded derivatives. Rather, it applies the classification requirements contained in Ind AS 109 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value though profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit and loss, unless designated as effective hedging instruments.

as at and for the year ended March 31, 2019

#### (vii) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

#### (viii) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously.

#### (ix) Derivative financial instruments and hedge accounting Initial recognition and subsequent measurement

In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Company enters into forward, option, swap contracts and other derivative financial instruments. The Company does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to the statement of profit and loss, except for the effective portion of cash flow hedges, which is recognised in OCI and later reclassified to the statement of profit and loss when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment
- · Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Company formally designates and documents the hedge relationship to which the Company wishes to apply hedge accounting. The documentation includes the Company's risk management objective and strategy for undertaking hedge, the hedging/ economic relationship, the hedged item or transaction, the nature of the risk being hedged, hedge ratio and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

#### i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in the statement of profit and loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in statement of profit and loss. Hedge accounting is discontinued when the Company revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

#### ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the statement of profit and loss.

Amounts recognised in OCI are transferred to profit or loss when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised as OCI are transferred to the initial carrying amount of the non-financial asset or liability.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

#### (H) Financial guarantees

Financial guarantees issued by the Company on behalf of group companies are designated as 'Insurance Contracts'. The Company assesses at the end of each reporting period whether its recognised insurance liabilities (if any) are adequate, using current estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency is recognised in the statement of profit and loss.

#### (I) Leases

#### Determining whether an arrangement contains lease

At inception of an arrangement, the Company determines whether the arrangement is or contains a lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

as at and for the year ended March 31, 2019

At inception or on reassessment of an arrangement that contains lease, the Company separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Company concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the Company's incremental borrowing rate.

#### Company as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Company is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company's policy on the general borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the statement of profit and loss on a straight-line basis over the lease term unless the payments are structured to increase in line with general inflation to compensate for the lessor's expected inflationary cost increase.

#### Company as a lessor

Leases in which the Company does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease unless the payments are structured to increase in line with the general inflation to compensate for the lessor's expected inflationary cost increase. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership is transferred from the Company to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

#### (J) Inventories

Inventories and work-in-progress are stated at the lower of cost and net realisable value. Cost is determined on the following basis:

- purchased copper concentrate is recorded at cost on a first-in, first-out ("FIFO") basis; all other materials including stores and spares are valued on a weighted average basis except in Oil and Gas business where stores and spares are valued on FIFO basis;
- finished products are valued at raw material cost plus costs of conversion, comprising labor costs and an attributable proportion of manufacturing overheads based on normal levels of activity and are moved out of inventory on a weighted average basis (except copper business where FIFO basis is followed) and
- By-products and scrap are valued at net realisable value.

Net realisable value is determined based on estimated selling price, less further costs expected to be incurred to completion and disposal.

#### (K) Government grants

Grants and subsidies from the government are recognised when there is reasonable assurance that (i) the Company will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognised as income on a systematic basis in the statement of profit and loss over the periods necessary to match them with the related costs, which they are intended to compensate.

Where the grant relates to an asset, it is recognised as deferred income and released to income in equal amounts over the expected useful life of the related asset and presented within other income.

When the Company receives grants of non-monetary assets, the asset and the grant are recorded at fair value amounts and released to profit or loss over the expected useful life in a pattern of consumption of the benefit of the underlying asset.

When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favorable interest is regarded as a government grant. The loan or assistance is initially recognised and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

#### (L) Taxation

Tax expense represents the sum of current tax and deferred tax.

Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date and includes any adjustment to tax payable in respect of previous years.

as at and for the year ended March 31, 2019

Subject to the exceptions below, deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and on carry forward of unused tax credits and unused tax losses;

- deferred income tax is not recognised on initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction which affects neither the accounting profit nor taxable profit (tax
- deferred tax assets (including MAT credit entitlement) are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Tax relating to items recognized outside statement of profit and loss is recognised outside the statement of profit and loss (either in other comprehensive income or equity).

The carrying amount of deferred tax assets (including MAT credit entitlement) is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

#### (M) Retirement benefit schemes

The Company operates or participates in a number of defined benefits and defined contribution schemes, the assets of which (where funded) are held in separately administered funds. For defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation separately for each plan using the projected unit credit method by third party qualified actuaries.

Remeasurement including, effects of asset ceiling and return on plan assets (excluding amounts included in interest on the net defined benefit liability) and actuarial gains and losses arising in the year are recognised in full in other comprehensive income and are not recycled to the statement of profit and loss.

Past service costs are recognised in profit or loss on the earlier of:

- · the date of the plan amendment or curtailment, and
- · the date that the Company recognises related restructuring costs

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are split into current service cost, past service cost, net interest expense or income and remeasurement and gains and losses on curtailments and

settlements. Current service cost and past service cost is recognised within employee benefit expenses. Net interest expense or income is recognized within finance costs.

For defined contribution schemes, the amount charged to the statement of profit and loss in respect of pension costs and other post retirement benefits is the contributions payable in the year, recognised as and when the employee renders related services.

#### (N) Share-based payments

Certain employees (including executive directors) of the Company receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares ('equity-settled transactions').

The cost of equity-settled transactions with employees is measured at fair value of share awards at the date at which they are granted. The fair value of share awards is determined with the assistance of an external valuer and the fair value at the grant date is expensed on a proportionate basis over the vesting period based on the Company's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the current expectations.

The resultant increase in equity is recorded in share based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

Additionally, VRL offered certain share based incentives under the Long-Term Incentive Plan ("LTIP") to employees and directors of the Company. VRL recovers the proportionate cost (calculated based on the grant date fair value of the options granted) from the Company, which is charged to the statement of profit and loss.

(O) Provisions, contingent liabilities and contingent assets The assessments undertaken in recognising provisions and contingencies have been made in accordance with the applicable Ind AS.

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognized when the Company has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognized in the statement of profit and loss as a finance cost. Provisions are reviewed at

as at and for the year ended March 31, 2019

each reporting date and are adjusted to reflect the current best estimate.

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of the Company or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The Company does not recognize a contingent liability but discloses its existence in the Balance Sheet.

Contingent assets are not recognised but disclosed in the financial statements when an inflow of economic benefit is probable

The Company has significant capital commitments in relation to various capital projects which are not recognised on the balance sheet.

#### (P) Restoration, rehabilitation and environmental costs

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or oil fields. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the statement of profit and loss over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as finance cost in the statement of profit and loss.

Costs for the restoration of subsequent site damage, which is caused on an ongoing basis during production, are provided for at their net present value and charged to the statement of profit and loss as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

#### (Q) Accounting for foreign currency transactions

The functional currency of the Company is determined as the currency of the primary economic environment in which it operates. For all principal businesses of the Company, the functional currency is Indian rupee (₹) with an exception of oil and gas business operations, which has a US dollar functional currency as that is the currency of the primary economic environment in which it operates. The financial statements are presented in Indian rupee (₹).

In the financial statements of the Company, transactions in currencies other than the functional currency are translated into the functional currency at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into the functional currency at exchange rates prevailing

on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the statement of profit and loss except those where the monetary item designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognized in the other comprehensive income.

Exchange differences which are regarded as an adjustment to interest costs on foreign currency borrowings, are capitalized as part of borrowing costs in qualifying assets.

The statement of profit and loss of oil and gas business is translated into Indian Rupees (INR) at the average rates of exchange during the year / exchange rates as on the date of the transaction. The Balance Sheet is translated at the exchange rate as at the reporting date. Exchange difference arising on translation is recognised in other comprehensive income and would be recycled to the statement of profit and loss as and when these operations are disposed off.

The Company had applied paragraph 46A of AS 11 under Previous GAAP. Ind AS 101 gives an option, which has been exercised by the Company, whereby a first time adopter can continue its Indian GAAP policy for accounting for exchange differences arising from translation of long-term foreign currency monetary items recognised in the Indian GAAP financial statements for the period ending immediately before the beginning of the first Ind AS financial reporting period. Hence, foreign exchange gain/loss on long-term foreign currency monetary items recognized upto March 31, 2016 has been deferred/capitalized. Such exchange differences arising on translation/settlement of long-term foreign currency monetary items and pertaining to the acquisition of a depreciable asset are amortised over the remaining useful lives of the assets.

Exchange differences arising on translation/ settlement of long-term foreign currency monetary items, acquired post April 01, 2016, pertaining to the acquisition of a depreciable asset are charged to the statement of profit and loss.

#### (R) Earnings per share

The Company presents basic and diluted earnings per share ("EPS") data for its equity shares. Basic EPS is calculated by dividing the profit or loss attributable to equity shareholders of the Company by the weighted average number of equity shares outstanding during the year. Diluted EPS is determined by adjusting the profit or loss attributable to equity shareholders and the weighted average number of equity shares outstanding for the effects of all dilutive potential equity shares.

#### (S) Buyers' Credit/ Suppliers' Credit

The Company enters into arrangements whereby financial institutions make direct payments to suppliers for raw materials and project materials. The financial institutions are subsequently repaid by the Company at a later date providing working capital timing benefits. These are normally settled up to twelve months (for raw materials) and up to 36 months (for project materials). Where these arrangements are for raw materials with a maturity of up to twelve months, the economic substance of the transaction is determined to be

as at and for the year ended March 31, 2019

operating in nature and these are recognised as operational buyers' credit/ suppliers' credit (under Trade payables). Where these arrangements are for project materials with a maturity up to thirty six months, the economic substance of the transaction is determined to be financing in nature, and these are presented within borrowings in the balance sheet. Interest expense on these are recognised in the finance cost.

#### (T) Current and non-current classification

The Company presents assets and liabilities in the balance sheet based on current / non-current classification.

An asset is classified as current when it satisfies any of the following criteria:

- it is expected to be realized in, or is intended for sale or consumption in, the Company's normal operating cycle.
- · it is held primarily for the purpose of being traded;
- it is expected to be realized within 12 months after the reporting date; or
- it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

All other assets are classified as non-current.

A liability is classified as current when it satisfies any of the following criteria:

- it is expected to be settled in the Company's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is due to be settled within 12 months after the reporting date; or
- the Company does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current

Deferred tax assets and liabilities are classified as non current only.

#### (U) Borrowing costs

Borrowing cost includes interest expense as per effective interest rate (EIR) and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost.

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time that the assets are substantially ready for their intended use i.e. when they are capable of commercial production. Where funds are borrowed specifically to finance a qualifying capital project, the amount capitalised represents the actual borrowing costs incurred.

Where surplus funds are available out of money borrowed specifically to finance a project, the income generated from such short-term investments is deducted from the total capitalized borrowing cost. If any specific borrowing

remains outstanding after the related asset is ready for its intended use or sale, that borrowing then becomes part of general borrowing. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Company during the year.

All other borrowing costs are recognised in the statement of profit and loss in the year in which they are incurred.

Capitalisation of interest on borrowings related to construction or development projects is ceased when substantially all activities that are necessary to make the assets ready for their intended use are complete or when delays occur outside of the normal course of business.

EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial liability or a shorter period, where appropriate, to the amortised cost of a financial liability. When calculating the effective interest rate, the Company estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options).

#### (V) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand and short-term money market deposits which have a maturity of three months or less, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, and additionally includes unpaid dividend account.

## (W) Equity investment in subsidiaries, associates and joint

Investments representing equity interest in subsidiaries, associates and joint ventures are carried at cost. A subsidiary is an entity that is controlled by the Company. Control is evidenced where the Company has the power over the investee or exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is demonstrated through existing rights that give the ability to direct relevant activities, which significantly affect the entity returns. An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

#### Joint Arrangements

A Joint arrangement is an arrangement of which two or more parties have joint control. Joint control is considered when there is contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements are classified as either joint operations or joint venture. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities,

as at and for the year ended March 31, 2019

relating to the arrangement. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

#### **Joint Operations**

The Company has joint operations within its Oil and gas segment and participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities. The Company accounts for its share of assets and income and expenditure of joint operations in which it holds an interest. Liabilities in unincorporated joint ventures, where the Company is the operator, is accounted for at gross values (including share of other partners) with a corresponding receivable from the venture partners. These have been included in the financial statements under the appropriate headings. [Details of joint operations are set out in note 38(b)].

#### (X) Common Control transactions

A business combination involving entities or businesses under common control is a business combination in which all of the combining entities or businesses are ultimately controlled by the same party or parties both before and after the business combination and the control is not transitory. The transactions between entities under common control are specifically covered by Ind AS 103. Such transactions are accounted for using the pooling-of-interest method. The assets and liabilities of the acquired entity are recognised at their carrying amounts recorded in the parent entity's consolidated financial statements with the exception of certain income tax and deferred tax assets. No adjustments are made to reflect fair values, or recognise any new assets or liabilities. The only adjustments that are made are to harmonise accounting policies. The components of equity of the acquired companies are added to the same components within the Company's equity. The difference, if any, between the amounts recorded as share capital issued plus any additional consideration in the form of cash or other assets and the amount of share capital of the transferor is transferred to capital reserve. The Company's shares issued in consideration for the acquired companies are recognized from the moment the acquired companies are included in these financial statements and the financial statements of the commonly controlled entities are combined, retrospectively, as if the transaction had occurred at the beginning of the earliest reporting period presented. However, the prior year comparative information is only adjusted for periods during which entities were under common control.

#### (Y) Exceptional items

Exceptional items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior years. Also tax charges related to exceptional items and certain one-time tax effects are considered exceptional. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with Ind AS.

#### **3(b) APPLICATION OF NEW STANDARDS AND AMENDMENTS**

(A) The Company has adopted with effect from April 01, 2018, the following new standards and amendments.

• Ind AS 115: Revenue from contracts with customers The Company has adopted Ind AS 115 Revenue from Contracts with Customers with effect from April 01, 2018 which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The standard replaces most of the current revenue recognition guidance. The core principle of the new standard is for companies to recognize revenue when the control of the goods and services is transferred to the customer as against the transfer of risk and rewards. As per the Company's current revenue recognition practices, transfer of control happens at the same point as transfer of risk and rewards thus not effecting the revenue recognition. The amount of revenue recognised reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

Under this standard, services provided post transfer of control of goods are treated as separate performance obligation and requires proportionate revenue to be deferred along with associated costs and to be recognized over the period of service. The Company provides shipping and insurances services after the date of transfer of control of goods and therefore has identified it as a separate performance obligation. As per the result of evaluation of contracts of the relevant revenue streams, it is concluded that the impact of this change is immaterial to the Company and hence no accounting changes have been done.

The Company has products which are provisionally priced at the date revenue is recognised. Revenue in respect of such contracts are recognised when control passes to the customer and is measured at the amount the entity expects to be entitled - being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, subsequent movements in provisional pricing are accounted for in accordance with Ind AS 109 "Financial Instruments" rather than Ind AS 115 and therefore the Ind AS 115 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control has been included in total revenue from operations on the face of the Statement of Profit and loss. The accounting for revenue under Ind AS 115 does not, therefore, represent a substantive change from the Company's previous practice for recognising revenue from sales to customers.

Further, export incentives received from Government that were included within 'other operating revenue' are now included within 'other operating income'.

The Company has adopted the modified transitional approach as permitted by the standard under which the comparative financial information is not restated. The accounting changes required by the standard are not having material effect on the recognition or measurement as at and for the year ended March 31, 2019

of revenues and no transitional adjustment is recognised in retained earnings at April 01, 2018. Additional disclosures as required by Ind AS 115 have been included in these financial statements

#### Previous period accounting policy: Revenue Recognition

Revenues are measured at the fair value of the consideration received or receivable, net of discounts, volume rebates, outgoing sales taxes/ goods & service tax and other indirect taxes excluding excise duty.

Excise duty is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to Company on its own account, revenue includes excise duty.

#### Sale of goods/rendering of services

Revenues from sales of goods are recognised when all significant risks and rewards of ownership of the goods sold are transferred to the customer which usually is on delivery of the goods to the shipping agent. Revenues from sale of by-products are included in revenue.

Certain of the Company's sales contracts provide for provisional pricing based on the price on The London Metal Exchange ("LME") and crude index, as specified in the contract, when shipped. Final settlement of the price is based on the applicable price for a specified future period. The Company's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represents the Company's share of oil, gas and condensate production, recognized on a direct entitlement basis, when significant risks and rewards of ownership are transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived after reducing government's share of profit petroleum which is accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at rates arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

#### · Amendment to Ind AS 23: Borrowing cost

The amendment clarifies that an entity considers any borrowings made specifically for the purpose of obtaining a qualifying asset as part of the general borrowings, when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. The amendment is applicable to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. The amendment is efffective from April 01, 2019. Since this amendment is clarificatory in nature, the Company has applied the amendment prospectively from the current reporting year i.e. for the borrowing costs incurred on or after April 01, 2018.

Based on the Amendment, the Company has now capitalized certain borrowing costs as general borrowings. This has resulted in capitalization of interest expense of ₹ 278 Crore for the year ended March 31, 2019 and a corresponding increase in depreciation of ₹ 1 Crore. The consequent incremental impact on net profit for the year was ₹ 200 Crore and on the basic and diluted earnings per share was ₹ 0.54/ share and ₹ 0.54/ share respectively.

The change did not have any significant impact on the Company's balance sheet and the statement of cash flows.

#### (B) Standards issued but not yet effective

The following standards/ amendments to standards have been issued but are not yet effective up to the date of issuance of the Company's Financial Statements. Except specifically disclosed below, the Company is evaluating the requirements of these standards, improvements and amendments and has not yet determined the impact on the financial statements.

#### I. Ind AS 116: Lease

Ind AS 116, Leases, replaces the existing standard on accounting for leases, Ind AS 17, with effect from April 01, 2019. This standard introduces a single lessee accounting model and requires a lessee to recognize a 'right of use asset' (ROU) and a corresponding 'lease liability' for all leases. Lease costs will be recognised in the statement of profit and loss over the lease term in the form of depreciation on the ROU asset and finance charges representing the unwinding of the discount on the lease liability. In contrast, the accounting requirements for lessors remain largely unchanged.

The Company acts as a lessee in lease arrangements mainly involving office premises and other properties. The Company has elected to apply the modified retrospective approach on transition, and accordingly the comparative figures will not be restated. For contracts in place at this date, the Company will continue to apply its existing definition of leases under current accounting standards ("grandfathering"), instead of reassessing whether existing contracts are or contain a lease at the date of application of the new standard. Further, as permitted by Ind AS 116, the Company will not bring leases of low value assets or short-term leases with 12 or fewer months remaining on to balance sheet.

Transition to Ind AS 116 does not have a material effect on the Company's Financial Statements.

#### II. Amendments to standards

The following amendments are applicable to the Company from April 01, 2019. The impacts of these are currently expected to be immaterial:

Reference	Name / Brief
Annual Improvements to Ind AS (2018)	The amendments comprise of changes in Ind AS 103, Ind AS 111 and Ind AS 12
Ind AS 19	Employee benefits - Plan Amendment, Curtailment or Settlement
Ind AS 28	Investments in Associates and Joint Ventures - Long-term Interests in Associates and Joint Ventures
Ind AS 109	Financial Instruments - Prepayment Features with Negative Compensation
Ind AS 12	Income Taxes - Uncertainty over Income Tax Treatments

as at and for the year ended March 31, 2019

#### **3(c) SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS**

The preparation of the financial statements in conformity with Ind AS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities at the date of these financial statements and the reported amounts of revenues and expenses for the years presented. These judgments and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ materially from the amounts included in the financial statements.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and future periods affected.

The information about significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements are as given below:

#### (A) Significant Estimates (i) Oil and Gas reserves

Significant technical and commercial judgements are required to determine the Company's estimated oil and natural gas reserves. Reserves considered for computing depletion are proved reserves for acquisition costs and proved and developed reserves for successful exploratory wells, development wells, processing facilities, distribution assets, estimated future abandonment cost and all other related costs. Reserves for this purpose are considered on working interest basis which are reassessed atleast annually. Details of such reserves are given in note 40(b).

Changes in reserves as a result of change in management assumptions could impact the depreciation rates and the carrying value of assets (refer note 5).

#### (ii) Carrying value of exploration and evaluation assets

The recoverability of a project is assessed under Ind AS 106. Exploration assets are assessed by comparing the carrying value to higher of fair value less cost of disposal or value in use if impairment indicators exists. Change to the valuation of exploration assets is an area of judgement. Further details on the Company's accounting policies on this are set out in accounting policy above. The amounts for exploration and evaluation assets represent active exploration projects. These amounts will be written off to the statement of profit and loss as exploration costs unless commercial reserves are established or the determination process is not completed and there are no indications of impairment. The outcome of ongoing exploration, and therefore whether the carrying value of exploration and evaluation assets will ultimately be recovered, is inherently uncertain.

During the financial year ended March 31, 2018, the Company had recognized impairment reversal (net) against exploration and evaluation oil and gas assets. The details of impairment reversal impact and the assumptions and sensitivities used are disclosed in note 31. Carrying values of exploration and evaluation assets are disclosed in note 5.

#### (iii) Carrying value of developing/producing oil and gas assets

Management performs impairment tests on the Company's developing/producing oil and gas assets where indicators of impairment or impairment reversal of previous recorded impairment are identified in accordance with Ind AS 36.

During the financial year ended March 31, 2018, the Company had recognised impairment reversal of its developing/ producing oil and gas assets in Rajasthan. During the current year, an impairment reversal has been recorded in the oil and gas assets in Krishna Godavari (KG) basin. The details of impairment charge/reversal and the assumptions and sensitivities used are disclosed in note 31.

In the current year, the management has reviewed the key assumptions i.e. future production, oil prices, discount to price, Production sharing contract (PSC) life, discount rates, etc. for all of its oil and gas assets. Based on analysis of events that have occurred since then, there did not exist any indication that the assets may be impaired or previously recorded impairment charge may reverse except for the assets in KG basin. Hence, detailed impairment analysis has not been conducted in the current financial year, except for assets in KG basin.

Carrying values of oil & gas assets are disclosed in note 5.

#### (iv) Mining properties and leases

The carrying value of mining property and leases is arrived at by depreciating the assets over the life of the mine using the unit of production method based on proved and probable reserves. The estimate of reserves is subject to assumptions relating to life of the mine and may change when new information becomes available. Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or commodity prices could thus impact the carrying values of mining properties and leases and environmental and restoration provisions.

Management performs impairment tests when there is an indication of impairment. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/assumptions	Basis
Future production	proved and probable reserves, resource estimates (with an appropriate conversion factor) considering the expected permitted mining volumes and, in certain cases, expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Exchange rates	management best estimate benchmarked with external sources of information
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/ CGU

Details of impairment charge/ reversal and the assumptions used and carrying value are disclosed in note 31 and 5 respectively.

as at and for the year ended March 31, 2019

#### (v) Assessment of Impairment of Goa iron ore mines:

Pursuant to an order passed by the Hon'ble Supreme Court of India on February 07, 2018, the second renewal of the mining leases granted by the State of Goa in 2014-15 to all miners including the Company were cancelled. Consequentially all mining operations stopped with effect from March 16, 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of The Mines and Minerals (Development and Regulation) (MMDR) Act. Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Company had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge in the financial year ended March 31, 2018. There are no significant changes subsequent to the financial year ended March 31, 2018.

Details of impairment charge and method of estimating recoverable value is disclosed in note 31.

#### (vi) Restoration, rehabilitation and environmental costs:

Provision is made for costs associated with restoration and rehabilitation of mining sites as soon as the obligation to incur such costs arises. Such restoration and closure costs are typical of extractive industries and they are normally incurred at the end of the life of the mine or oil fields. The costs are estimated on an annual basis on the basis of mine closure plans and the estimated discounted costs of dismantling and removing these facilities and the costs of restoration are capitalised as soon as the obligation to incur such costs arises.

The provision for decommissioning oil and gas assets is based on the current estimates of the costs for removing and decommissioning production facilities, the forecast timing and currency of settlement of decommissioning liabilities and the appropriate discount rate.

A corresponding provision is created on the liability side. The capitalised asset is charged to the statement of profit and loss through depreciation over the life of the operation and the provision is increased each period via unwinding the discount on the provision. Management estimates are based on local legislation and/or other agreements. The actual costs and cash outflows may differ from estimates because of changes in laws and regulations, changes in prices, analysis of site conditions and changes in restoration technology. Details of such provisions are set out in note 22.

#### (vii) Provisions and liabilities

Provisions and liabilities are recognised in the period when it becomes probable that there will be a future outflow of funds resulting from past operations or events that can be reasonably estimated. The timing of recognition requires the application of judgement to existing facts and circumstances which may be subject to change especially when taken in the context of the legal environment in India. The actual cash outflows may take place over many years in the future and hence the carrying amounts of provisions and liabilities are regularly reviewed and adjusted to take into account the changing circumstances and other factors that influence the provisions and liabilities. This is set out in note 22.

#### (viii) The HZL and BALCO call options

The Company had exercised its call option to acquire the remaining 49% interest in BALCO and 29.5% interest in HZL. The Government of India has however, contested the validity of the options and disputed their valuation performed in terms of the relevant agreements the details of which are set out in note 6A. In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Company considers the strike price of the options to be at fair value. Accordingly, the value of the option would be nil, and hence, the call options have not been recognized in the financial statements.

#### (ix) Recoverability of deferred tax and other income tax assets

The Company has carry forward tax losses, unabsorbed depreciation and MAT credit that are available for offset against future taxable profit. Deferred tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the unused tax losses or tax credits can be utilized. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. This requires assumptions regarding future profitability, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets and consequential impact in the statement of profit and loss.

Additionally, the Company has tax receivables on account of refund arising on account of past amalgamation and relating to various tax disputes. The recoverability of these receivables involve application of judgement as to the ultimate outcome of the tax assessment and litigations. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific tax law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision (Refer note 32).

The details of MAT assets are set out in note 32.

#### (x) Copper operations in India

In an appeal filed by the Company against the closure order of the Tuticorin Copper smelter by Tamil Nadu Pollution Control Board ("TNPCB"), the appellate authority National Green Tribunal ("NGT") passed an interim order on May 31, 2013 allowing the copper smelter to recommence operations and appointed an Expert Committee to submit a report on the plant operations. Post the interim order, the plant recommenced operations on June 23, 2013. Based on Expert Committee's report on the operations of the plant stating that the plant's emission were within prescribed standards and based on this report, NGT ruled on August 08, 2013 that the Copper smelter could continue its operations and recommendations made by the Expert Committee be implemented in a time bound manner. The Company has implemented all of the recommendations. TNPCB has filed an appeal against the order of the NGT before the Supreme Court of India.

In the meanwhile, the application for renewal of Consent to Operate (CTO) for existing copper smelter, required as per procedure established by law was rejected by TNPCB in April 2018. The Company has filed an appeal before the TNPCB Appellate Authority challenging the Rejection Order. During the pendency of the appeal, there were protests by a section of local community raising environmental concerns and TNPCB vide its order dated May 23, 2018 ordered closure

as at and for the year ended March 31, 2019

of existing copper smelter plant with immediate effect. Further, the Government of Tamil Nadu, issued orders dated May 28, 2018 with a direction to seal the existing copper smelter plant permanently. The Company believes these actions were not taken in accordance with the procedure prescribed under applicable laws. Subsequently, the Directorate of Industrial Safety and Health passed orders dated May 30, 2018, directing the immediate suspension and revocation of the Factory License and the Registration Certificate for the existing smelter plant.

Separately, the Company has filed a fresh application for renewal of the Environmental Clearance for the proposed Copper Smelter Plant 2 (Expansion Project) dated March 12, 2018 before the Expert Appraisal Committee of the MoEF wherein a sub-committee was directed to visit the Expansion Project site prior to prescribing the Terms of Reference. In the meantime, the Madurai Bench of the High Court of Madras in a Public Interest Litigation held vide its order dated May 23, 2018 that the application for renewal of the Environmental Clearance for the Expansion Project shall be processed after a mandatory public hearing and in the interim, ordered the Company to cease construction and all other activities on site for the proposed Expansion Project with immediate effect. The Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub judice. Separately, SIPCOT vide its letter dated May 29, 2018, cancelled 342.22 acres of the land allotted for the proposed Expansion Project. Further the TNPCB issued orders on June 7, 2018 directing the withdrawal of the Consent to Establish (CTE) which was valid till March 31, 2023. The Company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The Company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB, the matter is pending for adjudication.

The Company has appealed this before the National Green Tribunal (NGT). NGT vide its order on December 15, 2018 has set aside the impugned orders and directed the TNPCB to pass fresh orders for renewal of consent and authorization to handle hazardous substances, subject to appropriate conditions for protection of environment in accordance with law.

The State of Tamil Nadu and TNPCB approached Supreme Court in Civil Appeals on January 02, 2019 challenging the judgment of NGT dated December 15, 2018 and the previously passed judgment of NGT dated August 08, 2013. The Supreme Court vide its judgment dated February 18, 2019 set aside the judgments of NGT dated December 15, 2018 and August 08, 2013 on the basis of maintainability alone.

The Company has also filed a writ petition before Madras High Court challenging the various orders passed against the Company in 2018 and 2013. The case was heard on 01 March 2019 wherein the Company pressed for interim relief for care and maintenance of the plant. The Madras High Court has directed the State of Tamil Nadu and TNPCB to file their counter to our petition for interim relief.

The Company is taking appropriate legal measures to address the matters.

Even though there can be no assurance regarding the final outcome of the process and the timing of such process in

relation to the approval for the expansion project, as per the Company's assessment, it is in compliance with the applicable regulations and expects to get the necessary approvals in relation to the existing operations and the expansion project and is not expecting any material loss on this account. The carrying value of the assets under operation and under expansion as at March 31, 2019 and March 31, 2018 is ₹ 2,385 Crore and ₹ 1,046 Crore respectively.

The Company has carried out an impairment analysis considering the key variables and concluded that there exists no impairment. The Company has done an additional sensitivity with a delay in commencement of operations both at the existing and expansion plants by two years and noted that the recoverable amount of the assets would still be in excess of their carrying values.

#### (xi) PSC Extension

#### Rajasthan Block

On October 26, 2018, the Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH) has granted its approval for a ten-year extension of the Production Sharing Contract (PSC) for the Rajasthan Block (RJ), with effect from May 15, 2020 subject to certain conditions. The GoI has granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for RJ is sub-judice and pending before the Hon'ble Delhi High Court. To address two of the conditions stated by DGH, the Company has taken the following steps:

- Submission of Audited Accounts and End of year statement: The Company and one of the joint venture partners have divergent views on the cost oil entitlement and therefore the End of Year statement for the year ended March 31, 2018 and Investment Multiple as at March 31,2018 could not be finalized. To resolve this, the Company has initiated arbitration proceedings against the joint venture partner. Consequentially, profit petroleum pertaining to the said Block for the year ended March 31, 2019 and applicable Investment Multiple calculated based on management's cost oil computation (resulting into Government's share of profit petroleum @ 40% for DA-1 & DA-2 and @20% for DA-3 for FY 2018-19), remains provisional. The computation is after considering relevant independent legal advice.
- Profit Petroleum: DGH has raised a demand for the period upto March 31, 2017 for Government's additional share of Profit Oil based on its computation of disallowance of cost incurred over the initially approved Field Development Plan (FDP) of pipeline project and retrospective allocation of certain common costs between Development Areas (DAs) of Rajasthan Block. The Company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals) for having claimed such costs and for allocating common costs between different DAs and has responded to the government accordingly. Company's view is also supported by an independent legal opinion.

Pursuant to the aforesaid approval of October 26, 2018, the Company has recomputed its reserves till 2030 and has reclassified exploration costs of ₹ 4,071 Crore to property plant and equipment and ₹ 3,362 Crore to capital work in progress. This has led to a reduction in depletion charge of ₹ 94 Crore for the period from October 26, 2018 till March 31, 2019.

as at and for the year ended March 31, 2019

#### Ravva Block

The Government of India has granted its approval for a ten-year extension of PSC for Ravva Block with effect from October 28, 2019, subject to certain conditions. The extension has been granted with a 10% increase in GOI share of profit oil. Management has reviewed the conditions and is confident of fulfilling or disposing of such conditions.

The Company does not expect any material adjustment to the financial statements on account of the aforesaid matters.

### (B) Significant Judgement

#### (i) Contingencies

In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Company. A tax provision is recognised when the Company has a present obligation as a result of past events and it is probable that the Company will be required to settle that obligation.

Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain, the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements.

When considering the classification of legal or tax cases as probable, possible or remote, there is judgement involved. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific applicable law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision.

Although there can be no assurance regarding the final outcome of the legal proceedings, the Company does not expect them to have a materially adverse impact on the Company's financial position or profitability. These are set out in Note 35.

#### (ii) Revenue recognition and receivable recovery in relation to the power division

In certain cases, the Company's power customers are disputing various contractual provisions of Power Purchase Agreements (PPA). Significant judgement is required in both assessing the tariff to be charged under the PPA in accordance with Ind AS 115 and to assess the recoverability of withheld revenue currently accounted for as receivables.

In assessing this critical judgment, management considered favourable external legal opinions the Company has obtained in relation to the claims. In addition the fact that the contracts are with government owned companies implies the credit risk is low [Refer note 7(c)]

#### (iii) Exceptional items

Exceptional items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that

the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also tax charges related to exceptional items and certain one-time tax effects are considered Exceptional. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with Ind AS.

The determination as to which items should be disclosed separately requires a degree of judgement. The details of exceptional items are set out in note 31.

#### 4. SEGMENT INFORMATION

#### Description of segment and principal activities

The Company is a diversified natural resource company engaged in exploring, extracting and processing minerals and oil and gas. The Company produces oil and gas, aluminium, copper, iron ore and power. The Company has five reportable segments: oil and gas, aluminium, copper, iron ore and power. The management of the Company is organized by its main products: oil and gas, aluminium, copper, iron ore and power. Each of the reportable segments derives its revenues from these main products and hence these have been identified as reportable segments by the Company's Chief Operating Decision Maker ("CODM").

Segment Revenue, Results, Assets and Liabilities include the respective amounts identifiable to each of the segments and amount allocated on a reasonable basis. Unallocated expenditure consist of common expenditure incurred for all the segments and expenses incurred at corporate level. The assets and liabilities that cannot be allocated between the segments are shown as unallocated assets and unallocated liabilities respectively.

The accounting policies of the reportable segments are the same as the Company's accounting policies described in Note 3. Earnings before Interest, Tax and Depreciation & Amortisation (EBITDA) are evaluated regularly by the CODM, in deciding how to allocate resources and in assessing performance. The operating segments reported are the segments of the Company for which separate financial information is available. The Company's financing (including finance costs and finance income) and income taxes are reviewed on an overall basis and are not allocated to operating segments.

Pricing between operating segments are on an arm's length basis in a manner similar to transactions with third parties.

For the year ended March 31, 2019, the Company has not recorded any impairment of receivables relating to amounts owed by related parties. This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates.

The following table presents revenue and profit information and certain assets and liabilities information regarding the Company's business segments as at and for the year ended March 31, 2019 and March 31, 2018 respectively.

as at and for the year ended March 31, 2019

#### I) For the year ended March 31, 2019

(₹ in Crore)

	Business Segments						
Particulars	Oil and Gas	Aluminium	Copper	Iron Ore	Power	Eliminations	Total
Revenue							
External revenue <sup>a</sup>	7,104	21,000	6,833	2,909	252	-	38,098
Inter segment revenue	-	-	-	2	-	(2)	-
Segment revenue	7,104	21,000	6,833	2,911	252	(2)	38,098
Results							
EBITDA <sup>b</sup>	4,119	1,246	(214)	622	(195)	-	5,578
Depreciation, depletion and amortisation expense	1,531	1,285	197	105	125	-	3,243
Other income °	-	53	2	6	11	-	72
Segment Results	2,588	14	(409)	523	(309)	-	2,407
Less: Unallocated expenses							70
Less: Finance costs							3,757
Add: Other income (excluding exchange difference							6,043
and deferred grant)							
Add: Net exceptional gain							324
Net profit before tax							4,947
Other information							
Segment Assets	16,299	45,101	7,141	2,927	3,321	-	74,789
Financial asset investments							68,582
Income tax assets (net of provisions)							2,175
Cash & cash equivalents (including other bank							3,891
balances & bank deposits)							
Others							1,430
Total Assets							1,50,867
Segment Liabilities	6,961	17,499	3,743	1,235	162		29,600
Borrowings							42,204
Income tax liabilities (net)							46
Others							1,137
Total Liabilities							72,987
Capital Expenditure d	2,274	1,199	291	37	2		3,806
Impairment reversal/(charge) - net / provision <sup>e</sup>	261	-	-	-	-		265

a) Export incentive has been reclassified from 'segment revenue' to 'other operating income'. Refer note 2(b).

b) EBITDA is a non-GAAP measure

c) Amorisation of duty benefits relating to assets recognised as government grant.

d) Total Capital expenditure includes capital expenditure of ₹ 3 Crore not allocable to any segment.

e) Total of Impairment reversal/(charge) - net / provision includes net impairment reversal on investment in subsidiaries of ₹4 Crore not allocable to any segment.

as at and for the year ended March 31, 2019

#### II) For the year ended March 31, 2018

(₹ in Crore)

	Business Segments								
Particulars	Oil and Gas	Aluminium	Copper	Iron Ore	Power	Eliminations	Total		
Revenue									
External revenue <sup>a</sup>	5,085	15,600	21,253	3,146	412	-	45,496		
Inter segment revenue	-	-	-	16	-	(16)	-		
Segment revenue	5,085	15,600	21,253	3,162	412	(16)	45,496		
Results									
EBITDA <sup>b</sup>	2,909	1,891	1,103	401	44	-	6,348		
Depreciation, depletion and amortisation expense <sup>d</sup>	1,013	1,379	201	120	122	-	2,835		
Other income °	-	49	3	6	11	-	69		
Segment Results	1,896	561	905	287	(67)	-	3,582		
Add: Unallocated income <sup>d</sup>							98		
Less: Finance costs							3,353		
Add: Other income (excluding exchange difference and deferred grant)							3,490		
Add: Net exceptional gain							5,407		
Net profit before tax							9,224		
Other information									
Segment Assets	12,842	43,426	9,968	3,094	3,263	-	72,593		
Financial asset investments							68,010		
Income tax assets							2,429		
Cash & Cash Equivalents (Including other bank balances & bank deposits)							1,594		
Others							2,543		
Total Assets	-	-	-	-	-	-	1,47,169		
Segment Liabilities	3,755	11,919	8,667	1,558	275	-	26,174		
Borrowings							40,713		
Income tax liabilities (net)							45		
Deferred tax liabilities (net)							26		
Others							898		
Total Liabilities						-	67,856		
Capital Expenditure <sup>e</sup>	609	1,318	540	70	-	-	2,548		
Impairment reversal/(charge) - net / provision <sup>f</sup>	3,513	(251)	-	(452)	-	-	5,520		

- a) Export incentive has been reclassified from 'segment revenue' to 'other operating income'. Refer note 2(b).
- b) EBITDA is a non-GAAP measure
- c) Amorisation of duty benefits relating to assets recognised as government grant.
- d) Depreciation, depletion and amortisation expense excludes and unallocated income is net of unallocated deprection of ₹ 7 Crore.
- e) Total Capital expenditure includes capital expenditure of ₹ 11 Crore not allocable to any segment.
- f) Total of Impairment reversal/(charge) net / provision includes impairment reversal on investment in subsidiaries of ₹ 2,710 Crore not allocable to any segment.

### II) Geographical segment analysis

The following table provides an analysis of the Company's sales by region in which the customer is located, irrespective of the origin of the goods.

		(₹ in Crore)
Geographical Segment	Year ended March 31, 2019	Year ended March 31, 2018
Revenue by geographical segment		
India	19,636	21,933
China	1,797	6,836
UAE	41	2,766
Malaysia	3,875	3,897
Others	12,749	10,064
Total	38,098	45,496

as at and for the year ended March 31, 2019

The following is an analysis of the carrying amount of non-current assets, excluding deferred tax assets and financial assets, analysed by the geographical area in which the assets are located:

(₹ in Crore)

Carrying Amount of Segment Assets	Year ended March 31, 2019	Year ended March 31, 2018
India	61,939	60,551
Total	61,939	60,551

#### Information about major customers

Revenue from one customer amounted to ₹5,077 Crore (March 31, 2018: ₹1,687 Crore), arising from sales made in the Aluminium and Copper segment.

#### Disaggregation of revenue

Below table summarises the disaggregated revenue from contract with customers:

(₹ in Crore)

Particulars	Year ended March 31, 2019
Oil	6,763
Gas	300
Aluminium products	19,328
Copper Cathode	5,375
Iron Ore	693
Metallurgical coke	57
Pig Iron	2,062
Power	299
Others	3,234
Revenue from contracts with customers	38,111
Gains/(losses) from provisionally priced contracts	(13)
Total Revenue	38,098

# Notes forming part of the financial statements as at and for the year ended March 31, 2019

(₹ in Crore)

				Property,	Property, Plant and Equipment	ipment						Total
Particulars	Freehold Land	Buildings	Plant and equipment	Mining property and leases	Oil & gas producing facilities	Furniture and fixtures	Vehicles	Office equipment	Total	Capital Work in progress (CWIP)"	Exploration intangible assets under developemnt	including capital work in progress and exploration intangible assets under development
Gross Block												
As at April 1, 2017	1,112	6,702	36,206	26	25,294	163	51	337	69,891	12,755	29,251	1,11,897
Additions	<u></u>	4	527	ı	131	2	0	12	989	1,197	68	1,951
Transfers/ Reclassifications	00	22	2,630	1	141	2	•	7	2,810	(2,710)	(100)	1
Disposals/ Adjustments		(3)	(445)	ı	(14)	(1)	(10)	(2)	(475)		(32)	(507)
Exchange differences	2	0	53	ı	101	0	•	0	165	(52)	91	204
As at April 1, 2018	1,123	6,734	38,971	26	25,653	166	20	354	73,077	11,190	29,278	1,13,545
Additions	m	15	379	ı	153	D	00	22	585	2,635	478	3,698
Transfers/ Reclassifications	0	54	1,220	ı	16,838	2	237	00	18,368	11,418	(29,787)	(1)
Disposals/ Adjustments	ı	(14)	(525)	ı		1	(8)	(6)	(226)	(2)	,	(558)
Exploration costs written off (Refer note 30)	1	1		1	1	ı		1		1	(48)	(48)
Exchange differences	8	71	366	ı	1,432	5		11	1,893	(87)	2,159	3,965
As at March 31, 2019	1,143	6,860	40,411	26	44,076	178	287	386	93,367	25,154	2,080	1,20,601
Accumulated depreciation, depletion, amortisation and impairment												
As at April 1, 2017	82	1,914	7,282	15	24,162	82	27	285	33,849	540	24,223	58,612
Charge for the year	13	248	1,988	_	536	18	2	30	2,839	1	1	2,839
Disposals/ Adjustments		(1)	(386)	1	(14)	(1)	(4)	(2)	(408)		1	(408)
Impairment charge/(reversal) for the year (Refer note 31)	20	$\infty$	63	10	(536)	ı	0	0	(435)	264	(2,977)	(3,148)
Exchange differences	0	5	19	1	76	0		0	100	1	49	149
As at April 1, 2018	115	2,174	8,966	26	24,224	66	28	313	35,945	804	21,295	58,044
Charge for the year		232	1,789	ı	1,161	18	9	31	3,248	1	i	3,248
Disposals/ Adjustments	1	(14)	(387)	ı	•	•	(2)	(8)	(414)	•	1	(414)
Impairment charge/(reversal) for the vear (Refer note 31)	ı	•		1	(261)		•	ı	(261)	ľ	•	(261)
Transfers/ Reclassifications	1	42	(98)	•	12,071	2	48	2	12,070	10,308	(22,379)	(1)
Exchange differences	9	65	324	1	1,400	2		10	1,807	(106)	1,581	3,282
As at March 31, 2019	132	2,499	10,597	26	38,595	121	77	348	52,395	11,006	497	63,898
Net Book Value												
As at April 1, 2017	1,030	4,788	28,924	1	1,132	81	24	52	36,042	12,215	5,028	53,285
As at April 1, 2018	1,008	4,560	30,005	1	1,429	67	22	41	37,132	10,386	7,983	55,501
As at March 31, 2019	1,011	4,361	29,814		5,481	57	210	38	40,972	14,148	1,583	56,703

\* Impairment charge/ (reversal) in CWIP for the year ended March 31, 2018 includes ₹ 251 Crore of provision for loss on unusable items.

as at and for the year ended March 31, 2019

#### **Intangible Assets**

(₹ in Crore)

Particulars	Software License	Mining Rights	Total
Gross Block			
As at April 1, 2017	222	227	449
Additions	25	-	25
Disposals/ Adjustments	(1)	-	(1)
Exchange differences	1	-	1
As at April 1, 2018	247	227	474
Additions	13	-	13
Transfers from Property,Plant and Equipment	1	-	1
Disposals/ Adjustments	(4)	-	(4)
Exchange differences	9	-	9
As at March 31, 2019	266	227	493
Accumulated amortisation and impairment			
As at April 1, 2017	195	99	294
Charge for the year	18	12	30
Disposals/ Adjustments	(1)	-	(1)
Impairment charge/(reversal) for the year (note 31)	-	107	107
Exchange differences	0	-	0
As at April 1, 2018	212	218	430
Charge for the year	22	1	23
Disposals/ Adjustments	(3)	-	(3)
Transfers from Property, Plant and Equipment	1	-	1
Exchange differences	8	-	8
As at March 31, 2019	240	219	459
Net Book Value			
As at April 1, 2017	27	128	155
As at April 1, 2018	35	9	44
As at March 31, 2019	26	8	34

- a) Plant and equipment include refineries, smelters, power plants, railway sidings, ships, aircrafts, river fleet and related facilities.
- b) During the year ended March 31, 2019, interest capitalised was ₹ 567 Crore (March 31, 2018: ₹ 349 Crore).
- c) Certain property, plant and equipment are pledged as collateral against borrowings, the details related to which have been described in Note 17 on "Borrowings".
- d) In accordance with the exemption given under Ind AS 101, which has been exercised by the Company, a first time adopter can continue its previous GAAP policy for accounting for exchange differences arising from translation of long-term foreign currency monetary items recognised in the previous GAAP financial statements for the period ending immediately before the beginning of the first Ind AS financial reporting period i.e. April 01, 2016.

Accordingly, foreign currency exchange differences arising on translation/settlement of long-term foreign currency monetary items acquired before April 01, 2016 pertaining to the acquisition of a depreciable asset amounting to ₹ 2 Crore loss (March 31, 2018: ₹ 1 Crore gain) is adjusted to the cost of respective item of property, plant and equipment.

Capital work-in-progress includes foreign currency exchange loss of Nil incurred during the year (March 31, 2018: ₹ 17 Crore loss) on such long term foreign currency monetary liabilities.

e) Property, Plant and Equipment, Capital work-in-progress and exploration and evaluation assets net block includes share of jointly owned assets with the joint venture partners ₹ 12,211 Crore (March 31, 2018: ₹ 11,151 Crore). Refer note 3(c)(A)(xi) for reasons for transfer of exploration and evaluation assets to property, plant and equipment and capital work-in-progress.

as at and for the year ended March 31, 2019

f) Reconciliation of depreciation, depletion and amortisation expense

(₹in Crore)

Particulars	For the year ended March 31, 2019	For the year ended March 31, 2018
Depreciation/Depletion/Amortisation expense on:		
Property, Plant and equipment	3,248	2,839
Intangible assets	23	30
As per Property, Plant and Equipment and Intangibles schedule	3,271	2,869
Less: Cost allocated to joint ventures	(28)	(27)
As per Statement of Profit and Loss	3,243	2,842

g) Freehold Land includes gross block of ₹ 129 Crore (March 31, 2018: ₹ 119 Crore), accumulated amortisation of ₹ 112 Crore (March 31, 2018: ₹ 95 Crore), which is available for use during the lifetime of the Production Sharing Contract of the respective Oil and Gas blocks.

#### **6. FINANCIAL ASSETS- INVESTMENTS**

#### A) Non Current Investments

		As at March 31, 2019			As at March 31, 2018		
Part	iculars	No.		Amount (₹ in Crore)	No.		Amount (₹ in Crore)
	Investment in equity shares - at cost/ deemed cost <sup>a</sup>			(**************************************			(**************************************
	Subsidiary companies						
	Quoted						
	- Hindustan Zinc Limited, of ₹ 2/-each b	2,74,31,54,310		44,398	2,74,31,54,310		44,398
	Unquoted						
	- Bharat Aluminium Company Limited, of ₹ 10/- each (including 5 shares held jointly with nominees) <sup>b</sup>	11,25,18,495		553	11,25,18,495		553
	- Monte Cello BV, Netherlands, of Euro 453.78 each	40	204		40	204	
	Less: Reduction pursuant to merger °		(204)	0		(204)	0
	- Sterlite (USA) Inc., of US\$.01 per share (₹ 42.77 at each year end)	100		0	100		0
	- Cairn India Holdings Limited (CIHL) of GBP 1 each, fully paid up	42,08,10,062	28,873		42,08,10,062	28,873	
	Less: Reduction pursuant to merger °		(15,067)	13,806		(15,067)	13,806
	- Vizag General Cargo Berth Private Limited, of ₹ 10 each (including 6 shares held jointly with nominees)	3,21,08,000		32	3,21,08,000		32
	- Paradip Multi Cargo Berth Private Limited, of ₹ 10 each (including 6 shares held jointly with nominees)	10,000		0	10,000		0
	- Sterlite Ports Limited of ₹ 2 each (including 6 shares held jointly with nominees)	2,50,000		0	2,50,000		0
	- Talwandi Sabo Power Limited, of ₹ 10 each (including 6 shares held jointly with nominees)	3,20,66,09,692		3,207	3,20,66,09,692		3,207
	- Sesa Resources Limited, of ₹ 10 each °	12,50,000		757	12,50,000		757
	- Bloom Fountain Limited, of US\$ 1 each	2,20,10,00,001	14,734		2,20,10,00,001	14,734	
	Less: Reduction pursuant to merger °		(14,320)	414		(14,320)	414
	- MALCO Energy Limited, of ₹ 2 each (including 6 shares held jointly with nominees)	2,33,66,406	116		2,33,66,406	116	
	Less: Reduction pursuant to merger $^\circ$		(23)	93		(23)	93
	- THL Zinc Ventures Limited of US\$ 100 each	1,00,001	46		1,00,001	46	
	Less: Reduction pursuant to merger °		(46)	0	_	(46)	0
	- THL Zinc Holdings BV of EURO 1 each	37,38,000	23		37,38,000	23	
	Less: Reduction pursuant to merger $^\circ$		(23)	0		(23)	0

# Notes forming part of the financial statements as at and for the year ended March 31, 2019

	As at N	March 31, 2019	As at M	at March 31, 2018	
Particulars	No.	Amount (₹ in Crore)	No.		Amount (₹ in Crore)
- Vedanta Star Limited of ₹ 10 each (including 6 shares held jointly with nominees) 9	1,96,17,256	1,770	-		-
Associate companies - unquoted					
- Gaurav Overseas Private Limited, of ₹ 10 eachd	3,23,000	0	3,23,000		0
Joint venture - unquoted					
- Rampia Coal Mines and Energy Private Limited of ₹ 1 each	2,72,29,539	2	2,72,29,539		2
Investment in equity shares at fair value through other comprehensive income					
Quoted					
- Sterlite Technologies Limited, of ₹ 2 each (including 60 shares held jointly with nominees)	47,64,295	104	47,64,295		149
Unquoted					
- Sterlite Power Transmission Limited, of ₹ 2 each (including 12 shares held jointly with nominees)	9,52,859	11	9,52,859		11
- Goa Shipyard Limited of ₹ 10 each	2,50,828	0	2,50,828		0
(b) Investment in preference shares of subsidiary companies - at cost					
Subsidiary companies - Unquoted	40.000		40.50.000		007
- Bloom Fountain Limited, 0.25% Optionally Convertible Redeemable Preference shares of US\$ 1 each	18,59,900	907	18,59,900		907
<ul> <li>Bloom Fountain Limited, 0.25% Optionally Convertible Redeemable Preference shares of US\$ 100 each</li> </ul>	3,60,500	215	3,60,500		215
- THL Zinc Ventures Limited, 0.25% Optionally Convertible Redeemable Preference shares of US\$ 1 each	70,00,000	3,187	70,00,000	3,187	
Less: Reduction pursuant to merger °		(3,187) 0		(3,187)	0
- THL Zinc Holdings BV, 0.25% Optionally Convertible Redeemable Preference shares of EURO 1 each	55,00,000	2,495	55,00,000	2,495	
Less: Reduction pursuant to merger °		(2,495) 0		(2,495)	0
(c) Investment in Government or Trust securities at cost / amortised cost	-		-		
- 7 Years National Savings Certificates (March 31, 2019: ₹ 35,450 March 31, 2018: ₹ 35,450) (Deposit with Sales Tax Authority)	-	0	-		0
- UTI Master gain of ₹ 10 each (March 31, 2019: ₹ 4,072, March 31, 2018: ₹ 4,072)	100	0	100		0
- Vedanta Limited ESOS Trust (March 31, 2019: ₹ 5,000, March 31, 2018: ₹ 5,000)	-	0	-		0
(d) Investments in debentures of subsidiary companies at cost / amortised cost					
<ul> <li>Vizag General Cargo Berth Private Limited, 0.1% compulsorily convertible debentures of ₹ 1,000 each <sup>e</sup></li> </ul>	15,00,000	150	15,00,000		149
- MALCO Energy Limited, compulsorily convertible debentures of ₹ 1,000 each <sup>f</sup>	6,13,54,483	6,136	6,13,54,483	6,136	
Less: Reduction pursuant to merger °		(6,118) 18	_	(6,118)	18
(e) Investments in Co-operative societies at fair value through profit and loss					
- Sesa Ghor Premises Holders Maintenance Society Limited, of ₹ 200 each (March 31, 2019: ₹ 4,000, March 31, 2018: ₹ 4,000)	40	0	40		0

as at and for the year ended March 31, 2019

	As at March 31,	2019	As at March 31,	2018
Particulars	No.	Amount	A1 -	Amount
- Sesa Goa Sirsaim Employees Consumers Co- operative Society Limited, of ₹ 10 each (March 31, 2019: ₹ 2,000 March 31, 2018: ₹ 2,000)	200	(₹ in Crore) O	No. 200	(₹ in Crore) O
- Sesa Goa Sanquelim Employees Consumers Co- operative Society Limited, of ₹ 10 each (March 31, 2019: ₹ 2,300 March 31, 2018: ₹ 2,300)	230	0	230	0
- Sesa Goa Sonshi Employees Consumers Co- operative Society Limited, of ₹ 10 each (March 31, 2019: ₹ 4,680 March 31, 2018: ₹ 4,680)	468	0	468	0
- Sesa Goa Codli Employees Consumers Co- operative Society Limited, of ₹ 10 each (March 31, 2019: ₹ 4,500, March 31, 2018: ₹ 4,500)	450	0	450	0
- Sesa Goa Shipyard Employees Consumers Co-operative Society Limited, of ₹ 10 each (March 31, 2019: ₹ 5,000 March 31, 2018: ₹ 5,000)	500	0	500	0
- The Mapusa Urban Cooperative Bank Limited, of ₹ 25 each (March 31, 2019: ₹ 1,000, March 31, 2018: ₹ 1,000)	40	0	40	0
Less: Provision for diminution in value of investments in:				
Cairn India Holdings Limited (CIHL) (Refer note 31)		-		(52)
Bloom Fountain Limited		(1,536)		(1,536)
Sesa Resources Limited (Refer note 31)		(696)		(648)
Rampia Coal Mines and Energy Private Limited		(2)		(2)
Total		64,204		62,473
Aggregate amount of impairment		(2,234)		(2,238)
Aggregate amount of quoted investments		44,502		44,547
Market value of quoted investments		76,048		82,704
Aggregate carrying amount of unquoted investments		19,702		17,926

a. Carrying value of investment in equity shares of Hindustan Zinc Limited is at deemed cost and for all other subsidiaries, it is at the cost of acquisition.

b. Pursuant to the Government of India's policy of disinvestment, the Company in April 2002 acquired 26% equity interest in Hindustan Zinc Limited (HZL) from the Government of India. Under the terms of the Shareholder's Agreement ('SHA'), the Company had two call options to purchase all of the Government of India's shares in HZL at fair market value. The Company exercised the first call option on August 29, 2003 and acquired an additional 18.9% of HZL's issued share capital. The Company also acquired an additional 20% of the equity capital in HZL through an open offer, increasing its shareholding to 64.9%. The second call option provides the Company the right to acquire the Government of India's remaining 29.5% share in HZL. This call option was subject to the right of the Government of India to sell 3.5% of HZL shares to HZL employees. The Company exercised the second call option on July 21, 2009. The Government of India disputed the validity of the call option and refused to act upon the second call option. Consequently the Company invoked arbitration which is in the early stages. The next date of hearing is to be notified. The Government of India without prejudice to the position on the Put / Call option issue has received approval from the Cabinet for divestment and the

Government is looking to divest through the auction route. Meanwhile, the Supreme Court has, in January 2016, directed status quo pertaining to disinvestment of Government of India's residual shareholding in a public interest petition filed which is currently pending and sub-judice.

Pursuant to the Government of India's policy of divestment, the Company in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Company had a call option to purchase the Government of India's remaining ownership interest in BALCO at any point from March 2, 2004. The Company exercised this option on March 19, 2004. However, the Government of India contested the valuation and validity of the option and contended that the clauses of the SHA violate the erstwhile Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Company, the arbitral tribunal by a majority award rejected the claims of the Company on the ground that the clauses relating to the call option, the right of first refusal, the "tag along" rights and the restriction on the transfer of shares violate the erstwhile Companies Act, 1956 and are not enforceable. The Company has challenged the validity of the majority award before the Hon'ble High Court at Delhi and sought for setting aside the arbitration award to the

as at and for the year ended March 31, 2019

extent that it holds these clauses ineffective and inoperative. The Government of India also filed an application before the High Court to partially set aside the arbitral award in respect of certain matters involving valuation. The matter is currently scheduled for hearing by the Delhi High Court on August 02, 2019. Meanwhile, the Government of India without prejudice to its position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route.

On January 9, 2012, the Company offered to acquire the Government of India's interests in HZL and BALCO for ₹ 15,492 Crore and ₹ 1,782 Crore respectively. This offer was separate from the contested exercise of the call options, and Company proposed to withdraw the ongoing litigations in relation to the contested exercise of the options should the offer be accepted. To date, the offer has not been accepted by the Government of India and therefore, there is no certainty that the acquisition will proceed.

In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Company considers the strike price of the options to be at the fair value, which is effectively nil, and

hence the call options have not been recognised in the financial statements.

- c. Reduction pursuant to merger of Cairn India Limited with Vedanta Limited accounted for in the year ended March 31, 2017.
- d. During the previous year, the Company made an investment of ₹ 11.30 Lacs in 1.13 Lacs equity shares having face value of ₹ 10/- each in Gaurav Overseas Private Limited.
- e. During the previous year, the maturity of investments in compulsorily convertible debentures of Vizag General Cargo Berth Private Limited has been extended by 2 years 10 months till January 28, 2021.
- f. During the previous year, the Company made an investment in 1,70,418 Compulsory convertible debentures of MALCO energy limited (MEL) having face value of ₹ 100/- each at an premium of ₹ 900/- each.
- g. On April 23, 2018, Vedanta Star Limited was incorporated as a 100% subsidiary of the Company. The Company has made an investment of ₹ 1,770 Crore in 1,77,50,000 equity shares having face value of ₹ 10 each including 6 shares held by nominees. Further during the year, 18,67,256 shares were issued as bonus shares. Vedanta Star Limited in turn has acquired the controlling stake in Electrosteel Steels Limited.

#### **B) Current Investment**

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Investments carried at fair value through profit and loss		
Investment in mutual funds- quoted	1,229	1,761
Investment in mutual funds- unquoted	1,310	1,835
Investment in bonds - quoted	1,733	1,819
Investment in India Grid Trust - quoted <sup>a</sup>	106	122
Total	4,378	5,537
Aggregate amount of quoted investments, and market value thereof	3,068	3,702
Aggregate amount of unquoted investments	1,310	1,835

(a) Represents investment in related party (Refer note 36).

#### 7. FINANCIAL ASSETS - TRADE RECEIVABLES

(₹ in Crore)

	As at	March 31, 2019		As at	March 31, 2018	
Particulars	Non-current	Current	Total	Non-current	Current	Total
Unsecured	1,745	1,994	3,739	662	2,298	2,960
Less: Provision for expected credit loss	(497)	(28)	(525)	(191)	(330)	(521)
Total	1,248	1,966	3,214	471	1,968	2,439

- (a) The interest free credit period given to customers is upto 90 days. Also refer note 20(C)(d)
- (b) For amounts due and terms and conditions relating to related party receivables see note 36.
- (c) Additionally, as at March 31, 2018, ₹ 767 Crore was outstanding on account of certain disputes relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalisation by the Odisha State Regulatory Commission. During the current year the said disputes were settled. However, the customer has raised certain claims on the Company in respect of short supply of power for which a provision of ₹ 218 Crore has been made. A Minutes of Meeting (MOM) has been signed with the customer and subsequently the Company has received payment of ₹ 55 Crore in March 2019. Pending ratification of MOM by Odisha Electricity Regulatory Commission (OERC) and adjudication on certain issues related to the claim, the customer has withheld ₹ 1,248 Crore, which the Company is confident of recovering.

as at and for the year ended March 31, 2019

#### 8. FINANCIAL ASSETS - LOANS

(₹ in Crore)

	As at March 31, 2019 As at March 31, 2018			March 31, 2018		
Particulars	Non-current	Current	Total	Non-current	Current	Total
Unsecured, considered good						
Loans to related parties (Refer note 36)	197	114	311	-	9	9
Loan to employees	-	1	1	-	2	2
Others	-	3	3	-	3	3
Total	197	118	315	-	14	14

#### 9. FINANCIAL ASSETS - OTHERS

(₹ in Crore)

	As at March 31, 2019			As at March 31, 2018			
Particulars	Non-current	Current	Total	Non-current	Current	Total	
Site restoration asset <sup>a</sup>	365	-	365	318	-	318	
Unsecured, considered good							
Security deposits	82	10	92	125	12	137	
Dividend receivable	-	-	-	-	1,646	1,646	
Advance recoverable (Oil and Gas	-	2,382	2,382	-	936	936	
Business)							
Others <sup>b</sup>	172	36	208	-	302	302	
Receivable from related parties	-	202	202	-	107	107	
(Refer note 36)							
Unsecured, considered credit							
impaired							
Security deposits	15	1	16	15	6	21	
Others <sup>b</sup>	-	232	232	-	177	177	
Less: Provision for expected credit loss	(15)	(233)	(248)	(15)	(183)	(198)	
Total	619	2,630	3,249	443	3,003	3,446	

<sup>(</sup>a) Site restoration asset earns interest at fixed rate based on respective deposit rate.

#### **10. OTHER ASSETS**

(₹ in Crore)

	As at March 31, 2019			As at March 31, 2018		
- Particulars	Non-current	Current	Total	Non-current	Current	Total
Unsecured, considered good	Tron ourron		10141	non odnom	Carrone	10141
Capital advances	1,381	_	1,381	1,286	_	1,286
Advances other than capital	.,55.		.,	1,200		.,200
advances						
Advances for related party supplies	_	117	117	_	455	455
(Refer note 36)						
Advances for supplies	-	972	972	-	1,280	1,280
Others					,	,
Balance with government	416	350	766	420	526	946
authorities <sup>a,b</sup>						
Leasehold land prepayments °	215	2	217	202	2	204
Loan to employee benefit trust	351	-	351	236	-	236
Others d	664	530	1,194	433	601	1,034
Unsecured, considered doubtful						
Capital advances	6	-	6	6	-	6
Balance with government authorities	3	-	3	3	-	3
Advance for supplies	-	37	37	-	37	37
Others d	211	4	215	217	4	221
Less : Provision for doubtful	(220)	(41)	(261)	(226)	(41)	(267)
advances						
Total	3,027	1,971	4,998	2,577	2,864	5,441

<sup>(</sup>a) Includes ₹ 30 Crore (March 31, 2018: ₹ 30 Crore), being Company's share of gross amount of ₹ 86 Crore (March 31, 2018: ₹ 86 Crore) paid under protest on account of Education Cess and Secondary Higher Education Cess for the FY 2014.

<sup>(</sup>b) Others include claims receivables, and unbilled revenue (contract assets). The outstanding balance of contract assets was ₹ 23 Crore (March 31, 2018: ₹ 237 Crore)

<sup>(</sup>b) Includes ₹ 9 Crore (March 31, 2018: ₹ 48 Crore), being Company's share of gross amount of ₹ 26 Crore (March 31, 2018: ₹ 139 Crore), of excess oil cess paid under Oil Industry (Development) Act.

<sup>(</sup>c) Represents prepayments in respect of land taken under operating leases, being amortised equally over the period of the lease.

<sup>(</sup>d) Others include claim receivables, advance recoverable (oil and gas business), prepaid expenses and export incentive receivables.

as at and for the year ended March 31, 2019

#### 11. INVENTORIES

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Raw Materials	3,024	3,008
Goods-in transit	1,154	1,887
Work-in-progress	1,195	1,811
Finished goods	880	364
Fuel Stock	440	284
Goods-in transit	413	377
Stores and Spares	547	384
Goods-in transit	4	34
Total	7,657	8,149

- (a) For method of valuation for each class of inventories, refer note 3(a)(J).
- (b) Inventory held at net realisable value amounted to ₹ 3,584 Crore (March 31, 2018: ₹ 90 Crore).
- (c) The write down of inventories amounting to ₹ 152 Crore (March 31, 2018: ₹ 42 Crore) has been charged to the Statement of Profit and Loss.

#### 12. CURRENT FINANCIAL ASSETS - CASH AND CASH EQUIVALENTS

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Balances with banks	3,026	1,144
Deposits with original maturity of less than 3 months (including interest accrued thereon) <sup>a</sup>	183	-
Cash on hand	0	0
Total	3,209	1,144

- (a) Bank deposits earns interest at fixed rate based on respective deposit rate.
- (b) Cash & Cash equivalents for the purpose of Statement of Cash Flows comprises the following:

(₹ in Crore)

Total	3,284	1,231
Earmarked unpaid dividend accounts (Refer Note 13)	75	87
Cash and cash equivalents as above	3,209	1,144
Particulars	As at March 31, 2019	As at March 31, 2018
		(**************************************

#### 13. CURRENT FINANCIAL ASSETS - OTHER BANK BALANCES

Particulars	As at March 31, 2019	As at March 31, 2018
Bank deposits with original maturity of more than 12 months (including interest accrued thereon) ab	3	8
Bank deposits with original maturity of more than 3 months but less than 12 months (including interest accrued thereon) $^{\rm ac}$	602	355
Earmarked unpaid dividend accounts <sup>d</sup>	75	87
Earmarked escrow account <sup>e</sup>	2	-
Total	682	450

- (a) Bank deposits earns interest at fixed rate based on respective deposit rate.
- (b) Includes Nil Crore (March 31, 2018: ₹8 Crore) on lien with banks.
- (c) Includes ₹ 591 Crore (March 31, 2018: ₹ 193 Crore) on lien with banks and margin money ₹ 11 Crore (March 31, 2018: ₹ 39 Crore).
- (d) Earmarked unpaid dividend accounts are restricted in use as it relates to unclaimed or unpaid dividend.
- (e) Earmarked escrow account is restricted in use as it relates to unclaimed redeemable preference shares.

as at and for the year ended March 31, 2019

#### 14. SHARE CAPITAL

		<b>As at March 31, 2019</b> As at March 31, 2018		n 31, 2018	
Part	iculars	Number (in Crore)	Amount (₹ in Crore)	Number (in Crore)	Amount (₹ in Crore)
A.	Authorised equity share capital				
	Opening and Closing balance [equity shares of ₹1 each with voting rights]	4,402	4,402	4,402	4,402
	Authorised preference share capital <sup>a</sup>				
	Opening and Closing balance [preference shares of ₹10/- each]	301	3,010	301	3,010
В.	Issued, subscribed and paid up				
	Equity shares of ₹ 1/- each with voting rights bc	372	372	372	372
		372	372	372	372

- (a) Redeemable preference shares of ₹ 3,010 Crore were redeemed on October 27, 2018 i.e. 18 months from the date of allotment as per the scheme of amalgamation of Cairn India Limited with Vedanta Limited. An equivalent amount of ₹ 3,010 Crore has been transferred from general reserve to preference share redemption reserve.
- (b) Includes 3,08,232 (March 31, 2018: 3,08,232) equity shares kept in abeyance. These shares are not part of listed equity capital and pending allotment as they are sub-judice.
- (c) Includes 1,49,98,702 (March 31, 2018: 92,33,871) equity shares held by Vedanta Limited ESOS Trust (Refer note 25).

#### C. Shares held by the Ultimate holding company and its subsidiaries\*

	As at March 3	As at March 31, 2019		1, 2018
Particulars	No. of Shares held (in Crore)	% of holding	No. of Shares held (in Crore)	% of holding
Twin Star Holdings Limited	128.01	34.44	128.01	34.44
Twin Star Holdings Limited <sup>2</sup>	9.93	2.67	9.93	2.67
Finsider International Company Limited	40.15	10.80	40.15	10.80
Westglobe Limited	4.43	1.19	4.43	1.19
Welter Trading Limited	3.82	1.03	3.82	1.03
Total	186.34	50.13	186.34	50.13

<sup>\*</sup> The % of holding has been calculated on the issued and subscribed share capital as at the respective balance sheet date.

#### D. Aggregate number of bonus shares issued, shares issued for consideration other than cash and shares bought back during the period of five years immediately preceding the reporting date

(in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Equity shares issued pursuant to Scheme of Amalgamation (in FY 2017-18)	75	75
Preference shares issued pursuant to Scheme of Amalgamation (in FY 2017-18)*	301	301

<sup>\*</sup>These were redeemed on October 27, 2018

#### E. Details of shareholders holding more than 5% shares in the Company \*

Particulars	<b>As at March 31, 2019</b> As at March 31, 2018		, 2018	
	No. of Shares held (in Crore)	% of holding	No. of Shares held (in Crore)	% of holding
Twin Star Holdings Limited	128.01	34.44	128.01	34.44
Twin Star Holdings Limited*	9.93	2.67	9.93	2.67
Finsider International Company Limited	40.15	10.80	40.15	10.80

<sup>\*</sup> The % of holding has been calculated on the issued and subscribed share capital as at the respective balance sheet date.

As per the records of the Company, including its register of shareholders/members, the above shareholding represents legal ownership of shares.

<sup>(1)</sup> All the above entities are subsidiaries of Volcan Investments Limited, the ultimate holding Company.

<sup>(2)</sup> Represented by 2,48,23,177 American Depository Shares ("ADS").

<sup># 2,48,23,177</sup> ADS, held by CITI Bank N.A. New York as a depository.

as at and for the year ended March 31, 2019

#### F. Other disclosures

(i) The Company has one class of equity shares having a par value of ₹ 1 per share. Each shareholder is eligible for one vote per share held and dividend as and when declared by the Company. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend which is paid as and when declared by the Board of Directors. In the event of liquidation of the Company, the holders of equity shares will be entitled to receive any of the remaining assets of the Company, after distribution of all preferential amounts, in proportion to their shareholding.

(ii) The Company had one class of 7.5% non-cumulative redeemable preference shares having a par value of ₹10 per share. Each preference shareholder is eligible for one vote per share as per terms of Section 47(2) of the Companies Act 2013 and dividend as and when declared by the Company. As per the terms of preference shares, these shares are redeemable at par on expiry of 18 months from the date of their allotment. In the event of winding up of Vedanta Limited, the holders of Preference Shares shall have a right to receive repayment of capital paid up and arrears of dividend, whether declared or not, up to the commencement of winding up, in prioirty to any payment of capital on the equity shares out of the surplus of Vedanta Limited.

(iii) ADS shareholders do not have right to attend General meetings in person and also do not have right to vote. They are represented by depository, CITI Bank N.A. New York. As at March 31, 2019 - 24,87,79,452 equity shares were held in the form of 6,21,94,863 ADS (March 31, 2018- 24,84,24,696 equity shares in form of 6,21,06,174 ADS).

(iv) In terms of Scheme of Arrangement as approved by the Hon'ble High Court of Judicature at Mumbai, vide its order dated April 19, 2002, the erstwhile Sterlite Industries (India) Limited (merged with the Company during 2013-14) during 2002-2003 reduced its paid up share capital by ₹ 10 Crore. There are 2,01,305 equity shares (March 31, 2018: 204,525 equity shares) of ₹ 1 each pending clearance from NSDL/CDSL. The Company has filed an application in Hon'ble High Court of Mumbai to cancel these shares, the final decision on which is pending. Hon'ble High Court of Judicature at Mumbai, vide its interim order dated September 06, 2002 restrained any transaction with respect to subject shares.

# 15. OTHER EQUITY (REFER STATEMENT OF CHANGES IN EQUITY)

a) General reserve: Under the erstwhile Companies Act 1956, general reserve was created through an annual transfer of net income at a specified percentage in accordance with applicable regulations. The purpose of these transfers was to ensure that if a dividend distribution in a given year is more than 10% of the paid-up capital of the Company for that year, then the total dividend distribution is less than the total distributable results for that year. Consequent to introduction of Companies Act 2013, the requirement to mandatorily transfer a specified percentage of the net profit to general reserve has been withdrawn.

b) Debenture redemption reserve: The Companies Act requires companies that issue debentures to create a debenture redemption reserve from annual profits until such debentures are redeemed. Companies are required to maintain 25% as a reserve of outstanding redeemable debentures. The amounts credited to the debenture redemption reserve may not be utilised except to redeem debentures.

c) Preference share redemption reserve: The Companies Act provides that companies that issue preference shares may redeem those shares from profits of the Company which otherwise would be available for dividends, or from proceeds of a new issue of shares made for the purpose of redemption of the preference shares. If there is a premium payable on redemption, the premium must be provided for, either by reducing the additional paid in capital (securities premium account) or net income, before the shares are redeemed. If profits are used to redeem preference shares, the value of the nominal amount of shares redeemed should be transferred from profits (retained earnings) to the preference share redemption reserve account. This amount should then be utilised for the purpose of redemption of redeemable preference shares. This reserve can be used to issue fully paid-up bonus shares to the shareholders of the Company. During the year, on redemption of preference share, ₹ 3,010 Crore has been transferred from general reserve to preference share redemption reserve.

**d) Capital reserve:** The balance in capital reserve has mainly arisen consequent to merger of Cairn India Limited with the Company.

### **16. CAPITAL MANAGEMENT**

The Company's objectives when managing capital is to safeguard continuity, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth. The Company's overall strategy remains unchanged from previous year.

The Company sets the amount of capital required on the basis of annual business and long-term operating plans which include capital and other strategic investments.

The funding requirements are met through a mixture of equity, internal fund generation and other current borrowings. The Company's policy is to use current and non-current borrowings to meet anticipated funding requirements.

The Company monitors capital on the basis of the gearing ratio which is net debt divided by total capital (equity plus net debt) . The Company is not subject to any externally imposed capital requirements.

Net debt are non-current and current debts as reduced by cash and cash equivalents, other bank balances and current investments. Equity comprises all components including other comprehensive income.

as at and for the year ended March 31, 2019

The following table summarizes the capital of the Company:

(₹ in Crore except otherwise stated)

Particulars	As at March 31, 2019	As at March 31, 2018
Cash and cash equivalents (Refer note 12)	3,209	1,144
Other bank balances (Refer note 13)	682	450
Current investments (Refer note 6B)	4,378	5,537
Total cash (a)	8,269	7,131
Non-current borrowings (Refer note 17A)	20,521	14,810
Current borrowings (Refer note 17B)	17,180	18,320
Current maturities of long term debt (Refer note 19)	4,503	7,583
Total borrowings (b)	42,204	40,713
Net debt c=(b-a)	33,935	33,582
Total equity	77,880	79,313
Total capital (equity + net debt) (d)	1,11,815	1,12,895
Gearing ratio (times) (c/d)	0.30	0.30

#### 17. FINANCIAL LIABILITIES - BORROWINGS

#### A) Non-current borrowings

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
At amortised cost		
Secured		
Non convertible debentures	9,898	8,600
Rupee term loan from banks	15,037	10,692
Unsecured		
Deferred sales tax liability	87	91
Redeemable preference shares	2	3,010
Non current Borrowings (A)	25,024	22,393
Less: Current maturities of long term debt (Refer note 19)	(4,503)	(7,583)
Total Non current borrowings (Net)	20,521	14,810
Current borrowings (B) (Refer note 17B)	17,180	18,320
Total borrowings (A+B)	42,204	40,713

#### B) Current borrowings

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
At amortised cost		
Secured		
Project buyers credit from banks	16	127
Loans repayable on demand from Banks	715	477
Packing credit in foreign currencies from banks	-	636
Amounts due on factoring	360	-
Unsecured		
Commercial paper	14,555	14,815
Packing credit in foreign currencies from banks	492	2,105
Working capital loan	325	95
Amounts due on factoring	717	65
Total	17,180	18,320

The Company has discounted trade receivables on recourse basis of ₹ 1,077 Crore (March 31, 2018: ₹ 65 Crore). Accordingly, the monies received on this account are shown as borrowings as the trade receivables does not meet de-recognition criteria. The above borrowings pertaining to trade receivables discounted has been reinstated on account of foreign exchange fluctuation.

as at and for the year ended March 31, 2019

a) Details of Non-convertible debentures issued by the Company have been provided below (Carrying Value):

(₹ in Crore)

		(11101010)
Particulars	As at March 31, 2019	As at March 31, 2018
8.75% due September 2021	250	250
9.18% due July 2021	1,000	-
8.50% due June 2021	1,649	-
8.75% due April 2021	250	250
8.50% due April 2021	2,349	-
7.80% due December 2020	500	500
9.45% due August 2020	2,000	2,000
8.70% due April 2020	600	600
7.95% due April 2020*	300	300
7.50% due November 2019	200	200
8.25% due October 2019	300	300
8.65% due September 2019	150	150
7.60% due May 2019	350	350
9.17% due July 2018	-	1,200
9.10% due April 2018	-	2,500
Total	9,898	8,600

<sup>\*</sup> The debenture holders of these NCDs and the Company have put and call option at the end of 5 years from the respective date of the allotment of the

b) Vedanta Limited has taken borrowings towards funding of its acquisitions, capital expenditure and working capital requirements. The borrowings comprise of funding arrangements from various banks and financial institution. The details of security provided by the Company to various lenders on the assets of the Company are as follows:

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Secured long term borrowings	24,935	19,292
Secured short term borrowings	1,091	1,240
Total secured borrowings	26,026	20,532

Facility Category	Security details	As at March 31, 2019	As at March 31, 2018
Project Buyers credit from banks	'Secured by exclusive charge on the assets of Vedanta Limited's aluminium division at Jharsuguda imported under facility and first charge on Jharsuguda aluminium's current assets on pari passu basis	16	125
	Other secured project buyer's credit	-	2
Working	Secured by first pari passu charge on current assets, present and future of Vedanta	114	308
capital loans*	Limited		
	First pari passu charge on the entire current assets of Vedanta Limited, both present and future. First pari passu charge on all rights, title, claim and benefit in all the whole of the current assets of Vedanta Limited, both present and future, including stock and raw material, stock in process, semi finished and finished goods, stores and spares not relating to plant, and machinery (consumable stores and spares)	552	639
	First charge on the entire current assets of Vedanta Limited, present and future, on pari passu basis	49	-
	First pari passu charge on current assets of Vedanta Limited	360	-
	Other secured working capital loan	-	166

as at and for the year ended March 31, 2019

Facility Category	Security details	As at March 31, 2019	As at March 31, 2018
Non Convertible Debentures	Secured by way of movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project with a minimum security cover of 1 time of the outstanding amount of the debenture and specifically exclude the 1MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions	850	850
	Secured by the whole of the movable fixed assets of the 1.6 MTPA Aluminium Smelter along with 1215 MW captive power plant in Jharsuguda and 1 MTPA alumina refinery alongwith 90 MW co-generation plant in Lanjigarh, including its movable plant and machinery, capital works-in-process, machinery spares, tools and accessories, and other movable fixed assets	800	800
	Secured by way of first ranking pari passu charge on movable fixed assets in relation to the Lanjigarh Refinery Expansion Project (having capacity beyond 2 MTPA and upto 6 MTPA) situated at Lanjigarh, Odisha. The Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related capacity expansions	1,250	1,250
	Secured by way of "movable fixed assets" in relation to the 1.6 MTPA aluminium smelter alongwith 1215 MW (135MW * 9) captive power plant located in Jharsuguda and 1 MTPA Alumina Refinery alongwith 90 MW co-generation power plant located at Lanjigarh in Odisha State and shall include all present movable plant and machinery, machinery spares, tools and accessories, fixtures, mechanical and electrical equipments, machinery and all other movable fixed assets and all estate, right, title, interest, property, claims and demands whatsoever in relation to assets	2,000	2,000
	Secured by a first pari passu charge on the whole of the present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location	3,998	2,500
	Secured by way of first pari passu charge on all present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of debentures outstanding at any point of time	1,000	-
	Other secured non- convertible debuntures	-	1,200
Rupee term loans from banks	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium Division comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha, both present and future	5,102	5,521
	A pari passu charge by way of hypothecation of all the movable fixed assets of the Vedanta Limited pertaining to its Aluminium Division project consisting of (i) alumina refinery having output of 1 MTPA (Refinery) along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha (Power Plant); and (ii) aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha (Smelter) (the Refinery, Power Plant and Smelter). Also, a first pari passu charge by way of equitable mortgage on the land pertaining to the mentioned project of Aluminium division	3,551	3,939
	Secured by a pari passu charge by way of hypothecation on the movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project. Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related expansions	482	-
	A pari passu charge by way of hypothecation on the movable fixed assets of Vedanta Limited pertaining to its Aluminium Division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	1,734	-
	A pari passu charge by way of hypothecation/equitable mortgage of the movable/immovable fixed assets of Vedanta Limited pertaining to its Aluminium Division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	2,984	-
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immoveable assets of the Aluminium Division of the Borrower comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with a naggregate capacity of 90 MW at Lanjigarh, Orissa; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Orissa and additional charge on Lanjigarh Expansion project, both present and future	1,184	1,232
Total	analge on Eurijigam Expansion project, both protent and ratare	26,026	20,532

<sup>\*</sup> Includes loans repayable on demand from banks, packing credit in foreign currencies from banks and amounts due on factoring.

as at and for the year ended March 31, 2019

c) The Company facilities are subject to certain financial and non- financial covenants. The primary covenants which must be complied with include interest service coverage ratio, current ratio, debt service coverage ratio, total outside liabilities to total net worth, fixed assets coverage ratio, ratio of total term liabilities to net worth and return on fixed assets. The Company has complied with the covenants as per the terms of the loan agreement.

d) Terms of repayment of total borrowings outstanding as at March 31, 2019 are provided below -

(₹ in Crore)

Borrowings	Weighted average interest rate as at March 31, 2019	Total carrying value	<1 year	1-3 years	3-5 years	>5 years	Remarks
Rupee term loan	8.79%	15,037	3,199	5,294	2,271	4,319	Repayable in 404 quarterly installments and 5 installments payable in the gap of 5 months and 7 months
Non convertible debentures	8.68%	9,898	1,300	8,600	-	-	Repayable in 13 bullet payments
Commercial paper	7.50%	14,555	14,555	-	-	-	Repayable in 72 bullet payments
Working capital loan*	8.50%	1,532	1,532	-	-	-	Export packing credit is repayable within 1-6 months from the date of drawal, cash credit can be repaid anytime as per the availability of business surplus during the validity of the facility and working capital loan is repayable in one bullet payment.
Project buyers' credit from banks	3.51%	16	16	-	-	-	Repayable in 2 bullet payments
Amounts due on factoring	3.16%	1,077	1,077	-	-	-	Repayable within one month
Deferred sales tax liability	NA	87	17	32	46	12	Repayable in 90 monthly instalments
Redeemable preference shares	7.50%	2	2	-	-	-	The redemption and dividend paid to the preference shares unclaimed if any, is payable on claim
Total		42,204	21,698	13,926	2,317	4,331	

The above maturity is based on the total principal outstanding gross of issue expenses and discounting impact of deferred sales tax liability.

e) Terms of repayment of total borrowings outstanding as at March 31, 2018 are provided below -

(₹ in Crore)

Borrowings	Weighted average interest rate as at March 31, 2018	Total carrying value	<1 year	1-3 years	3-5 years	>5 years	Remarks
Rupee term loan	8.36%	10,692	866	5,388	2,303	2,168	Repayable in 171 quarterly instalments and 6 instalments payable in the gap of 5 months and 7 months
Non convertible debentures	8.89%	8,600	3,700	4,400	500	-	Repayable in 13 bullet payments
Commercial paper	7.35%	14,815	14,815	-	-	-	Repayable in 88 bullet payments
Working capital loan*	7.71%	3,313	3,313	-	-	-	Export packing credit is repayable within 1-6 months from the date of drawal and cash credit can be repaid anytime as per the availability of business surplus during the validity of the facility.
Project buyers' credit from banks	1.77%	127	127	-	-	-	Repayable in 15 bullet payments
Amounts due on factoring	8.50%	65	65	-	-	-	Repayable in 1 bullet payment
Deferred sales tax liability	NA	91	10	37	41	29	Repayable in 103 monthly instalments
Redeemable preference shares	7.50%	3,010	3,010	-	-	-	Repayable in 1 bullet payment upon 18 months from date of issuance
Total		40,713	25,906	9,825	2,844	2,197	

The above maturity is based on the total principal outstanding gross of issue expenses and discounting impact of deferred sales tax liability.

<sup>\*</sup> Includes loans repayable on demand from banks for ₹ 715 Crore and packing credit in foreign currencies from banks.

<sup>\*</sup> Includes loans repayable on demand from banks for ₹ 477 Crore and packing credit in foreign currencies from banks.

as at and for the year ended March 31, 2019

f) Movement in borrowings during the year is provided below-

(₹ in Crore)

	Borrowings due	Borrowings due	
Particulars	within one year	after one year	Total
As at April 1, 2017	20,985	22,248	43,233
Cash flow	3,983	(9,578)	(5,595)
Other non cash changes	935	2,140	3,075
As at April 1, 2018	25,903	14,810	40,713
Cash flow	(1,165)	2,612	1,447
Other non cash changes	(3,055)	3,099	44
As at March 31, 2019	21,683	20,521	42,204

Other non-cash changes comprises of amortisation of borrowing costs, foreign exchange difference on borrowings and reclassification between borrowings due within one year and borrowings due after one year. Additionally non-cash changes for the year ended March 31, 2018 includes preference shares issued on merger of Cairn India Limited with Vedanta Limited.

#### 18. FINANCIAL LIABILITIES - TRADE PAYABLES a

(₹ in Crore)

	As at	March 31, 2019		As at March 31, 2018			
Particulars	Non-current	Current	Total	Non-current	Current	Total	
Total outstanding dues of micro, small and medium enterprises (Refer note 39(b))	-	59	59	-	84	84	
Total outstanding dues of creditors other than micro, small and medium enterprises	-	5,173	5,173	-	5,473	5,473	
Total outstanding dues of related parties <sup>b</sup>	-	13	13	-	57	57	
Operational buyers credit/suppliers credit °	-	6,017	6,017	-	8,452	8,452	
Total	-	11,262	11,262		14,066	14,066	

- (a) Trade payables are non-interest bearing and are normally settled upto 180 days terms.
- (b) For terms and conditions relating to related party payables, see note 36.
- (c) Operational Buyers' Credit and Suppliers' Credit is availed in foreign currency from offshore branches of Indian banks or foreign banks at an interest rate ranging from 2.5% to 4% per annum and in rupee from domestic banks at interest rate ranging from 8%-9%. These trade credits are largely repayable within 180 days from the date of draw down. Operational Buyer's credit availed in foreign currency is backed by Standby Letter of Credit issued under working capital facilities sanctioned by domestic banks. Part of these facilities are secured by first pari passu charge over the present and future current assets of the Company.

# 19. FINANCIAL LIABILITIES - OTHERS

	As at	: March 31, 2019		As at	As at March 31, 2018		
Particulars	Non-current	Current	Total	Non-current	Current	Total	
Liability for capital expenditure	42	3,379	3,421	44	1,633	1,677	
Security deposits from vendors & others	-	14	14	-	17	17	
Interest Accrued but not due	239	710	949	-	738	738	
Current maturities of long term debt <sup>a</sup>	-	4,503	4,503	-	7,583	7,583	
Unpaid/unclaimed dividend <sup>b</sup>	-	75	75	-	87	87	
Unpaid matured deposits and interest accrued thereon $^{\circ}$	-	0	0	-	0	0	
Profit petroleum payable	-	624	624	-	481	481	
Dues to related parties (Refer note 36)	-	84	84	-	25	25	
Other Liabilities <sup>d</sup>	-	2,094	2,094	-	1,680	1,680	
Total	281	11,483	11,764	44	12,244	12,288	

as at and for the year ended March 31, 2019

(a) Current Maturities of long term debt consists of:

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Non-convertible debentures	1,300	3,700
Deferred sales tax liability	17	10
Rupee term loans from banks	3,184	863
Redeemable preference shares	2	3,010
Total	4,503	7,583

- (b) Does not include any amounts, due and outstanding, to be credited to Investor Education and Protection Fund except ₹ 0.11 Crore (March 31, 2018: ₹ 0.07 Crore) which is held in abeyance due to a pending legal case.
- (c) Matured deposits of ₹ 0.01 Crore (March 31,2018: ₹ 0.01 Crore) due for transfer to Investor Education and Protection Fund have not been transferred in view of pending litigation between the beneficiaries.
- (d) Includes revenue received in excess of entitlement interest of ₹ 1,439 Crore (March 31, 2018: ₹ 648 Crore), reimbursement of expenses, provision for expenses, liabilities related to compensation/claim etc.

### **20. FINANCIAL INSTRUMENTS**

#### A. Financial assets and liabilities:

The accounting classification of each category of financial instruments, and their carrying amounts, are set out below:

#### As at March 31, 2019

(₹ in Crore)

Financial Assets	Fair value through profit or loss	Fair value through other comprehensive income	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Investments*	4,378	115	-	-	4,493	4,493
Trade receivables	170	-	-	3,044	3,214	3,214
Cash and cash equivalents	-	-	-	3,209	3,209	3,209
Other bank balances	-	-	-	682	682	682
Loans	-	-	-	315	315	315
Derivatives	6	-	40	-	46	46
Other financial assets	-	-	-	3,249	3,249	3,249
Total	4,554	115	40	10,499	15,208	15,208

Financial Liabilities	Fair value hrough profit or loss	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Borrowings	-	-	42,204	42,204	42,169
Trade payables	909	-	10,353	11,262	11,262
Derivatives	342	1	-	343	343
Other financial liabilities	-	-	7,261	7,261	7,261
Total	1,251	1	59,818	61,070	61,035

as at and for the year ended March 31, 2019

#### As at March 31, 2018

(₹ in Crore)

Other bank balances Loans Derivatives Other financial assets	20	-	82	3,446	102 3,446	102 3,446
Loans	20	-	82			
				17	1 -	1 -
Other bank balances	-	-	-	14	14	14
	-	-	-	450	450	450
Cash and cash equivalents	-	-	-	1,144	1,144	1,144
Trade receivables	477	-	-	1,962	2,439	2,439
Investments* 5	,537	160	-	-	5,697	5,697
through	profit throug	h other de nensive as	erivatives signated A hedging truments	mortised 1 cost	Total carrying value	Total fair value

(₹ in Crore)

Total	3,499	0	56,011	59,510	59,559
Other financial liabilities	-	-	4,705	4,705	4,705
Derivatives	26	0	-	26	26
Trade payables	3,473	-	10,593	14,066	14,066
Borrowings	-	-	40,713	40,713	40,762
Financial Liabilities	Fair value hrough profit or loss	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value

<sup>\*</sup> Investment in note 6 also includes investments (in equity and preference shares) in subsidiaries, associates and joint ventures which are carried at cost and hence are not required to be disclosed as per Ind AS 107 "Financial Instruments Disclosures". Hence, the same have been excluded from the above table.

### B. Fair value hierarchy

The Company uses the following hierarchy for determining and/or disclosing the fair value of financial instruments by valuation techniques:

(i) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

(ii) Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e. derived from prices).

(iii) Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

The below table summarises the categories of financial assets and liabilities as at March 31, 2019 and March 31, 2018 measured at fair value:

#### As at March 31, 2019

Financial Assets	Level 1	Level 2	Level 3
At fair value through profit or loss			
- Investments	1,416	2,881	81
- Derivative financial assets*	-	6	-
- Trade receivables	-	170	-
At fair value through other comprehensive income			
- Investments	104	-	11
Derivative designated as hedging instruments			
- Derivative financial assets*		40	
Total	1,520	3,097	92

as at and for the year ended March 31, 2019

/ <b>=</b>	:	Crore

Financial Liabilities	Level 1	Level 2	Level 3
At fair value through profit or loss			
- Derivative financial liabilities*	-	342	-
- Trade payables	-	909	-
Derivative designated as hedging instruments			
- Derivative financial liabilities*	-	1	-
Total	-	1,252	-

#### As at March 31, 2018

(₹ in Crore)

- Derivative financial assets*  Total	2,106	82 <b>4.159</b>	11
Derivative designated as hedging instruments			
- Investments	149	-	11
At fair value through other comprehensive income			
- Derivative financial assets*	-	20	-
- Trade receivables	-	477	-
- Investments	1,957	3,580	-
At fair value through profit or loss			
Financial Assets	Level 1	Level 2	Level 3

			(₹ in Crore)
Financial Liabilities	Level 1	Level 2	Level 3
At fair value through profit or loss			
- Derivative financial liabilities*	-	26	-
- Trade payables	-	3,473	-
Derivative designated as hedging instruments			
- Derivative financial liabilities*	-	0	-
Total	-	3,499	-

<sup>\*</sup> Refer "D" below.

The below table summarises the fair value of borrowings which are carried at amortised cost as at March 31, 2019 and March 31, 2018:

# As at March 31, 2019

(₹ in Crore)

Total	-	42,169	-
Borrowings	-	42,169	-
Financial Liabilities	Level 1	Level 2	Level 3
			(( 111 01010)

#### As at March 31, 2018

(₹ in Crore

Financial Liabilities	Level 1	Level 2	Level 3
Borrowings	-	40,762	-
Total	-	40,762	-

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate the fair values:

Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments are valued on the basis of market trades, poll and

primary issuances for securities issued by the same or similar issuer and for similar maturities or based on the applicable spread movement for the security derived based on the aforementioned factor(s).

Trade receivables, cash and cash equivalents, other bank balances, loans, other financial assets, current borrowings, trade payables and other current financial liabilities: fair values approximate their carrying amounts largely due to the short-term maturities of these instruments.

Other non-current financial assets and liabilities: Fair value is calculated using a discounted cash flow model with market

as at and for the year ended March 31, 2019

assumptions, unless the carrying value is considered to approximate to fair value.

Non-current fixed-rate and variable-rate borrowings: Fair value has been determined by the Company based on parameters such as interest rates, specific country risk factors, and the risk characteristics of the financed project.

Derivative financial assets/liabilities: The Company enters into derivative financial instruments with various counterparties. Interest rate swaps, foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques include the forward pricing and swap models, using present value calculations. The models incorporate various inputs including foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom (U.K.).

For all other financial instruments, the carrying amount is either the fair value, or approximates the fair value.

The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationship and the value of other financial instruments recognised at fair value.

The estimated fair value amounts as at March 31, 2019 have been measured as at that date. As such, the fair values of these financial instruments subsequent to reporting date may be different than the amounts reported at each year-end.

There were no significant transfers between Level 1, Level 2 and Level 3 during the year.

### C. Risk management framework

The Company's businesses are subject to several risks and uncertainties including financial risks.

The Company's documented risk management policies act as an effective tool in mitigating the various financial risks to which the businesses are exposed in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty credit risk and capital management. Risks are identified at both the corporate and individual subsidiary level with active involvement of senior management. Each operating subsidiary in the Company has in place risk management processes which are in line with the Company's policy. Each significant risk has a designated 'owner' within the Company at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Company's Audit Committee. The Audit Committee is aided by the other Committees of the Board including the Risk Management Committee, which meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- · identify, control and monitor key risks
- · identify risk accumulations
- provide management with reliable information on the Company's risk situation
- · improve financial returns

#### Treasury management

Treasury management focuses on liability management, capital protection, liquidity maintenance and yield maximisation. The treasury policies are approved by the Committee of the Board. Daily treasury operations of the business units are managed by their respective finance teams within the framework of the overall Group treasury policies. Long-term fund raising including strategic treasury initiatives are managed jointly by the business treasury team and the central team at corporate treasury while short-term funding for routine working capital requirements is delegated to business units. A monthly reporting system exists to inform senior management of the Company's investments and debt position, exposure to currency, commodity and interest rate risk and their mitigants including the derivative position. The Company has a strong system of internal control which enables effective monitoring of adherence to Company's policies. The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Company is independently reviewed by CRISIL Limited and Company portfolio has been rated as Tier I or "Very Good" meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximization.

The Company uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. The Company does not acquire or issue derivative financial instruments for trading or speculative purposes. The Company does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts, interest rate and currency swaps and these are in line with the Company's policies.

### Commodity price risk

The Company is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Company produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Company aims to sell the products at prevailing market prices. The commodity price risk in import input commodity such as of Copper Concentrate & Alumina, for our copper and aluminium business respectively, is hedged on back-to back basis ensuring no price risk for the business. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging

as at and for the year ended March 31, 2019

activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level, basis clearly laid down guidelines.

Whilst the Company aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

The Company is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to following activities:

- · economic hedging of prices realised on commodity contracts
- · cash flow hedging of revenues, forecasted highly probable transactions

#### Aluminium

The requirement of the primary raw material, alumina, is partly met from own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present the Company on selective basis hedges the aluminium content in outsourced alumina to protect its margins. The Company also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

#### Copper

The Company's custom smelting copper operations at Tuticorin is benefited by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. The Company's policy on custom smelting is to generate margins from Treatment charges /Refining charges (TC/RC), improving operational efficiencies, minimising conversion cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales. Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. The Company hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of copper concentrate

and sales of finished products, both of which are linked to the LME price.

TC/RCs are a major source of income for the Indian copper smelting operations. Fluctuations in TC/RCs are influenced by factors including demand and supply conditions prevailing in the market for mine output. The Company's copper business has a strategy of securing a majority of its concentrate feed requirement under long-term contracts with mines.

#### Iron ore

The Company sells its Iron Ore production from Goa on the prevailing market prices and from Karnataka through e-auction route as mandated by State Government of Karnataka in India.

#### Oil and Gas

The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors like supply and demand. The regional producers price their crude basis these benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, which are USA (Henry Hub Prices), UK (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

#### Provisionally priced financial instruments

On March 31, 2019, the value of net financial assets linked to commodities (excluding derivatives) accounted for on provisional prices was ₹ 15 Crore (March 31, 2018: liability of ₹ 3,335 Crore). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning April 01, 2019.

Set out below is the impact of 10% increase in LME prices on pre-tax profit/ (loss) for the year and pre-tax total equity as a result of changes in value of the Company's commodity financial instruments:

### For the year ended March 31, 2019

(₹ in Crore)

Effect on total equity of a 10% increase in the LME	Effect on profit/(loss) of a 10% increase in the LME	Total Exposure
-	(5)	per (53)

### For the year ended March 31, 2018

	Total Exposure	Effect on profit/(loss) of a 10% increase in the LME	Effect on total equity of a 10% increase in the LME
Copper	(3,416)	(342)	-

as at and for the year ended March 31, 2019

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on the Company's financial statements.

The impact on pre-tax profit/(loss) mentioned above includes the impact of a 10% increase in closing copper LME for provisionally priced copper concentrate purchased at Copper division custom smelting operations in India of ₹ 74 Crore (March 31, 2018: ₹ 368 Crore), which is pass through in nature and as such will not have any impact on the profitability.

#### Financial risk

The Company's Board approved financial risk policies include monitoring, measuring and mitigating the liquidity, currency, interest rate and counterparty risk. The Company does not engage in speculative treasury activity but seeks to manage risk and optimize interest and commodity pricing through proven financial instruments.

#### (a) Liquidity

The Company requires funds both for short-term operational needs as well as for long-term investment programmes mainly in growth projects. The Company generates sufficient cash flows from the current operations which together with the available cash and cash equivalents and short-term investments provide liquidity both in the short-term as well as in the long-term. The Company has been rated by CRISIL

Limited (CRISIL) and India Ratings and Research Private Limited (India Rating) for its capital market issuance in the form of CPs and NCDs and for its banking facilities in line with Basel II norms

CRISIL changed the outlook for the Company's long-term bank facilities and its Non-Convertible Debentures (NCD) programme to CRISIL AA / Stable from CRISIL AA / Positive during the year on account of delay in deleveraging amid weaker commodity prices. India Ratings has revised the outlook on Vedanta Limited's ratings to IND AA / Stable from IND AA/ Positive on account of weaker profitability resulting in delay in deleveraging. Vedanta Limited has the highest short term rating on its working capital and Commercial Paper Programme at A1+ from CRISIL and India Ratings.

Anticipated future cash flows, together with undrawn fund based committed facilities of ₹ 3,205 Crore, and cash, bank and current investments of ₹8,269 Crore as at March 31, 2019, are expected to be sufficient to meet the liquidity requirement of the Company in the near future.

The Company remains committed to maintaining a healthy liquidity, a low gearing ratio, deleveraging and strengthening our balance sheet. The maturity profile of the Company's financial liabilities based on the remaining period from the date of balance sheet to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Company.

#### As at March 31, 2019

					(₹ in Crore)
Payments due by year	<1 year	1-3 years	3-5 years	>5 years	Total
Borrowings *	24,348	16,599	3,281	5,334	49,562
Derivative financial liabilities	343	-	-	-	343
Trade Payables and other financial liabilities **	17,612	42	-	-	17,654
Total	42,303	16,641	3,281	5,334	67,559

### As at March 31, 2018

Total	46,410	11,600	3,373	2,810	64,193
Trade Payables and other financial liabilities **	18,048	44	-	-	18,092
Derivative financial liabilities	26	-	-	-	26
Borrowings *	28,336	11,556	3,373	2,810	46,075
Payments due by year	<1 year	1-3 years	3-5 years	>5 years	Total
					(₹ in Crore)

<sup>\*</sup>Includes Non-current borrowings, current borrowings, current maturities of non-current borrowings and committed interest payments on borrowings and interest accrued on borrowings.

### The Company had access to following funding facilities:

#### As at March 31, 2019

|--|

(₹ in Crore)

Funding facilities	Total Facility	Drawn	Undrawn
Fund/non-fund based	42,378	31,582	10,796

#### As at March 31, 2018

			(₹ in Crore)
Funding facilities	Total Facility	Drawn	Undrawn
Fund/non-fund based	39,551	32,111	7,440

<sup>\*\*</sup>Includes both Non-current and current financial liabilities and committed interest payment, as applicable. Excludes current maturities of non-current borrowings and interest accrued on borrowings.

as at and for the year ended March 31, 2019

#### Collateral

The Company has pledged financial instruments with carrying amount of ₹ 13,030 Crore and inventories with carrying amount of ₹7,657 Crore as per the requirements specified in various financial facilities in place. The counterparties have an obligation to release the securities to the Company when financial facilities are surrendered.

#### (b) Foreign exchange risk

Fluctuations in foreign currency exchange rates may have an impact on the statement of profit and loss, the statement of changes in equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the Company.

Exposures on foreign currency loans are managed through the Company wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange rates are appropriately managed. The Company strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged.

The Company's presentation currency is the Indian Rupee (INR). The assets are located in India and the Indian Rupee is the functional currency except for Oil and Gas business operations which have a dual functional currency. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

The following analysis is based on the gross exposure as at the reporting date which could affect the statement of profit and loss. The exposure is mitigated by some of the derivative contracts entered into by the Company as disclosed under the section on "Derivative financial instruments".

The carrying amount of the Company's financial assets and liabilities in different currencies are as follows:

(₹ in Crore)

	As at Marc	As at March 31, 2019		As at March 31, 2018	
Currency	Financial Assets	Financial liabilities	Financial Assets	Financial liabilities	
INR	8,355	46,288	11,201	44,508	
USD	6,850	14,502	1,966	14,709	
Others	3	280	125	293	
Total	15,208	61,070	13,292	59,510	

The Company's exposure to foreign currency arises where an entity holds monetary assets and liabilities denominated in a currency different to the functional currency of the respective business, with US dollar being the major non-functional currency.

The foreign exchange rate sensitivity is calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rates shift in the foreign currencies by 10% against the functional currency of the respective businesses.

Set out below is the impact of a 10% strengthening in the functional currencies of the respective businesses on pre-tax profit/(loss) and pre-tax equity arising as a result of the revaluation of the Company's foreign currency monetary financial assets/liabilities:

### For the year ended March 31, 2019

(₹ in Crore)

		(
	Effect of	Effect of
	10% strengthening	10% strengthening
	of functional currency on	of foreign currency on
As at March 31, 2019	pre-tax profit/ (loss)	equity
USD	481	0
INR	46	-

### For the year ended March 31, 2018

(₹ in Crore)

		(CIII OIOIC)
	Effect of 10% strengthening of functional currency on	Effect of 10% strengthening of foreign currency on
As at March 31, 2018	pre-tax profit/ (loss)	equity
USD	1,129	0
INR	10	-

A 10% weakening of functional currencies of the respective businesses would have an equal and opposite effect on the Company's financial statements.

as at and for the year ended March 31, 2019

#### (c) Interest rate risk

At March 31, 2019, the Company's net debt of ₹33,935 Crore (March 31, 2018: ₹ 33,582 Crore) comprises cash, bank and investments of ₹8,269 Crore (March 31, 2018: ₹7,131 Crore) offset by debt of ₹ 42,204 Crore (March 31, 2018: ₹ 40,713 Crore).

The Company is exposed to interest rate risk on short-term and long-term floating rate instruments and on the refinancing of fixed rate debt. The Company's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates. The borrowings of the Company are principally denominated in Indian Rupees and US dollars with mix of fixed and floating rates of interest. The USD floating rate debt is linked to US dollar LIBOR and INR Floating rate debt to Bank's base rate. The Company

has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements. These exposures are reviewed by appropriate levels of management on a monthly basis. The Company invests cash and liquid investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve the Company's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk.

The exposure of the Company's financial assets as at March 31, 2019 to interest rate risk is as follows:

(₹ in Crore)

		Floating rate	Fixed rate	Non-interest bearing financial
As at March 31, 2019	Total	Financial assets	financial assets	assets
Financial Assets	15,208	2,937	2,941	9,330

The exposure of the Company's financial liabilities as at March 31, 2019 to interest rate risk is as follows:

(₹ in Crore)

		Floating rate	Fixed rate	Non-interest bearing financial
As at March 31, 2019	Total	financial liabilities	financial liabilities	liabilities
Financial Liabilities	61,070	15,589	32,544	12,937

The exposure of the Company's financial assets as at March 31, 2018 to interest rate risk is as follows:

(₹ in Crore)

As at March 31, 2018	Total	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets
Financial Assets	13,292	3,978	3,043	6,271

The exposure of the Company's financial liabilities as at March 31, 2018 to interest rate risk is as follows:

(₹ in Crore)

				Non-interest
		Floating rate	Fixed rate	bearing financial
As at March 31, 2018	Total	financial liabilities	financial liabilities	liabilities
Financial Liabilities	59.510	11.840	37.234	10.436

Considering the net debt position as at March 31, 2019 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

The table below illustrates the impact of a 0.5% to 2.0% movement in interest rates on floating rate financial assets/ liabilities (net) on profit/(loss) and equity assuming that the changes occur at the reporting date and has been calculated based on risk exposure outstanding as of date. The year end balances are not necessarily representative of the average debt outstanding during the year. This analysis also assumes that all other variables, in particular foreign currency rates, remain constant.

Increase in interest rates	Effect on pre-tax profit/(loss) during the year ended March 31, 2019	Effect on pre-tax profit/(loss) during the year ended March 31, 2018
0.50%	(63)	(39)
1.00%	(127)	(79)
2.00%	(253)	(157)

as at and for the year ended March 31, 2019

An equivalent reduction in interest rates would have an equal and opposite effect on the Company's financial statements.

#### d) Counterparty and concentration of credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults.

The Company is exposed to credit risk for trade receivables, contract assets, investments, loans, other financial assets, and derivative financial instruments.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standina.

Moreover, given the diverse nature of the Company's businesses trade receivables are spread over a number of customers with no significant concentration of credit risk. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Company does not expect any material risk on account of non-performance by any of the Company's counterparties.

The Company has clearly defined policies to mitigate counterparty risks. For current investments, counterparty limits are in place to limit the amount of credit exposure to any one

counterparty. This, therefore, results in diversification of credit risk for our mutual fund and bond investments. For derivative and financial instruments, the Company attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

The carrying value of the financial assets represents the maximum credit exposure. The Company's maximum exposure to credit risk is ₹ 15,208 Crore and ₹ 13,292 Crore as at March 31, 2019 and March 31, 2018 respectively.

The maximum credit exposure on financial guarantees given by the Company for various financial facilities is described in Note 35 on "Commitments, contingencies, and guarantees".

None of the Company's cash equivalents, including time deposits with banks, are past due or impaired. Regarding trade receivables, loans and other financial assets (both current and non-current), there were no indications as at March 31, 2019, that defaults in payment obligations will occur except as described in Note 7 and 9 on allowance for impairment of trade receivables and other financial assets.

Of the year end trade receivables, loans and other financial assets (excluding bank deposits, site restoration fund and derivatives) balance the following, though overdue, are expected to be realised in the normal course of business and hence, are not considered impaired as at March 31, 2019 and March 31, 2018:

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Neither impaired nor past due	4,514	4,437
Past due but not impaired		
- Less than 1 month	292	295
- Between 1–3 months	140	60
- Between 3-12 months	728	144
- Greater than 12 months	739	645
Total	6,413	5,581

Receivables are deemed to be past due or impaired with reference to the Company's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above tables are those that have not been settled within the terms and conditions that have been agreed with that customer. The Company based on past experiences does not expect any material loss on its receivables.

The credit quality of the Company's customers is monitored on an ongoing basis and assessed for impairment where indicators of such impairment exist. The Company uses simplified approach for impairment of financial assets. If credit risk has not increased significantly, 12-month expected credit loss is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime expected credit loss is used. The solvency of the debtor and their ability to repay the receivable is considered in assessing receivables for impairment. Where receivables have been impaired, the Company actively seeks to recover the amounts in question and enforce compliance with credit terms.

as at and for the year ended March 31, 2019

#### Movement in allowances for Financial Assets (Trade receivables and financial assets - others)

(₹ in Crore)

Particulars	Trade receivables	Financial assets - others
As at April 01, 2017	540	198
Allowance made during the year	196	-
Reversals/ write - offs during the year	(215)	-
Exchange differences	0	-
As at March 31, 2018	521	198
Allowance made during the year	4	48
Reversals/ write - offs during the year	0	(5)
Exchange differences	0	7
As at March 31, 2019	525	248

#### D. Derivative financial instruments

The Company uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices. The Company does not acquire or issue derivative financial instruments for trading or speculative purposes. The Company does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Company guidelines and policies.

The fair values of all derivatives are separately recorded in the balance sheet within current and non-current assets and liabilities. Derivatives that are designated as hedges are classified as current or non-current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Company tries to control credit risk as far as possible by only entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

#### (i) Cash flow hedges

The Company enters into forward exchange and commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognized in equity though OCI until the hedged transaction occurs, at which time, the respective gain or losses are reclassified to profit or loss. These hedges have been effective for the year ended March 31, 2019.

The Company uses foreign exchange contracts from time to time to optimize currency risk exposure on its foreign currency transactions. The Company hedged part of its foreign currency exposure on capital commitments during the year ended 2019. Fair value changes on such forward contracts are recognized in comprehensive income.

The majority of cash flow hedges taken out by the Company during the year comprise non-derivative hedging instruments for hedging the foreign exchange rate of highly probable forecast transactions and commodity price contracts for hedging the commodity price risk of highly probable forecast transactions.

The cash flows related to above are expected to occur during the year ended March 31, 2020 and consequently may impact profit or loss for that year depending upon the change in the commodity prices and foreign exchange rates movements. For cash flow hedges regarded as basis adjustments to initial carrying value of the property, plant and equipment, the depreciation on the basis adjustments made is expected to affect profit or loss over the expected useful life of the property, plant and equipment.

#### (ii) Fair value hedge

The fair value hedges relate to forward covers taken to hedge currency exposure and commodity price risks.

The Company's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Company enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. Net gains and losses are recognized in the statement of profit and loss.

The Company uses foreign exchange contracts from time to time to optimize currency risk exposure on its foreign currency transactions. Fair value changes on such forward contracts are recognized in the statement of profit and loss.

# (iii) Non-designated economic hedge

The Company enters into derivative contracts which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Hedging instruments include copper, aluminium future contracts on the LME and certain other derivative instruments. Fair value changes on such derivative instruments are recognized in the statement of profit and loss.

as at and for the year ended March 31, 2019

The fair value of the Company's derivative positions recorded under derivative financial assets and derivative financial liabilities are as follows:

	As at March 3	1, 2019	As at March 31	, 2018
Derivative Financial Instruments	Assets	Liabilities	Assets	Liabilities
Current				
Cash flow hedge*				
- Commodity contracts	3	-	81	-
- Forward foreign currency contracts	37	1	1	0
Non - qualifying hedges/economic hedge				
- Commodity contracts	1	71	-	15
- Forward foreign currency contracts	5	265	20	10
- Cross currency swap	0	6	0	1_
Total	46	343	102	26

<sup>\*</sup> Refer statement of profit and loss and statement of changes in equity for the changes in the fair value of cash flow hedges.

#### E. Derivative contracts entered into by the Company and outstanding as at Balance Sheet date:

(i) To hedge currency risks and interest related risks, the Company has entered into various derivatives contracts. The category wise break up of amount outstanding as at Balance Sheet date is given below:

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Forex forward cover (buy)	8,893	9,983
Forex forward cover (sell)	1,401	223

(ii) For hedging commodity related risks: Category wise break up is given below.

	As at March	31, 2019	As at March	31, 2018
Particulars	Purchases	Sales	Purchases	Sales
Forwards / Futures				
Copper (MT)	8,675	63,275	61,850	53,825
Gold (Oz)	-	49,993	8,070	1,05,594
Silver (Oz)	18,682	5,93,577	30,219	5,65,393
Aluminium (MT)	950	63,250	-	73,675

### 21. OTHER LIABILITIES

						(CITOTOIC)
	As at	As at March 31, 2019		As at	March 31, 2018	
Particulars	Non-current	Current	Total	Non-current	Current	Total
Amount payable to owned post - employment benefit trust (Refer note 36)	-	7	7	-	6	6
Other statutory Liabilities <sup>a</sup>	-	1,284	1,284	-	1,001	1,001
Deferred government grant <sup>b</sup>	2,468	72	2,540	2,479	71	2,550
Advance from customers °	-	6,787	6,787	-	3,614	3,614
Advance from related party (Refer note 36) $^{\circ}$	-	2	2	-	-	-
Other liabilities	-	123	123	-	123	123
Total	2,468	8,275	10,743	2,479	4,815	7,294

<sup>(</sup>a) Other statutory liabilities mainly includes contribution to PF, ESIC, withholding taxes, goods & service tax, VAT etc.

<sup>(</sup>b) Represents government assistance in the form of the duty benefit availed under Export Promotion Capital Goods (EPCG) Scheme and Special Economic Zone (SEZ) scheme on purchase of property, plant and equipments accounted for as government grant and being amortised over the useful life of such assets.

<sup>(</sup>c) Advance from customers are contract liabilities and include amounts received under long term supply agreements. The advance payment plus a fixed rate of return/ discount will be settled by supplying respective commodity over a period up to twenty four months under an agreed delivery schedule as per the terms of the respective agreements. As these are contracts that the Company expects, and has the ability, to fulfil through delivery of a non-financial item, these are recognised as advance from customers and will be recognised as revenue as and when control of respective commodities is transferred to customer under the agreements. The portion of the advance that is expected to be settled within the next 12 months has been classified as a current liability.

as at and for the year ended March 31, 2019

#### 22. PROVISIONS

(₹ in Crore)

	As at March 31, 2019			As at March 31, 2018		
Particulars	Non-current	Current	Total	Non-current	Current	Total
Provision for employee benefits (Refer note 23) <sup>a</sup>						
- Retirement Benefit	2	45	47	2	36	38
- Others	-	95	95	30	93	123
Provision for restoration, rehabilitation and environmental costs <sup>b,c</sup>	986	-	986	820	-	820
Total	988	140	1,128	852	129	981

a) Includes gratuity, compensated absences, deferred cash bonus etc.

b) The movement in provisions for restoration, rehabilitation and environmental costs is as follows [Refer note 3(a)(P)]:

(₹ in Crore)

	(**************************************
	Restoration,
	rehabilitation and environmental
Particulars	costs (refer c)
At April 01, 2017	759
Additions	8
Utilised	(1)
Unused amounts reversed	(17)
Unwinding of discount (Refer note 29)	27
Revision in estimates	41
Exchange differences	3
At March 31, 2018	820
Unwinding of discount (Refer note 29)	30
Revision in estimates	85
Exchange differences	51
At March 31, 2019	986

#### c) Restoration, rehabilitation and environmental costs

The provisions for restoration, rehabilitation and environmental liabilities represent the management's best estimate of the costs which will be incurred in the future to meet the Company's obligations under existing Indian law and the terms of the Company's exploration and other licences and contractual arrangements.

The principal restoration and rehabilitation provisions are recorded within oil & gas division where a legal obligation exists relating to the oil and gas fields, where costs are expected to be incurred in restoring the site of production facilities at the end of the producing life of an oil field. The Company recognises the full cost of site restoration as a liability when the obligation to rectify environmental damage arises.

These amounts are calculated by considering discount rates within the range of 2% to 3%, and become payable at the end of the producing life of an oil field and are expected to be incurred over a period of twenty two years.

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production from a producing field.

### 23. EMPLOYEE BENEFIT PLANS

The Company participates in defined contribution and benefit plans, the assets of which are held (where funded) in separately administered funds.

For defined contribution plans the amount charged to the statement of profit and loss is the total amount of contributions payable in the year.

For defined benefit plans, the cost of providing benefits under the plans is determined by actuarial valuation separately each year for each plan using the projected unit credit method by independent qualified actuaries as at the year end. Remeasurement gains and losses arising in the year are recognised in full in other comprehensive income for the year.

as at and for the year ended March 31, 2019

#### i) Defined contribution plans

The Company contributed a total of ₹ 63 Crore for the year ended March 31, 2019 and ₹ 59 Crore for the year ended March 31, 2018 to the following defined contribution plans.

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Employer's contribution to recognised provident fund and family pension fund	46	45
Employer's contribution to superannuation	17	14
Total	63	59

#### Central recognised provident fund

In accordance with the 'The Employees Provident and Miscellaneous Provisions Act ,1952', employees are entitled to receive benefits under the Provident Fund. Both the employee and the employer make monthly contributions to the plan at a predetermined rate (12% for the year ended March 31, 2019 and March 31, 2018) of an employee's basic salary. All employees have an option to make additional voluntary contributions. These contributions are made to the fund administered and managed by the Government of India (GOI) or to independently managed and approved funds. The Company has no further obligations under the fund managed by the GOI beyond its monthly contributions which are charged to the statement of profit and loss in the period they are incurred.

#### Family pension fund

The Pension Fund was established in 1995 and is managed by the Government of India. The employee makes no contribution to this fund but the employer makes a contribution of 8.33% of salary each month subject to a specified ceiling per employee. This is provided for every permanent employee on the payroll.

At the age of superannuation, contributions ceases and the individual receives a monthly payment based on the level of contributions through the years, and on their salary scale at the time they retire, subject to a maximum ceiling of salary level. The Government funds these payments, thus the Company has no additional liability beyond the contributions that it makes, regardless of whether the central fund is in surplus or deficit.

#### Superannuation

Superannuation, another pension scheme applicable in India, is applicable only to senior executives. The Company holds a policy with Life Insurance Corporation of India ("LIC"), to which it contributes a fixed amount relating to superannuation and the pension annuity is met by LIC as required, taking into consideration the contributions made. The Company has no further obligations under the scheme beyond its monthly contributions which are charged to the statement of profit and loss in the year they are incurred.

#### ii) Defined benefit plans

#### (a) Contribution to provident fund trust (the "trust")

The provident fund of the Iron Ore division is exempted under section 17 of The Employees Provident Fund and Miscellaneous Provisions Act, 1952. Conditions for grant of exemption stipulates that the employer shall make good deficiency, if any, between the return guaranteed by the statute and actual earning of the Fund. Based on actuarial valuation in accordance with Ind AS 19 and Guidance note issued by Institute of Actuaries of India for interest rate guarantee of exempted provident fund liability of employees, there is no interest shortfall in the funds managed by the trust and hence there is no further liability as on March 31, 2019 and March 31, 2018. Having regard to the assets of the Fund and the return on the investments, the Company does not expect any deficiency in the foreseeable future.

The Company contributed a total of ₹ 9 Crore for the year ended March 31,2019 and ₹ 10 Crore for the year ended March 31, 2018. The present value of obligation and the fair value of plan assets of the trust are summarized below.

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Fair value of plan assets	193	181
Present value of defined benefit obligations	(187)	(174)
Net liability arising from defined benefit obligation of trust	Nil	Nil

### Percentage allocation of plan assets of trust

Assets by category	As at March 31, 2019	As at March 31, 2018
Government Securities	59.00%	53.00%
Debentures / bonds	37.00%	42.00%
Equity	4.00%	3.00%
Fixed deposits	0.00%	2.00%

### (b) Gratuity plan

In accordance with the Payment of Gratuity Act, 1972, the Company contributes to a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. The Gratuity Plan provides a lump sum payment to vested employees at retirement, disability or termination of employment being an amount based on the respective employee's last drawn salary and the number of years of employment with the Company. The Gratuity plan is a funded plan and the Company makes contribution to recognised funds in India.

as at and for the year ended March 31, 2019

Based on actuarial valuations conducted as at year end using the projected unit credit method, a provision is recognised in full for the benefit obligation over and above the funds held in the Gratuity Plan.

The iron ore and oil & gas division of the Company have constituted a trust recognised by Indian Income Tax Authorities for gratuity to employees, contributions to the trust are funded with Life Insurance Corporation of India (LIC) and ICICI Prudential Life Insurance Company Limited.

#### Principal actuarial assumptions

Principal actuarial assumptions used to determine the present value of the Gratuity plan obligation are as follows:

	As at	As at
Particulars	March 31, 2019	March 31, 2018
Discount rate	7.80%	7.70%
Expected rate of increase in compensation level of covered employees	2%-10%	2%-10%
In service mortality	IALM (2006-08)	IALM (2006-08)
Post retirement mortality	LIC(1996-98)	LIC(1996-98)
	Ultimate	Ultimate

Amount recognised in the balance sheet consists of:

(₹ in Crore)

	As at	As at
Particulars	March 31, 2019	March 31, 2018
Fair value of plan assets	131	123
Present value of defined benefit obligations	(178)	(161)
Net liability arising from defined benefit obligation	(47)	(38)

Amount recognised in the statement of profit and loss in respect of the Gratuity plan are as follows:

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Current service cost	17	16
Net Interest cost	3	2
Components of defined benefit costs recognised in profit or loss	20	18

Amount recognised in other comprehensive income in respect of the Gratuity plan are as follows:

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Re-measurement of the net defined benefit obligation:-		
Actuarial losses / (gains) arising from experience adjustments	3	-
Actuarial losses / (gains) arising from changes in financial assumptions	0	(2)
Losses / (gains) on plan assets	1	1
Components of defined benefit costs recognised in other comprehensive income	4	(1)

Movement in present value of the Gratuity plan:

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Opening balance	161	148
Current service cost	17	16
Benefits paid	(15)	(12)
Interest cost	12	11
Actuarial losses / (gains) arising from changes in assumptions	3	(2)
Closing balance	178	161

Movement in the fair value of Gratuity plan assets is as follows:

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Opening balance	123	113
Contributions received	16	15
Benefits paid	(16)	(13)
Re-measurement loss arising from return on plan assets	(1)	(1)
Interest income	9	9
Closing balance	131	123

as at and for the year ended March 31, 2019

The above plan assets have been invested in the qualified insurance policies.

The actual return on plan assets was ₹ 8 Crore for the year ended March 31, 2019 and ₹ 8 Crore for the year ended March 31, 2018.

The weighted average duration of the defined benefit obligation is 16.98 years and 16.75 years as at March 31, 2019 and March 31, 2018 respectively.

The Company expects to contribute ₹ 23 Crore to the funded defined benefit plans during the year ending March 31,2020.

### Sensitivity analysis

Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligations and based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period while holding all other assumptions constant.

		(₹ in Crore)
Increase / (Decrease) in defined benefit obligation	As at March 31, 2019	As at March 31, 2018
Discount rate	March 31, 2013	Walcito 1, 2010
Increase by 0.50%	(7)	(6)
Decrease by 0.50%	8	6
Expected rate of increase in compensation level of covered employees		
Increase by 0.50%	8	7
Decrease by 0.50%	(7)	(6)

The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined benefit obligation liability recognized in the balance sheet.

#### Risk analysis

Company is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefit plans and management's estimation of the impact of these risks are as follows:

#### Investment risk

The Gratuity plan is funded with Life Insurance Corporation of India (LIC) and ICICI Prudential Life (ICICI). Company does not have any liberty to manage the fund provided to LIC and ICICI. The present value of the defined benefit plan obligation is calculated using a discount rate determined by reference to Government of India bonds. If the return on plan asset is below this rate, it will create a plan deficit.

#### Interest risk

A decrease in the interest rate on plan assets will increase the net plan obligation.

### Longevity risk / Life expectancy

The present value of the defined benefit plan obligation is calculated by reference to the best estimate of the mortality of plan participants both during and at the end of the employment. An increase in the life expectancy of the plan participants will increase the plan obligation.

### Salary growth risk

The present value of the defined benefit plan obligation is calculated by reference to the future salaries of plan participants. An increase in the salary of the plan participants will increase the plan obligation.

#### 24. EMPLOYEE BENEFITS EXPENSE <sup>a</sup>

(₹ in Crore)

		( ,
Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Salaries and Wages	1,257	1,165
Share based payments (Refer note 25)	62	56
Contributions to provident and other funds (Refer Note 23)	89	85
Staff welfare expenses	95	84
Less: Cost allocated/directly booked in Joint ventures	(641)	(588)
Total	862	802

a. Net of recoveries of ₹83 Crore (March 31, 2018: ₹56 Crore) from subsidiaries.

as at and for the year ended March 31, 2019

#### **25. SHARE BASED PAYMENTS**

The Company offers equity based and cash based option plans to its employees, officers and directors through the Company's stock option plan introduced in 2016, Cairn India's stock option plan now administered by the Company pursuant to merger with the Company and Vedanta Resources Limited (earlier known as Vedanta Resources Plc) plans [Vedanta Resources Long-Term Incentive Plan ("LTIP"), Employee Share Ownership Plan ("ESOP"), Performance Share Plan ("PSP") and Deferred Share Bonus Plan ("DSBP")] collectively referred as 'VRL ESOP' scheme.

#### The Vedanta Limited Employee Stock Option Scheme (ESOS) 2016

The Company introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders to provide equity settled incentive to all employees of the Company including subsidiary companies. The ESOS scheme includes tenure based, business performance (EBIDTA) based and market performance based stock options. The maximum value of options that can be awarded to members of the wider management group is calculated by reference to the grade average cost-tocompany ("CTC") and individual grade of the employee. The performance conditions attached to the option is measured by comparing Company's performance in terms of Total Shareholder Return ("TSR") over the performance period with the performance of two group of comparator companies (i.e. Indian and global comparator companies) defined in the scheme. The extent to which an option vests will depend on the Company's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. Dependent on the level of employee, part of these options will be subject to a continued service condition only with the remainder measured in terms of TSR.

The exercise price of the options is ₹ 1 per share and the performance period is three years, with no re-testing being allowed.

The details of share options for the year ended March 31, 2019 is presented below:

Year of Grant	Exercise Period	Options outstanding April 1, 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding March 31, 2019
2017	December 15, 2019 - June 14, 2020	70,98,602	-	5,90,376	-	-	65,08,226
2018	September 1, 2020 - February 28, 2021	96,17,340	-	8,48,381	4,94,566	-	82,74,393
2018	October 16, 2020 - April 15, 2021	11,570	-	-	444	-	11,126
2018	November 1, 2020 - April 30, 2021	28,740	-	-	1,102	-	27,638
2019	November 1, 2021 - April 30, 2022		1,37,93,980	2,27,780	-	-	1,35,66,200
2019	November 1, 2021 - April 30, 2022 (Cash settled)		2,47,870	23,030	-	-	2,24,840
		1,67,56,252	1,40,41,850	16,89,567	4,96,112	-	2,86,12,423

The details of share options for the year ended March 31, 2018 is presented below:

Year of Grant	Exercise Period	Options outstanding April 1, 2017	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding March 31, 2018
2017	December 15, 2019 -June 14, 2020	78,03,400	0	7,04,798	-	-	70,98,602
2018	September 1, 2020 - February 28, 2021	-	1,00,48,650	4,31,310	-	-	96,17,340
2018	October 16, 2020 - April 15, 2021	-	11,570	-	-	-	11,570
2018	November 1, 2020 - April 30, 2021	-	28,740	-	-	-	28,740
		78,03,400	1,00,88,960	11,36,108	-	-	1,67,56,252

The fair value of all options has been determined at the date of grant of the option allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of options that will eventually vest as a result of non-market conditions, is expensed over the vesting period.

The fair values were calculated using the Black-Scholes Model for tenure based and EBIDTA based options and Monte Carlo simulation model for TSR based options. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the option.

as at and for the year ended March 31, 2019

The volatilities of the industry peers have been modelled based on historical movements in the indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Monte Carlo model to estimate their future TSR performance relative to the Company's TSR performance. All options are assumed to be exercised immediately after vesting, as the excercise period is 6 months.

The assumptions used in the calculations of the charge in respect of the ESOS options granted during the year ended March 31, 2019 and March 31, 2018 are set out below:

	Year ended March 31, 2019	Year ended March 31, 2018
Particulars	ESOS November 2018	ESOS September, October and November 2017
Number of Options	Cash settled - 2,47,870 Equity settled -1,37,93,980	Equity settled - 1,00,88,960
Exercise Price	₹1	₹1
Share Price at the date of grant	₹ 195.00	₹308.90
Contractual Life	3 years	3 years
Expected Volatility	44.3%	48%
Expected option life	3 years	3 years
Expected dividends	6.50%	3.70%
Risk free interest rate	7.70%	6.50%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted (Tenure & EBIDTA based/Performance based)	₹ 159.9/₹ 96.3	₹ 275.3/₹ 161.1

The Company recognized total expenses of ₹82 Crore (March 31, 2018: ₹47 Crore) related to equity settled share-based payment transactions for the year ended March 31, 2019 out of which ₹ 30 Crore (March 31, 2018: ₹18 Crore) was recovered from group companies. The total expense recognised on account of cash settled share based plan during the year ended March 31, 2019 is ₹ 0 Crore (March 31, 2018: Nil) and the carrying value of cash settled share based compensation liability as at March 31, 2019 is ₹ 0 Crore (March 31, 2018: Nil).

## Employee stock option plans of erstwhile Cairn India Limited:

The Company has provided CIESOP share based payment scheme to its employees.

### **CIESOP** plan

There are no specific vesting conditions under CIESOP plan other than completion of the minimum service period of 3 years from the date of grant. Phantom options are exercisable proportionate to the period of service rendered by the employee subject to completion of one year. The exercise period is 7 years from the vesting date.

Details of employees stock option plans is presented below

	Year ended March 31, 2019		Year ended Ma	arch 31, 2018
CIESOP Plan	Number of options	Weighted average exercise price in ₹	Number of options	Weighted average exercise price in ₹
Outstanding at the beginning of the year	71,30,625	275.5	89,62,666	264.3
Granted during the year	Nil	NA	Nil	NA
Expired during the year	90,896	187.0	Nil	NA
Exercised during the year	2,35,169	189.0	15,92,759	213.8
Forfeited / cancelled during the year	3,27,501	287.2	2,39,282	268.2
Outstanding at the end of the year	64,77,059	279.2	71,30,625	275.5
Exercisable at the end of the year	64,77,059	279.2	71,30,625	275.5

Weighted average share price at the date of exercise of stock options is ₹ 232.7 (March 31, 2018: ₹324.6)

Scheme	Range of exercise price in ₹	Weighted average remaining contractual life of options (in years)	Weighted average exercise price in ₹
The details of exercise price for stock options outstanding as at March 31, 2019 are:			
CIESOP Plan	200.05-291.25	NA	279.2
The details of exercise price for stock options outstanding as at March 31, 2018 are:			
CIESOP Plan	187-291.25	NA	275.5

as at and for the year ended March 31, 2019

#### Employee share option plan of Vedanta Resources Limited (earlier known as Vedanta Resources Plc)

The value of shares that are awarded to members of the Company is calculated by reference to the individual fixed salary and share-based remuneration consistent with local market practice. ESOP scheme of Vedanta Resources Limited is both tenure and performance based share schemes. The options are indexed to and settled by Parent's shares (Vedanta Resources Limited shares as defined in the scheme). The options have a fixed exercise price denominated in Parent's functional currency (10 US cents per share), the performance period of each option is three years and is exercisable within a period of six months from the date of vesting beyond which the option lapses.

During the current year, through an open offer all the outstanding equity settled options were bought back by Vedanta Resources Limited's parent, Volcan Investments Limited. On account of delisting of Vedanta Resources Limited, the cash based options were also early settled. The accelerated charge on account of early settlement of both the equity settled and cash settled options was recognised in the Statement of Profit and Loss.

Amount recovered by the Parent and recognized by the Company for the year ended March 31, 2019 is ₹ 11 Crore (March 31, 2018: ₹ 29 Crore). The Company considers these amounts as not material and accordingly has not provided further disclosures.

Out of the total expense of ₹ 63 Crore (March 31, 2018: ₹ 58 Crore) pertaining to above options for the year ended March 31, 2019, the Company has capitalised ₹ 1 Crore (March 31, 2018: ₹ 2 Crore) expense for the year ended March 31, 2019.

### **26. A) REVENUE FROM OPERATIONS**

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Sale of products (Net of excise duty) <sup>a</sup>	37,760	44,286
Add: Excise duty	-	450
Total sale of products (Gross of excise duty)	37,760	44,736
Sale of services	338	760
Total	38,098	45,496

a) With effect from July 01, 2017 Goods and Service Tax (GST) has been implemented which has replaced several indirect taxes including excise duty. While Ind-AS required excise duty to be included while computing revenues, GST is required to be excluded from revenue computation. Accordingly "Revenue from operation (net of excise duty)" has been additionally disclosed to enhance comparability of financial information.

b) Revenue from sale of products and from sale of services for the year ended March 31, 2019 comprises of revenue from contracts with customers of ₹ 38,111 Crore and a net loss on mark-to-market of ₹ 13 Crore on account of gains/ losses relating to sales that were provisionally priced as at March 31, 2018 with the final price settled in the current year, gains/ losses relating to sales fully priced during the year, and marked to market gains/ losses relating to sales that were provisionally priced as at March 31, 2019. It further includes ₹ 2,522 Crore for which contract liabilities existed at the beginning of the year.

Revenue from sale of products are recorded at a point in time and those from sale of services are recognised over a period of time.

# **B) OTHER OPERATING INCOME**

		(( 111 01010)
Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Export incentives	322	263
Scrap sales	87	100
Miscellaneous income	137	115
Total	546	478

### **27. OTHER INCOME**

	Year ended	Year ended
Particulars	March 31, 2019	March 31, 2018
Net gain on investments measured at FVTPL	96	615
Interest income from investments measured at FVTPL	124	232
Interest income from financial assets at amortised cost		
- Bank Deposits	67	49
- Loans	27	11
- Others	122	121
Interest on income tax refund	106	181
Dividend income from		
- financial assets at FVTPL	15	8
- financial assets at FVOCI	1	1
- investment in Subsidiaries	5,485	2,195
Deferred government grant income	72	69
Miscellaneous income	37	77
Total	6,152	3,559

as at and for the year ended March 31, 2019

#### 28. CHANGES IN INVENTORIES OF FINISHED GOODS, WORK-IN-PROGRESS AND STOCK-IN-TRADE

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Opening Stock:		
Finished Goods	364	403
Work in Progess	1,811	1,764
Total	2,175	2,167
Add / (Less) : Foreign exchange translation difference	4	0
Add / (Less) : Impairment of stock during the year [Refer note 31(c)]	-	(3)
Closing Stock		
Finished Goods	880	364
Work in Progess	1,195	1,811
Total	2,075	2,175
Sub-total Sub-total	104	(11)
Add / (Less) : Copper Concentrate (raw material) sold during the year	203	-
Changes in Inventory	307	(11)

#### 29. FINANCE COST

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Interest expense on financial liabilities at amortised cost <sup>a</sup>	4,076	3,544
Other finance costs	215	129
Net interest on defined benefit arrangement	3	2
Unwinding of discount on provisions (Refer note 22)	30	27
Less: Capitalisation of finance costs <sup>b</sup>	(567)	(349)
Total	3,757	3,353

- a) Includes ₹ 130 Crore (March 31, 2018: ₹ 209 Crore) on redeemable preference shares.
- b) Interest rate of 7.5% was used to determine the amount of general borrowing costs eligible for capitalization in respect of qualifying asset for the year ended March 31, 2019.
- c) Interest expense on income tax is ₹ 0 Crore (March 31, 2018: ₹ 0 Crore)

### **30. OTHER EXPENSES \***

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Cess on crude oil	1,492	1,085
Royalty	175	254
Consumption of stores and spare parts	560	520
Repairs to plant and equipment	276	407
Carriage	550	609
Mine Expenses	115	206
Net loss on foreign currency transactions and translation	319	240
Other Selling Expenses	13	89
Repairs to building	101	59
Insurance	72	75
Repairs others	72	95
Loss on sale/ discard of property, plant and equipment (net)	76	11
Rent	45	52
Rates and taxes	13	25
Amortisation of prepaid lease charges	3	3
Exploration costs written off (Refer note 5)	48	-
Directors sitting fees and commission	5	4
Remuneration to Auditors <sup>a</sup>	12	11
Provision for doubtful advances/ expected credit loss	(6)	38
Bad debts written off	6	2
Miscellaneous expenses b.c	2,026	1,490
Less: Cost allocated/directly booked in Joint ventures	(388)	(277)
<u>Total</u>	5,585	4,998

<sup>\*</sup> Net of recoveries of ₹ 62 Crore (March 31, 2018: ₹ 73 Crore) from subsidiaries

as at and for the year ended March 31, 2019

#### a. Remuneration to auditors comprises of:

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Payment to auditors		
For statutory audit (including quarterly reviews and international reporting)	9	8
For parent company reporting	2	2
For certification services	0	0
For other services	1	0
For reimbursement of expenses	0	1_
Total	12	11

- (b) Includes Corporate social responsibility expenses of ₹ 52 Crore (March 31, 2018: ₹ 45 Crore) as detailed in note 39(a).
- (c) The Company made contributions through electoral bonds and to an electoral trust of ₹ 64.5 Crore and ₹ 2.5 Crore respectively for the year ended March 31, 2019, which is included in Miscellaneous expenses. Miscellaneous expenses for the year ended March 31, 2018 includes refund of ₹ 4 Crore being the donation given to a political party.

#### 31. EXCEPTIONAL ITEMS

(₹ in Crore)

	Year ended March 31, 2019 Year ended March 31, 2018			8		
Particulars	Exceptional Items	Tax effect of exceptional item	Exceptional item after tax	Exceptional Items	Tax effect of exceptional item	Exceptional item after tax
Loss on unusable capital work-in- progress <sup>a</sup>	-	-	-	(251)	87	(164)
Net reversal of impairment on Property, plant and equipments and exploration intangible assets under development <sup>b</sup>	261	(91)	170	3,513	(1,227)	2,286
Impairment of Iron ore assets °	-	-	-	(452)	158	(294)
Reversal /(Charge) pursuant to Supreme Court order/ arbitration order <sup>d</sup>	59	(21)	38	(113)	40	(73)
Net reversal of impairment on investment in subsidiaries <sup>e</sup>	4	-	4	2,710	-	2,710
Total	324	(112)	212	5,407	(942)	4,465

a. During the year ended March 31, 2018, the Company has recognised a loss of ₹ 251 Crore relating to certain items of capital work-in-progress at the aluminium operations, which are no longer expected to be used.

b. During the year, the Company has recognized impairment reversal of ₹ 261 Crore in respect of Oil & Gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The impairment reversal has been recorded against Oil & Gas producing facilities. The recoverable amount of the Company's share in KG-ONN-2003/1 (CGU) was determined to be ₹ 208 Crore (US\$ 30 million).

The recoverable amount of the KG-ONN-2003/1 CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on Company's view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-inuse test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil

price of US\$ 62 per barrel for the year ended March 31, 2019 and scales upto long-term nominal price of US\$ 65 per barrel by year ended March 31, 2022 derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 11.8% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

During the year ended March 31, 2018, the Company has recognized net impairment reversal of ₹ 3,513 Crore on its assets in the oil and gas segment comprising of:

i) reversal of previously recorded impairment charge of ₹ 3,622 Crore relating to Rajasthan oil and gas block ("CGU") mainly following the progress on key growth projects expected to result in the enhanced recovery of resources in a commercially viable manner leading to a higher forecast of oil production and adoption of integrated development strategy for various projects leading to savings in cost. Of this reversal, ₹ 536 Crore reversal has been recorded against oil and gas producing facilities and ₹ 3,086 Crore reversal has been recorded against exploration intangible assets under development.

The recoverable amount of the Company's share in Rajasthan Oil and Gas cash generating unit ("RJ CGU") was determined to be ₹ 8,664 Crore (US\$ 1,332 million) as at March 31, 2018.

as at and for the year ended March 31, 2019

The recoverable amount of the RJ CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on the Company's view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US\$ 62 per barrel for the next one year and scales upto long-term nominal price of US\$ 65 per barrel three years thereafter derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 10.1% derived from the post-tax weighted average cost of capital after factoring in the risks ascribed to PSC extension including successful implementation of key growth projects. Based on the sensitivities carried out by the Company, change in crude price assumptions by US\$ 1/bbl and changes to discount rate by 0.5% would lead to a change in recoverable value by ₹ 238 Crore (US\$ 37 million) and ₹ 180 Crore (US\$ 28 million) respectively.

ii) impairment charge of ₹ 109 Crore recorded against exploration intangible assets under development representing the carrying value of exploratory wells in Block PR-OSN-2004/1 which was relinquished during the previous year.

c. During the year ended March 31, 2018, the Company had recognized an impairment charge of ₹ 452 Crore as against the net carrying value of ₹ 1,048 Crore on its iron ore assets in Goa in the iron ore segment.

Pursuant to an order passed by the Hon'ble Supreme Court of India on February 7, 2018 the second renewal of the mining leases granted by the State of Goa to all miners including Vedanta were cancelled. Consequentially all mining operations stopped with effect from March 16, 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of the The Mines and Minerals (Development and Regulation) (MMDR) Act.

Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Company has assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge. Upon consideration of past precedence, the provision for restoration and rehabilitation with respect to these mines has been assessed as Nil, as the Company believes that the same would be carried out by the future successful bidder at the time of mine closure.

d. During the current year, the Company has partly reversed the provision for interest of ₹ 59 Crore for dues towards a vendor pursuant to the Hon'ble Supreme Court of India order. A charge of ₹ 113 Crore in this matter was recognised pursuant to an unfavourable arbitration order during the previous year.

e. During the year ended March 31, 2019 and March 31, 2018 the Company has recognized net impairment reversal of ₹ 4 Crore and ₹ 2,710 Crore respectively, on its investment in subsidaries, comprising of:

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Reversal of impairment on investment in Cairn India Holdings Limited (Refer (i) below)	52	3,358
Impairment charge on investment in Sesa Resources Limited (Refer (ii) below)	(48)	(648)
Net Impairment reversal on investment in subsidiaries	4	2,710

(i) Cairn India Holding Limited ('CIHL') holds 35% share in Rajasthan oil and gas block through its step down subsidiary Cairn Energy Hydrocarbons Limited. In the previous year, the recoverable value of investment in CIHL was determined to be ₹ 13,754 Crore (US\$ 2,115 million), represented by CIHL's share of discounted cash flows in RJ CGU held through its subsidiary and net fair value of its other assets. (Refer note (b)(i) above).

(ii) The Supreme Court judgement relating to iron ore mining in Goa resulted in impairment of investment in Sesa Resources Limited. The recoverable value is represented by the estimated selling price of the underlying assets of SRL. (Refer note (c) above).

as at and for the year ended March 31, 2019

#### **32. TAX EXPENSE**

#### (a) Tax charge/(credit) recognised in profit or loss (including on exceptional items)

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Current tax:		
Current tax on profit for the year	5	-
Total Current Tax (a)	5	-
Deferred tax:		
Origination and reversal of temporary differences	(244)	994
Charge/(credit) in respect of deferred tax for earlier years	(1)	32
Charge in respect of exceptional items	112	942
Total Deferred Tax (b)	(133)	1,968
Net tax (benefit)/ expense (a+b)	(128)	1,968
Profit before tax	4,947	9,224
Effective income tax rate (%)	(3%)	21%

#### Tax expense

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Tax effect of exceptional items	112	942
Tax expense- others	(240)	1,026
Net tax expense	(128)	1,968

#### (b) A reconciliation of income tax expense/ (credit) applicable to profit/ (loss) before tax at the Indian statutory income tax rate to recognised income tax expense for the year indicated are as follows:

(₹ in Crore)

		(VIII CICIC)
Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Profit before tax	4,947	9,224
Indian statutory income tax rate	34.944%	34.608%
Tax at statutory income tax rate	1,729	3,192
Disallowable expenses	88	88
Non-taxable income*	(1,984)	(865)
Tax holidays and similar exemptions	9	(8)
Change in deferred tax balances due to change in income tax rate from 34.608% to 34.944%	-	41
Charge/(credit) in respect of earlier years	(1)	32
Unrecognised tax assets (net)	(30)	-
Other permanent differences	61	(512)
Total	(128)	1,968

<sup>\*</sup>Including dividend income received from subsidiary

Certain businesses of the Company are eliqible for specified tax incentives which are included in the table above as tax holidays and similar exemptions. Most of such tax exemptions are relevant for the Companies operating in India. These are briefly described as under:

### The location based exemption: SEZ Operations

In order to boost industrial development and exports, provided certain conditions are met, profits of undertaking located in Special Economic Zone ('SEZ') may benefit from a tax holiday. Such a tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, 50% of profits for five years thereafter and 50% of the profits for further five years provided the amount allowable in respect of deduction is credited to Special Economic Zone Re-Investment Reserve account. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Company has setup SEZ Operations in its aluminium division (where no benefit has been drawn).

#### **Sectoral Benefit - Power Plants**

To encourage the establishment of certain power plants, provided certain conditions are met, tax incentives exist to exempt 100% of profits and gains for any ten consecutive years within the 15 years period following commencement of the power plant's operation. However, such undertakings generating power would continue to be subject to the MAT provisions.

as at and for the year ended March 31, 2019

The total effect of such tax holidays and exemptions was ₹ 9 Crore for the year ended March 31,2019 (March 31,2018: ₹ (8) Crore).

#### (c) Deferred tax assets/liabilities

The Company has accrued significant amounts of deferred tax. The majority of the deferred tax liability represents accelerated tax relief for the depreciation of property, plant and equipment, net of losses carried forward by Vedanta Limited (post the re-organisation) and unused tax credit in the form of MAT credits carried forward. Significant components of Deferred tax (assets) & liabilities recognized in the balance sheet are as follows:

#### For the year ended 31 March 2019

(₹ in Crore)

Significant components of Deferred tax (assets) & liabilities	Opening balance as at April1, 2018	Charged / (credited) to statement of profit and loss	Charged / (credited) to other comprehensive income	Exchange difference transferred to translation of foreign operation	Closing balance as at March 31,2019
Property, Plant and Equipment	7,195	416	-	155	7,766
Voluntary retirement scheme	(6)	3	-	-	(3)
Employee benefits	(16)	(2)	(1)	-	(19)
Fair valuation of derivative asset/liability	4	-	(37)	-	(33)
Fair valuation of other asset/liability	138	(26)	-	-	112
Unused tax asset MAT credit entitlement	(3,971)	-	-	-	(3,971)
Unabsorbed depreciation and tax losses	(2,985)	(539)	-	-	(3,524)
Other temporary differences	(333)	15	(13)	-	(331)
Total	26	(133)	(51)	155	(3)

#### For the year ended 31 March 2018

(₹ in Crore)

Significant components of Deferred tax (assets) & liabilities	Opening balance as at April 1, 2017	Charged / (credited) to statement profit and loss	Charged / (credited) to other comprehensive income	Exchange difference transferred to translation of foreign operation	Closing balance as at March 31,2018
Property, Plant and Equipment	5,267	1,912	-	16	7,195
Voluntary retirement scheme	(5)	(1)	-	-	(6)
Employee benefits	(20)	9	(5)	-	(16)
Fair valuation of derivative asset/liability	6	-	(2)	-	4
Fair valuation of other asset/liability	329	(191)	-	-	138
Unused tax asset MAT credit entitlement	(3,971)	-	-	-	(3,971)
Unabsorbed depreciation and tax losses	(3,322)	337	-	-	(2,985)
Other temporary differences	(242)	(98)	7	-	(333)
Total	(1,958)	1,968	-	16	26

Recognition of deferred tax assets on MAT credit entitlement is based on the Company's present estimates and business plans as per which the same is expected to be utilized within the stipulated fifteen year period from the date of origination.

Unused tax losses for which no deferred tax asset is recognized amount to Nil and ₹ 270 Crore as at March 31, 2019 and March 31, 2018 respectively. The unused tax losses expire as detailed below:

(₹ in Crore)

	Nature of unrecognised	Within one	Greater than one year, less	Greater than	No expiry	
Year ended	deferred tax assets	year	than five years	five years	date	Total
March 31, 2018	Unutilised Capital losses	128	142	-	-	270

#### (d) Non- current tax assets

Non- current tax assets of ₹ 2,175 Crore and ₹ 2,429 Crore as at March 31, 2019 and March 31, 2018 respectively mainly represents income tax receivable from Indian tax authorities by Vedanta Limited relating to the refund arising consequent to the Scheme of Amalgamation & Arrangement made effective in August 2013 pursuant to approval by the jurisdiction High Court and receivables relating to matters in tax disputes including tax holiday claim.

as at and for the year ended March 31, 2019

#### **33. EARNINGS PER EQUITY SHARE**

(₹ in Crore except as otherwise stated)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Profit after tax and exceptional items	5,075	7,256
Less: Notional Preference Dividend *	-	(17)
Profit after tax and exceptional items attributable to equity share holders for Basic and Diluted EPS	5,075	7,239
Add/ (Less): Exceptional items (net of tax)	(212)	(4,465)
Profit after tax but before exceptional items attributable to equity share holders for Basic and Diluted EPS	4,863	2,774
Weighted Average no. of equity shares outstanding during the year for Basic and Dilutive EPS	372	372
Basic and Diluted Earnings per share after tax and exceptional items (in ₹)	13.65	19.47
Basic and Diluted Earnings per share after tax but before exceptional items(in ₹)	13.08	7.46
Nominal value per share (in ₹)	1.00	1.00

<sup>\*</sup> till the date of issuance of preference shares i.e till April 28, 2017.

#### 34. DISTRIBUTIONS MADE AND PROPOSED

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Amounts recognised as distributions to equity shareholders:		
Final dividend	-	-
Interim dividend (March 31, 2019 : ₹17.00/- and ₹1.85/- per share, March 31, 2018 : ₹21.20/- per share) a	7,005	7,881
Dividend distribution tax (DDT) on above <sup>b</sup>	0	-
	7,005	7,881
Preference dividends on redeemable preference shares:		
Preference dividends for the year : 7.5% p.a. (March 31, 2018: 7.5% p.a) $^{\circ}$	130	209
Dividend distribution tax (DDT) on preference dividend °	-	-
Total	130	209

- a) The Board of Directors of the Company declared the second dividend of ₹ 6,580 Crore for the financial year 2016-17 which has been paid during the financial year 2017-18.
- b) Tax on interim dividend (net of dividend from a subsidiary) u/s 1150 of the Income Tax Act, 1961.
- c) Dividend @ 7.5% p.a. on the redeemable preference shares of face value of ₹ 10/- per preference share for the period from April 01, 2018 to October 27, 2018 and April 27, 2017 to March 31, 2018, as per their terms of issuance was declared during the year ended March 31, 2019 and March 31, 2018 respectively. The same has been accounted for as interest cost and has been recorded in the Statement of Profit and Loss. These preference shares were redeemed, along with dividend on October 26, 2018. (refer note 29).

#### 35. COMMITMENTS, CONTINGENCIES AND GUARANTEES

The Company has a number of continuing operational and financial commitments in the normal course of business including:

- Exploratory mining commitments;
- · Oil & gas commitments;
- · Mining commitments arising under production sharing agreements; and
- Completion of the construction of certain assets.

# Estimated amount of contracts remaining to be executed on capital accounts and not provided for:

		(CITCIOIE)
Particulars	As at March 31, 2019	As at March 31, 2018
Oil & Gas sector		
Cairn India	2,781	2,338
Aluminium sector		
Lanjigarh Refinery (Phase II)	1,443	1,335
Jharsuguda 1.25 MTPA smelter	460	491
Copper sector		
Tuticorin Smelter 400 KTPA*	2,794	2,758
Others	589	520
Total	8,067	7,442

<sup>\*</sup>currently contracts are under suspension under the force majeure clause as per the contract

as at and for the year ended March 31, 2019

### Commitments related to the minimum work programme (Other than capital commitment)

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Oil & Gas sector		
Cairn India (OALP - New Oil and Gas blocks)	3,811	-

#### Other Commitments

Power Division of the Company has signed a long term power purchase agreement (PPA) with Gridco Limited for supply of 25% of power generated from the power station with additional right to purchase power at (5%/7%) at variable cost as per the conditions referred to in PPA. The PPA has a tenure of twenty five years.

#### **B)** Guarantees

The aggregate amount of indemnities and other guarantees on which the Company does not expect any material losses, was ₹ 27,577 Crore (March 31, 2018: ₹ 14,023 Crore).

The Company has given guarantees in the normal course of business as stated below:

- a) Guarantees and bonds advanced to the customs authorities in India of ₹ 547 Crore relating to the export and payment of import duties on purchases of raw material and capital goods (March 31, 2018: ₹ 580 Crore).
- b) Guarantees issued for Company's share of minimum work programme commitments of ₹ 2,367 Crore (March 31, 2018: ₹ 170 Crore).
- c) Guarantees of ₹ 535 Crore issued under bid bond (March 31, 2018: ₹ 12 Crore).
- d) Bank guarantees of ₹115 Crore (March 31, 2018: ₹115 Crore) has been provided by the Company on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes.
- e) The Company has given corporate guarantees, bank guarantees and also assigned its bank limits to other group companies majorly in respect of certain short-term and long-term borrowings amounting to ₹ 17,507 Crore (₹ 11,961 Crore as on March 31, 2018). Refer Note 36.
- f) Other guarantees worth ₹ 1,506 Crore (March 31, 2018: ₹ 1,186 Crore) issued for securing supplies of materials and services, in lieu of advances received from customers, litigation, for provisional valuation of custom duty and also to various agencies, suppliers and government authorities for various purposes. The Comapny does not anticipate any liability on these guarantees.

### C) Export Obligations

The Company has export obligations of ₹ 1,211 Crore (March 31, 2018: ₹ 7,190 Crore) on account of concessional rates of import duty paid on capital goods under the Export Promotion Capital Goods Scheme and under the Advance Licence Scheme for the import of raw material laid down by the Government of India.

In the event of the Company's inability to meet its obligations, the Company's liability would be ₹ 115 Crore (31 March 2018: ₹ 479 Crore) reduced in proportion to actual exports, plus applicable interest.

The Company has given bonds of ₹ 61 Crore (31 March 2018: ₹ 68 Crore) to custom authorities against these export obligations.

#### **D) Contingent Liabilities**

The Company discloses the following legal and tax cases as contingent liabilities:

#### a) Vedanta Limited: Income tax

In March 2014, Vedanta Limited (notice was served on Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) received a show cause notice from the Indian Tax Authorities ('Tax Authorities') for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. The Tax Authorities have stated in the notice that a short-term capital gain has accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited, in the financial year 2006-2007, on which tax should have been withheld by the Company. Pursuant to this various replies were filed with the Tax Authorities. After several hearings, the Income Tax Authority, in March 2015, issued an order holding the Company as 'assessee in default' and raised a demand totalling ₹ 20,495 Crore (including interest of ₹ 10,247 Crore). The Company had filed an appeal before the First Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated July 03, 2017 confirmed the tax demand against the Company. The Company has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

The Company also filed a writ petition before the Delhi High Court wherein it has raised several points for assailing the aforementioned Income Tax Authority's order. The matter is pending for adjudication before the Honourable Delhi High Court.

Separately CUHL, on whom the primary liability of tax lies, had received an Order from the ITAT in the financial year 2016-17 holding that the transaction is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of ₹ 10,247 Crore excluding the interest portion that had previously been claimed. The tax department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, the Company considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated October 12, 2018 received from the Tax Recovery Officer (TRO) appointed for CUHL, tax demand of CUHL of approx. ₹ 4,996 Crore along with interest is outstanding. Further, in the said notice, tax department had also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Accordingly amount aggregating to ₹ 607 Crore has been paid to the TRO on October 26, 2018 thus reducing the liability to ₹ 4,389 Crore. The Company has also paid interim dividend for FY 2018-19 of ₹ 4 Crore to the TRO. Accordingly, the Company has revised the contingent liability to ₹ 4,385 Crore (March 31, 2018: ₹ 9,139 Crore).

In the event, the case is finally decided against the Company, the demand payable along with interest as per the above mentioned order would be ₹ 20,495 Crore, of which only

as at and for the year ended March 31, 2019

₹ 4,385 Crore is considered as possible. Separately, but in connection with this litigation, Vedanta Resources Limited has filed a Notice of Claim against the Government of India ('GOI') under the UK India Bilateral Investment Treaty (the BIT). The International Arbitration Tribunal passed a favourable order on jurisdiction and recently hearing on merits have been completed and order will be passed on due course. The Government of India has challenged the jurisdiction order of Arbitration Tribunal before the High Court of Singapore.

# b) Ravva Joint Operations arbitration proceedings

The Ravva Production Sharing Contract (PSC) obliges the contractor parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to the construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the ONGC Carry). The question as to how the ONGC Carry is to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the contractor parties (including Vedanta Limited (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited)) whereas four other issues were decided in favour of Government of India (GOI) in October 2004 (Partial Award). The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. The Federal Court of Malaysia upheld the Partial Award. As the Partial Award did not quantify the sums, therefore, contractor parties approached the same Arbitration Tribunal to pass a Final Award in the subject matter since it had retained the jurisdiction to do so. The Arbitral Tribunal was reconstituted and the Final Award was passed in October 2016 in Company's favour. GOI's challenge of the Final Award has been dismissed by the Malaysian High Court and the next appellate court in Malaysia i.e. Malaysian Court of Appeal, GOI then filed an appeal at Federal Court of Malaysia. The matter was heard on February 28, 2019 and the Federal Court dismissed GOI's leave to appeal. The Company has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

#### **Base Development Cost**

Ravva joint operations had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from 2000-2005 for ₹892 Crore (US\$ 129 million) for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Government of India (GOI), out of which, Vedanta Limited's (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) share will be ₹201 Crore (US\$ 29 million) plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing claimants (including the Company) to recover the development costs spent to the tune of ₹ 1,923 Crore (US\$ 278 million) and disallowed over run of ₹ 154 Crore (US\$ 22 million) spent in respect of BDC along with 50% legal costs. The High Court of Kuala Lumpur as well as Court of Appeal dismissed GOI's application of setting aside the part of the Award. GOI challenge to the same before the Federal Court of Malasia was also dismissed by the Federal Court on May 17, 2016. The Company has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, the Company has received an order dated October 22, 2018 from the GOI directing oil marketing companies (OMCs) who are the offtakers for Ravva to divert the sale proceeds to Government's account. GOI alleges that the Ravva Joint Venture has short paid profit petroleum of ₹ 2,172 Crore (US\$ 314 million) (the Company share approximately - ₹ 643 Crore (US\$ 93 million)) on account of the two disputed issues of ONGC Carry and BDC matters. Against an interim application, filed by the Company and other joint venture partner, seeking stay of such action from GOI, before the Delhi High Court, where enforcement petitions for both matters are pending, the Court directed the OMCs to deposit above sums to the Court for both BDC and ONGC Carry matters. However, the Company (and other joint venture partner) has been given the liberty to seek withdrawal of the proportionate amounts (fallen due as of the date of Court order) from the Court upon furnishing a bank guarantee (BG) of commensurate value. The interim application is pending adjudication.

While the Company does not believe the GOI will be successful in its challenge, if the Arbitral Awards in above matters are reversed and such reversals are binding, the Company would be liable for approximately ₹ 643 Crore (US\$ 93 million) plus interest (March 31, 2018: ₹ 605 Crore (US\$ 93 million) plus interest).

#### c) Proceedings related to the imposition of entry tax

The Company challenged the constitutional validity of the local statutes and related notifications in the states of Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside. Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Company filed writ petitions in respective High Courts.

On October 09, 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgment, imported goods will rank pari passu with domestic goods for the purpose of levy of Entry tax. The Company has amended its appeal (writ petitions) in Odisha to include imported goods as well. With respect to Rajasthan, the State Government has filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods.

The issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the Odisha High Court. The Company has challenged the levy of entry tax on any movement of goods into SEZ based on the definition of 'local area' under the Odisha

as at and for the year ended March 31, 2019

Entry Tax Act which is very clear and does not include a SEZ. In addition, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated August 22, 2016, exempted the entry tax levy on SEZ operations.

The total claims against the Company are ₹ 1,065 Crore (March 31, 2018: ₹ 1,020 Crore) net of provisions made.

#### d) Miscellaneous disputes- Income tax

The Company is involved in various tax disputes amounting to ₹486 Crore (March 31, 2018: ₹1,430 Crore) relating to income tax for the periods for which initial assessments have been completed. These mainly relate to the disallowance of tax holiday for 100% Export Oriented Undertaking under section 10B of the Income Tax Act, 1961, disallowance of tax holiday benefit on production of gas under section 80IB of the Income Tax Act, 1961, on account of depreciation disallowances of the Income Tax Act and interest thereon which are pending at various appellate levels.

The Company believes that these disallowances are not tenable and accordingly no provision is considered necessary.

#### e) Miscellaneous disputes- Others

The Company is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the excise, indirect tax authorities and others. These claims and exposures mostly relate to the assessable values of sales and purchases or to incomplete documentation supporting the Company's returns or other claims.

The approximate value of claims (excluding the items as set out separately above) against the Company totals to ₹ 1,957 Crore (March 31, 2018: ₹ 1,988 Crore).

The Company considers that it can take steps such that the risks can be mitigated and that there are no significant unprovided liabilities arising.

Except as described above, there are no pending litigations which the Company believes could reasonably be expected to have a material adverse effect on the results of operations, cash flows or the financial position of the Company.

### E) Leases

#### Operating lease commitments - as lessee

Operating leases are in relation to the office premises, office equipment and other assets, some of which are cancellable and some are non-cancellable. There is an escalation clause in the lease agreements during the primary lease period. There are no restrictions imposed by lease arrangements and there are no sub-leases. There are no contingent rents. The total of the future minimum lease payments under non-cancellable leases are as under:

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Within one year	5	2
Later than one year but not later than five years	6	0
Later than five years	-	-
Total	11	2

Lease payments recognized as expenses on non-cancellable lease during the year is ₹12 Crore (March 31, 2018: ₹ 4 Crore).

as at and for the year ended March 31, 2019

#### **36. RELATED PARTY DISCLOSURES**

List of related parties and relationships

### A) Entities controlling the Company (Holding Companies)

Volcan Investments Limited

Volcan Investments Cyprus Limited

### Intermediate Holding Companies

Finsider International Company Limited

Richter Holdings Limited

Twin Star Holdings Limited

Vedanta Resources Cyprus Limited

Vedanta Resources Finance Limited

Vedanta Resources Holdings Limited

Vedanta Resources Limited (formerly Vedanta Resources Plc)

Welter Trading Limited

Westglobe Limited

### B) Fellow Subsidiaries (with whom transactions have taken place)

Konkola Copper Mines Plc

Sterlite Iron and Steel Company Limited

Sterlite Technologies Limited

Sterlite Power Grid Ventures Limited

Sterlite Power Transmission limited

#### C) Associates (with whom transactions have taken place)

Gaurav Overseas Private Limited Roshkor Township Pty Ltd.

### D) Subsidiaries

Amica Guesthouse (Proprietary) Limited

AvanStrate Inc. Japan

AvanStrate Korea Inc, Korea

AvanStrate Taiwan Inc, Taiwan

Bharat Aluminium Company Limited

Black Mountain Mining (Proprietary) Limited

Bloom Fountain Limited

Cairn Energy Discovery Limited

Cairn Energy Gujarat Block 1 Limited

Cairn Energy Hydrocarbons Limited

Cairn Energy India (Proprietary) Limited

Cairn Exploration (No. 2) Limited

Cairn India Holdings Limited

Cairn Lanka (Private) Limited

Cairn South Africa (Pty) Limited

CIG Mauritius Holdings Private Limited

CIG Mauritius Private Limited

Copper Mines of Tasmania (Proprietary) Limited Electrosteel Steels Limited\*\*

Fuiairah Gold FZC

Goa Sea Port Private Limited

Hindustan Zinc Limited

Killoran Lisheen Finance Limited

Killoran Lisheen Mining Limited

Lakomasko BV

Lisheen Milling Limited

Lisheen Mine Partnership

Malco Energy Limited

Maritime Ventures Private Limited

Monte Cello BV

Namzinc (Proprietary) Limited

Paradip Multi Cargo Berth Private Limited

Rosh Pinah Health Care (Proprietary) Limited

Sesa Mining Corporation Limited

Sesa Resources Limited

Sesa Sterlite Mauritius Holdings Limited\*

Skorpion Mining Company (Proprietary) Limited

Skorpion Zinc (Proprietary) Limited

Sterlite (USA) Inc.\*

Sterlite Ports Limited

Talwandi Sabo Power Limited

Thalanga Copper Mines (Proprietary) Limited

THL Zinc Holding BV

THL Zinc Limited

THL Zinc Namibia Holdings (Proprietary) Limited

THL Zinc Ventures Limited

Twin Star Energy Holdings Limited\*

Twin Star Mauritius Holdings Limited\*

Vedanta Exploration Ireland Limited

Vedanta Lisheen Holdings Limited Vedanta Lisheen Mining Limited

Vizag General Cargo Berth Private Limited

Western Cluster Limited

Vedanta Star Limited\*\*\*

#### E) Post retirement benefit plan

Sesa Group Employees Provident Fund

Sesa Group Employees Gratuity Fund and

Sesa Group Executives Gratuity Fund

Sesa Group Executives Superannuation Scheme Fund

### F) Others (with whom transactions have taken place)

Vedanta Foundation

Sesa Community Development Foundation

Rampia Coal Mines & Energy Private Limited

Vedanta Limited ESOS Trust

Cairn Foundation

India Grid Trust

Runaya Refinery LLP

Janhit Electoral Trust

- Under liquidation
- \*\* Acquired during the year
- \*\*\* Incorporated during the year

# **Ultimate Controlling party**

As at March 31, 2019, the Group is majorly owned by Twin Star Holdings Limited, Finsider International Company Limited, Westglobe Limited and Welter Trading Limited which are in turn wholly-owned subsidiaries of Vedanta Resources Limited (formerly Vedanta Resources Plc) (Intermediate Holding Company). The ultimate controlling party of the Group is Volcan (Volcan Investments Limited and its wholly owned subsidiary Volcan Investments Cyprus Limited), which is controlled by the Chairman Emeritus, Mr. Anil Agarwal and persons related to him. Volcan Investment Limited, Volcan Investments Cyprus Limited, Twin Star Holdings Limited, Finsider International Company Limited, Westglobe Limited and Welter Trading Limited do not produce Group financial statements.

# Notes forming part of the financial statements

as at and for the year ended March 31, 2019

The Group enters into transactions in the normal course of business with its related parties, including its parent Vedanta Resources Limited (formerly Vedanta Resources Plc), and the companies over which it has significant influence. A summary of significant related party transactions for the year ended March 31, 2019 and 2018 are noted below.

(₹ in Crore)

			(₹ in Crore)
Parti	culars	Year ended March 31, 2019	Year ended March 31, 2018
Inc	ome:		
(i)	Revenue from operations		
	Fujairah Gold FZC	41	2,308
	Cairn India Holdings Limited	0	-
	Electrosteel Steels Limited	2	-
	Sterlite Technologies Limited	0	2
	Sterlite Power Transmission Limited	864	954
	Bharat Aluminium Company Limited	1,813	935
	Sesa Resources Limited	0	12
	Sesa Mining Corporation Limited	0	2
	Talwandi Sabo Power Limited	_	0
	Hindustan Zinc Limited	4	10
	Konkola Copper Mines Plc		2
	Normala doppor minoc no	2,724	4,225
ii)	Other income	2,721	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
a)	Interest and guarantee commission		
aj	Malco Energy Limited		0
	Electrosteel Steels Limited	1	O
	Talwandi Sabo Power Limited	23	-
			-
	Sterlite Iron and Steel Company Limited	0	0
	Bharat Aluminium Company Limited	-	1
	Sterlite Ports Limited	0	0
	Vizag General Cargo Berth Private Limited	1	1
	Paradip Multi Cargo Berth Private Limited	0	0
	Sterlite Power Transmission limited	4	1
	Cairn India Holdings Limited	8	7
	Sesa Resources Limited	4	3
	Sesa Mining Corporation Limited	1	-
	Copper Mines of Tasmania Pty Limited	0	0
	Konkola Copper Mines Plc	5	4
	Fujairah Gold FZC	1	3
	Vedanta Star Limited	21	-
	Black Mountain Mining (Proprietary) Limited	0	<u> </u>
		69	20
b)	Dividend income		
	Hindustan Zinc Limited	5,485	2,195
	Sterlite Technologies Limited	1	1
	India Grid Trust	15	8
		5,501	2,203
c)	Outsourcing service fees		•
,	Vedanta Resources Limited (formely Vedanta Resources Plc)	3	3
	, , , , , , , , , , , , , ,	3	3
d)	Other non-operating income		
ω,	Hindustan Zinc Limited		1
	Sterlite Power Transmission Limited		0
	Control over transmission Entitled		
		-	I

(₹ in Crore)

Parti	iculars	Year ended March 31, 2019	Year ended March 31, 2018
	penditure and other transactions		,
i)	Purchase of goods/ services		
	Konkola Copper Mines Plc	351	657
	Hindustan Zinc Limited	-	16
	Sesa Resources Limited	3	48
	Bharat Aluminium Company Limited	741	303
	Maritime Ventures Private Limited	8	2
	Sterlite Power Transmission limited	-	2
	Sesa Mining Corporation Limited	1	213
	Talwandi Sabo Power Limited	1	-
	Vizag General Cargo Berth Private Limited	11	6
	Runaya Refinery LLP	1	-
	Fujairah Gold FZC	-	6
		1,117	1,253
ii)	Power Charges		
	Malco Energy Limited	-	18
		-	18
iii)	Stock options expenses/(recovery)	4.4	40
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	14	49
	Electrosteel Steels Limited	(1)	- (05)
	Hindustan Zinc Limited	(23)	(25)
	Bharat Aluminium Company Limited	(10)	(11)
	Talwandi Sabo Power Limited	(2)	(2)
	Malco Energy Limited	(0)	(1)
	Black Mountain Mining (Proprietory) Limited	(1)	-
	Vizag General Cargo Berth Private Limited	(0)	(0)
	Konkola Copper Mines Plc	(0)	(0)
	Fujairah Gold FZC	(0)	(O) <b>10</b>
iv)	Allocation of Corporate Expenses	(23)	10
IV)	Hindustan Zinc Limited	(78)	(73)
	Bharat Aluminium Company Limited	(43)	(40)
	Malco Energy Limited	(43)	(1)
	Malco Energy Elimited	(121)	(114)
v)	Management and Brand Fees paid/ (recovered)	(121)	(11-7)
•,	Vedanta Resources Limited (formerly Vedanta Resources Plc)	325	345
	Hindustan Zinc Limited	(9)	(10)
	Bharat Aluminium Company Limited	(5)	(5)
		311	330
vi)	(Recovery of) / Reimbursement to /for other expenses (net)		
,	Bharat Aluminium Company Limited	(80)	(187)
	Hindustan Zinc Limited	(1)	5
	Malco Energy Limited	(1)	(1)
	Electrosteel Steels Limited	(3)	-
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	1	11
	Konkola Copper Mines Plc	(3)	(5)
	Sesa Resources Limited	3	-
	Sesa Mining Corporation Limited	4	-
	Copper Mines of Tasmania Pty Limited	(0)	(0)
	Fujairah Gold FZC	(0)	(0)
	Black Mountain Mining (Proprietary) Limited	(1)	(2)
	Talwandi Sabo Power Limited	(4)	(3)
	Vizag General Cargo Berth Private Limited	(1)	(0)

			(₹ in Crore)
Partic	ulare	Year ended March 31, 2019	Year ended March 31, 2018
Tartio	Cairn Energy Hydrocarbons Limited	0	-
	Goa Sea Port Private Limited	(0)	(2)
	Maritime Ventures Private Limited	1	2
	Namzinc (Pty) Limited	(0)	(0)
	Sterlite Power Transmission Limited	0	-
	Vedanta Lisheen Mining Limited	(0)	(0)
	Vedanta Star Limited	(18)	- (2)
	Volcan Investments Limited Cairn India Holdings Limited	(1)	(2)
	Cairringia Holdings Limited	(104)	(184)
vii)	Corporate Social Responsibility expenditure/ Donation	(10.1)	(111)
	Vedanta Foundation	5	0
	Janhit Electoral Trust	3	-
	Cairn Foundation	19	16
		27	16
viii)	Contribution to Post retirement employee benefit trust	_	_
	Sesa Group Employees Provident Fund	5	5
	Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund Sesa Group Executives Superannuation Scheme Fund	0 2	1 2
	Sesa Group Executives Superannuation Scheme Fund	7	8
ix)	Transfer of Assets	,	
	Purchase of Assets		
	Hindustan Zinc Limited	0	0
	Sesa Resources Limited	4	-
	Sesa Mining Corporation Limited	3	
,	Port I I I	7	0
x)	<b>Dividend paid</b> Twin Star Holdings Limited	2,600	2,924
	Finsider International Company Limited	757	2,924 851
	Westglobe Limited	84	94
	Welter Trading Limited	72	81
	Vedanta Limited ESOS Trust	26	20
		3,539	3,970
xi)	a. Financial guarantees given		
	Talwandi Sabo Power Limited	2,800	3,600
	Black Mountain Mining (Proprietary) Limited	477	-
	Fujairah Gold FZC.  Vizag General Cargo Berth Private Limited	851	445
	Vedanta Star Limited	3,400	443
	Cairn India Holdings Limited	-	4,870
		7,528	8,915
	b. Financial guarantees relinquished		
	Talwandi Sabo Power Limited	2,504	5,293
	Vizag General Cargo Berth Private Limited	-	400
	Bharat Aluminium Company Limited	-	2,500
	Western Cluster Limited	-	32
	Cairn India Holdings Limited	416	1,646
xii)	Banking Limits assigned to/utilised/renewed for group companies	2,920	9,871
A11)	Electrosteel Limited	730	_
	Copper Mines of Tasmania Proprietary Limited	30	31
	Thalanga Copper Mines Proprietary Limited	23	23
		783	54
xiii)	Sale/ (Redemption) of Investments		
	India Grid Trust	-	(0)

(0)

(₹ in Crore)

Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust	0 0 74 0 0 1 0	606 0 58 - 0
rujairah Gold FZC Cairn Lanka (Private) Ltd Bharat Aluminium Company Limited Electrosteel Steels Limited Sterlite Power Transmission Limited Vizag General Cargo Berth Private Limited Maritime Ventures Private Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  bi) Loans given Sterlite Ports Limited Vedanta Star Limited Vedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Vedanta Limited ESOS Trust  c) Other receivables and advances Talwandi Sabo Power Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Sesa Resources Limited Sesa Resources Limited Sesa Resources Limited Sesa Resources Limited Hindustan Zinc Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Vedanta Star Limited Sesa Resources Limited Hindustan Zinc Limited Malco Energy Limited Malco Energy Limited	0 74 0 0 1 0	0 58
Cairn Lanka (Private) Ltd Bharat Aluminium Company Limited Electrosteel Steels Limited Sterlite Power Transmission Limited Vizag General Cargo Berth Private Limited Maritime Ventures Private Limited Talwandi Sabo Power Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  b) Loans given Sterlite Ports Limited Vedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  c) Other receivables and advances Talwandi Sabo Power Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Sesa Resources Limited Sesa Resources Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Vedanta Star Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	0 74 0 0 1 0	0 58
Bharat Aluminium Company Limited Electrosteel Steels Limited Sterlite Power Transmission Limited Vizag General Cargo Berth Private Limited Maritime Ventures Private Limited Handustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  b) Loans given Sterlite Ports Limited  Yedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  c) Other receivables and advances Talwandi Sabo Power Limited Bharat Aluminium Company Limited Vedanta Star Limited Sesa Resources Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited Malco Energy Limited	74 0 0 1 0	58
Electrosteel Steels Limited Sterlite Power Transmission Limited Vizag General Cargo Berth Private Limited Maritime Ventures Private Limited Talwandi Sabo Power Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  Di Loans given Sterlite Ports Limited Vedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Di Other receivables and advances Talwandi Sabo Power Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	0 0 1 0	-
Sterlite Power Transmission Limited Vizag General Cargo Berth Private Limited Maritime Ventures Private Limited Talwandi Sabo Power Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  **Discrept Company Limited**  **D	0 1 0 0	- 0 -
Vizag General Cargo Berth Private Limited Maritime Ventures Private Limited Talwandi Sabo Power Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  **Discrept Ports Limited**  **Discrept Ports Limi	1 0 0	0 - -
Maritime Ventures Private Limited Talwandi Sabo Power Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited    Loans given	0	-
Talwandi Sabo Power Limited Hindustan Zinc Limited Konkola Copper Mines Plc Western Cluster Limited  Loans given Sterlite Ports Limited  Vedanta Star Limited  Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Other receivables and advances Talwandi Sabo Power Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Find Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited Malco Energy Limited	0	-
Hindustan Zinc Limited  Konkola Copper Mines Plc  Western Cluster Limited     Description		
Konkola Copper Mines Plc Western Cluster Limited  Discrete Ports Limited  Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Discrete Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Discrete Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Vedanta Limited ESOS Trust  Signature  Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited		
Western Cluster Limited    Loans given     Sterlite Ports Limited     Vedanta Star Limited     Sesa Mining Corporation Limited     Paradip Multi Cargo Berth Private Limited     Sesa Resources Limited     Sterlite Iron and Steel Company Limited     Vedanta Limited ESOS Trust     Other receivables and advances     Talwandi Sabo Power Limited     Sesa Resources Limited     Bharat Aluminium Company Limited     Electrosteel Steels Limited     Vedanta Star Limited     Sterlite Iron and Steel Company Limited     Hindustan Zinc Limited     Malco Energy Limited     Malco En	0	
Sterlite Ports Limited Vedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	0	(
Sterlite Ports Limited Vedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	-	C
Sterlite Ports Limited  Vedanta Star Limited  Sesa Mining Corporation Limited  Paradip Multi Cargo Berth Private Limited  Sesa Resources Limited  Sterlite Iron and Steel Company Limited  Vedanta Limited ESOS Trust  Other receivables and advances  Talwandi Sabo Power Limited  Sesa Resources Limited  Bharat Aluminium Company Limited  Electrosteel Steels Limited  Vedanta Star Limited  Sterlite Iron and Steel Company Limited  Hindustan Zinc Limited  Malco Energy Limited	75	664
Vedanta Star Limited Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust  Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited		
Sesa Mining Corporation Limited Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust   Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	4	4
Paradip Multi Cargo Berth Private Limited Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust   Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	197	
Sesa Resources Limited Sterlite Iron and Steel Company Limited Vedanta Limited ESOS Trust   Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	26	
Sterlite Iron and Steel Company Limited  Vedanta Limited ESOS Trust   Other receivables and advances  Talwandi Sabo Power Limited  Sesa Resources Limited  Bharat Aluminium Company Limited  Electrosteel Steels Limited  Vedanta Star Limited  Sterlite Iron and Steel Company Limited  Hindustan Zinc Limited  Malco Energy Limited	0	(
Vedanta Limited ESOS Trust  Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	79	
Other receivables and advances Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	5	5
Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	351	236
Talwandi Sabo Power Limited Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	662	245
Sesa Resources Limited Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited		
Bharat Aluminium Company Limited Electrosteel Steels Limited Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	37	4
Electrosteel Steels Limited  Vedanta Star Limited  Sterlite Iron and Steel Company Limited  Hindustan Zinc Limited  Malco Energy Limited	4	69
Vedanta Star Limited Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	84	46
Sterlite Iron and Steel Company Limited Hindustan Zinc Limited Malco Energy Limited	1	
Hindustan Zinc Limited  Malco Energy Limited	27	4.6
Malco Energy Limited	13	13
	10	22
Konkola Copper Mines Pic	1	5
	98	320
Sterlite Ports Limited	1	1
Volcan Investments Limited	1	4
Paradip Multi Cargo Berth Private Limited	5	Ę
Sesa Mining Corporation Limited	1	
Vizag General Cargo Berth Private Limited  Vedanta Lisheen Mining Limited	4	2
vedanta Lisneen Mining Limited  Black Mountain Mining (Proprietary) Limited	0	(
	1	1
Namzinc (Pty) Limited	0	
Fujairah Gold FZC	1	C
Sterlite Power Transmission Limited	0	(
Goa Sea Port Private Limited	3	3
Vedanta Resources Limited (formerly Vedanta Resources Plc)	27	62
Vedanta Foundation	-	5
	319	562
) Dividend receivable Hindustan Zinc Limited		1,646
Timadatan Ame Limited		1,040

(₹ in Crore)

Parti	culars	As at March 31, 2019	As at March 31, 2018
e)	Trade Payables	March 51, 2013	Walci 31, 2010
,	Hindustan Zinc Limited	_	10
	Sesa Mining Corporation Limited	_	8
	Malco Energy Limited	_	0
	Bharat Aluminium Company Limited	1	0
	Black Mountain Mining (Pty) Limited	_	0
	Konkola Copper Mines Plc	10	38
	Cairn Energy Hydrocarbons Ltd	1	1
	Western Cluster Limited	0	_
	Vizag General Cargo Berth Private Limited	0	0
	Sterlite Power Transmission Limited	-	0
	Maritime Ventures Private Limited	1	0
	Talwandi Sabo Power Limited	0	0
	ruiwanar oubo i ower Eirritea	13	57
f)	Other payables		
-,	Malco Energy Limited	0	_
	Hindustan Zinc Limited	0	_
	Vedanta Resources Limited (formerly Vedanta Resources plc)	76	13
	Bharat Aluminium Company Limited	0	0
	Talwandi Sabo Power Limited	-	0
	Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	5	4
	Maritime Ventures Private Limited	-	1
	Fujairah Gold FZC		0
	Vizag General Cargo Berth Private Limited	0	0
	Namzinc (Proprietary) Limited	-	0
	Sesa Group Employees Provident Fund	2	2
	Sesa Group Executives Superannuation scheme	0	0
	Cairn Foundation	8	11
	Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0
	Jesa Nesources Elittica and Jesa Milling Corporation Elittica Employees Juperannuation Fund	91	31
g)	Other Current liabilities- Advance from Customers	91	31
9)	Sterlite Power Transmission limited	2	
	Stellite rower Italishiission iiniiteu	2	
h)	Banking Limits assigned to/utilised/renewed for group companies		
11)	Vizag General Cargo Berth Private Limited	38	38
	Volcan Investments Limited*	115	115
	Copper Mines of Tasmania Pty Limited	30	31
	•	23	23
	Thalanga Copper Mines Pty Limited  Flectrosteel Steels Limited	730	23
	Electrosteel Steels Littlited		
		936	207

<sup>\*</sup> Bank guarantee given by Vedanta Limited on behalf of Volcan Investments Limited in favour of Income Tax department, India as collateral in respect of certain tax disputes of Volcan Investments Limited

i)	Financial guarantee given		
	Talwandi Sabo Power Limited	8,496	9,000
	Black Mountain Mining (Pty) Limited	477	-
	Vizag General Cargo Berth Private Limited	445	445
	Fujairah Gold FZC	851	-
	Vedanta Star Limited	3,400	-
	Cairn India Holdings Limited	3,017	3,224
		16,686	12,669
j)	Commission payable to KMP	5	3

Year ended

1,770

1,770

as at and for the year ended March 31, 2019

Malco Energy Limited

Vedanta Star Limited

(₹ in Crore) Year ended

Parti	culars	March 31, 2019	March 31, 2018
(x)	Transactions during the year		
a)	Loans given during the year		
	Paradip Multi Cargo Berth Private Limited	0	-
	Malco Energy Limited	-	18
	Sterlite Ports Limited	0	-
	Sesa Resources Limited*	79	5
	Sterlite Iron and Steel Company Limited	0	0
	Sesa Mining Corporation Limited*	26	-
	Vedanta Star Limited	197	-
	Vedanta Limited ESOS Trust	147	202
		449	225
*Ses	a Resources Limited includes ₹ 69 Crore as advance/ interest receivable converted to loan during the year.		
b)	Loans repaid during the year		
	Sesa Resources Limited	-	138
	Sterlite Ports Limited	-	1
	Vizag General Cargo Berth Private Limited	-	8
	Sterlite Iron and Steel Company Limited	0	-
	Vedanta Limited ESOS Trust*	30	58
	Malco Energy Limited	-	18_
		30	223
	e Company reduced its loan receivable from Vedanta Limited ESOS Trust by ₹ 2 Crore and ₹ 12 Crore on exercise of Freer March 31, 2019 and March 31, 2018 respectively.	of stock options by e	mployees during
c)	Investments made during the year		
	Gaurav Overseas Private Limited	-	0

During previous year, Compulsorily Convertible Debentures (CCDs) issued by Vizag General Cargo Berth Private Limited (VGCB) to the Company for an amount ₹150 Crore have been extended for an additional period of 2 years and 10 months.

# The remuneration of key management personnel of the Company are set out below in aggregate for each of the categories specified in Ind AS 24 Related Party disclosures.

(₹ in Crore)

18

18

Partic	pulars	Year ended March 31, 2019	Year ended March 31, 2018
(xi)	Remuneration of key management personnel		
	Short-term employee benefits	41	33
	Post employment benefits*	1	2
	Share based payments	5	6
		47	41

<sup>\*</sup> Does not include the provision made for gratuity and leave benefits, as they are determined on an actuarial basis for all the employees together.

Commission/Sitting fees		
Commision to Key Management Personnel	1	0
Commision and sitting fees to Independent directors	4	4
Dividend to key management personnel	0	0
Dividend to relatives of key management personnel	0	0

# Terms and conditions of transactions with related parties

All transactions are from related parties are made in ordinary course of business. For the year ended March 31 2019, the Company has not recorded any impairment of receivables relating to amounts owed by related parties. This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates.

There are no outstanding debts or loans due from directors or other officers (as defined under Section 2(59) of the Companies Act, 2013) of the Company.

# Notes forming part of the financial statements

as at and for the year ended March 31, 2019

# **37. SUBSEQUENT EVENTS**

There are no material adjusting or non-adjusting subsequent events, except as already disclosed.

# **38. INTEREST IN OTHER ENTITIES**

# a) Subsidiaries

The Group consists of a parent company, Vedanta Limited, incorporated in India and a number of subsidiaries held directly and indirectly by the Group which operate and are incorporated around the world. Following are the details of shareholdings in the subsidiaries.

					The Company's / Ir Company's perc (in '	entage holding
S. No	Subsidiaries	Principal activities	Country of Incorporation	Immediate holding company	As at March 31, 2019	As at March 31, 2018
1	Cairn Energy India Pty Limited	Oil and gas exploration, development and production	Australia	Cairn India Holdings Limited	100.00	100.00
2	Copper Mines of Tasmania Pty Limited ("CMT")	Copper mining	Australia	Monte Cello BV	100.00	100.00
3	Thalanga Copper Mines Pty Limited ("TCM")	Copper mining	Australia	Monte Cello BV	100.00	100.00
4	Bharat Aluminium Company Limited ("BALCO")	Aluminium mining and smelting	India	Vedanta Limited	51.00	51.00
5	Electrosteel Steels Limited <sup>3</sup>	Manufacturing of Steel & DI Pipe	India	Vedanta Star Limited	90.00	-
6	Goa Sea Port Private Limited	Infrastructure	India	Sterlite Ports Limited	100.00	100.00
7	Hindustan Zinc Limited ("HZL")	Zinc mining and smelting	India	Vedanta Limited	64.92	64.92
8	MALCO Energy Limited ("MEL")	Power generation	India	Vedanta Limited	100.00	100.00
9	Maritime Ventures Private Limited	Infrastructure	India	Sterlite Ports Limited	100.00	100.00
10	Paradip Multi Cargo Berth Private Limited	Infrastructure	India	Vedanta Limited	100.00	100.00
11	Sesa Mining Corporation Limited	Iron ore mining	India	Sesa Resources Limited	100.00	100.00
12	Sesa Resources Limited ("SRL")	Iron ore mining	India	Vedanta Limited	100.00	100.00
13	Sterlite Ports Limited	Infrastructure	India	Vedanta Limited	100.00	100.00
14	Talwandi Sabo Power Limited ("TSPL")	Power generation	India	Vedanta Limited	100.00	100.00
15	Vedanta Star Limited***	Operating and holding Company	India	Vedanta Limited	100.00	-
16	Vizag General Cargo Berth Private Limited	Infrastructure	India	Vedanta Limited	100.00	100.00
17	Killoran Lisheen Finance Limited	Investment company	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
18	Killoran Lisheen Mining Limited	Zinc and lead mining	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
19	Lisheen Milling Limited	Manufacturing	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
20	Lisheen Mine Partnership	Mining Partnership Firm	Ireland	50% each held by Killoran Lisheen Mining Limited & Vedanta Lisheen Mining Limited	100.00	100.00
21	Vedanta Exploration Ireland Limited	Exploration company	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
22	Vedanta Lisheen Holdings Limited	Investment company	Ireland	THL Zinc Holing BV	100.00	100.00
23	Vedanta Lisheen Mining Limited	Zinc and lead mining	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
24	AvanStrate Inc. ('ASI') <sup>1</sup>	Operating and holding Company	Japan	Cairn India Holdings Limited	51.63	51.63
25	Cairn India Holdings Limited	Investment company	Jersey	Vedanta Limited	100.00	100.00
26	Western Cluster Limited	Iron ore mining	Liberia	Bloom Fountain Limited	100.00	100.00
27	Bloom Fountain Limited	Operating (Iron ore) and Investment Company	Mauritius	Vedanta Limited	100.00	100.00
28	CIG Mauritius Holdings Private Limited	Investment Company	Mauritius	Cairn Energy Hydrocarbons Limited	100.00	100.00
29	CIG Mauritius Private Limited	Investment Company	Mauritius	CIG Mauritius Holdings Private Limited	100.00	100.00
30	Sesa Sterlite Mauritius Holdings Limited *	Investment Company	Mauritius	Bloom Fountain Limited	100.00	100.00
31	THL Zinc Ltd.	Investment company	Mauritius	THL Zinc Ventures Ltd	100.00	100.00
32	THL Zinc Ventures Limited	Investment company	Mauritius	Vedanta Limited	100.00	100.00
33	Twin Star Energy Holdings Limited ("TEHL")*	. ,	Mauritius	Bloom Fountain Limited	100.00	100.00
34	Twin Star Mauritius Holdings Limited ("TMHL") *	Investment company	Mauritius	Twin Star Energy Holdings Limited	100.00	100.00
35	Amica Guesthouse (Proprietary) Limited	Accommodation and catering services	Namibia	Skorpion Zinc (Proprietary) Limited	100.00	100.00

as at and for the year ended March 31, 2019

					The Company's / Ir Company's perc	entage holding
S. No	Subsidiaries	Principal activities	Country of Incorporation	Immediate holding company	As at March 31, 2019	As at March 31, 2018
36	Namzinc (Proprietary) Limited	Owns and operates zinc refinery	Namibia	Skorpion Zinc (Proprietary) Limited	100.00	100.00
37	Rosh Pinah Healthcare (Proprietary) Limited	Leasing out of medical equipment and building and conducting services related thereto	Namibia	Skorpion Zinc (Proprietary) Limited	69.00	69.00
38	Skorpion Mining Company (Proprietary) Limited ('NZ')	Exploration, development, production and sale of zinc ore	Namibia	Skorpion Zinc (Proprietary) Limited	100.00	100.00
39	Skorpion Zinc (Proprietary) Limited ('SZPL')	Operating (Zinc) and Investment Company	Namibia	THL Zinc Namibia Holdings (Proprietary) Limited	100.00	100.00
40	THL Zinc Namibia Holdings (Proprietary) Limited ("VNHL")	Mining and Exploration and Investment company	Namibia	THL Zinc Ltd	100.00	100.00
41	Lakomasko BV	Investment company	Netherlands	THL Zinc Holding BV	100.00	100.00
42	Monte Cello BV ("MCBV")	Investment company	Netherlands	Vedanta Limited	100.00	100.00
43	THL Zinc Holding BV	Investment company	Netherlands	Vedanta Limited	100.00	100.00
44	Cairn Energy Discovery Limited	Oil and gas exploration, development and production	Scotland	Cairn India Holdings Limited	100.00	100.00
45	Cairn Energy Gujarat Block 1 Limited	Oil and gas exploration, development and production	Scotland	Cairn India Holdings Limited	100.00	100.00
46	Cairn Energy Hydrocarbons Limited	Oil and gas exploration, development and production	Scotland**	Cairn India Holdings Limited	100.00	100.00
47	Cairn Exploration (No. 2) Limited	Oil and gas exploration, development and production	Scotland	Cairn India Holdings Limited	100.00	100.00
48	Black Mountain Mining (Proprietary) Limited	Exploration, development, production and sale of zinc, lead, copper and associated mineral concentrates		THL Zinc Ltd	74.00	74.00
49	Cairn South Africa Pty Limited	Oil and gas exploration, development and production	South Africa	Cairn Energy Hydrocarbons Limited	100.00	100.00
50	AvanStrate Korea Inc¹	Manufacturer of LCD glass substrate	South Korea	Avanstrate (Japan) Inc.	51.63	51.63
51	Cairn Lanka Private Limited	Oil and gas exploration, development and production	Sri Lanka	CIG Mauritius Private Limited	100.00	100.00
52	AvanStrate Taiwan Inc¹	Manufacturer of LCD glass substrate	Taiwan	Avanstrate (Japan) Inc.	51.63	51.63
53	Fujairah Gold FZC	Gold & silver processing	United Arab Emirates	Malco Energy Limited	100.00	100.00
54	Sterlite (USA) Inc.*	Investment company	United States	s Vedanta Limited	100.00	100.00

<sup>\*</sup>Under liquidation \*\*Principal place of business is in India \*\*\*Incorporated during the current year

 $<sup>1\,\,\</sup>mathrm{On\,December\,28,\,2017,\,the\,Group\,through\,its\,wholly\,owned\,subsidiary,\,acquired\,51.6\%\,equity\,stake\,in\,AvanStrate\,Inc.\,(ASI)}$ 

<sup>2</sup> The Group also has interest in certain trusts which are neither significant nor material to the Group.

<sup>3</sup> On June 4, 2018, the Group through its wholly owned subsidiary, acquired 90.0% equity stake in Electrosteel Steels Limited (ESL)

# Notes forming part of the financial statements

as at and for the year ended March 31, 2019

### b) Joint operations

The Company participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities which are as follows:

		Participating	Interest (%)
		As at	As at
Oil & gas blocks/ fields	Area	March 31, 2019	March 31, 2018
Operating Blocks			
Ravva block - Exploration, Development and Production	Krishna Godavari	22.50	22.50
CB-OS/2 – Exploration	Cambay Offshore	60.00	60.00
CB-OS/2 - Development & production	Cambay Offshore	40.00	40.00
RJ-ON-90/1 – Exploration	Rajasthan Onshore	50.00	50.00
RJ-ON-90/1 - Development & production	Rajasthan Onshore	35.00	35.00
Non-Operating Blocks			
KG-ONN-2003/11	Krishna Godavari Onshore	49.00	49.00

<sup>(1)</sup> Operatorship has been transferred to Oil and Natural Gas Corporation (ONGC) w.e.f. July 7, 2014

# c) Interest in associates and joint ventures

Set out below are the associates and joint ventures of the Company as at March 31, 2019 which, in the opinion of the directors, are not material to the Company. The country of incorporation or registration is also their principal place of business, and the proportion of ownership interest is the same as the proportion of voting rights held.

			% Ownership interest	
S. No	. Associates	Country of incorporation	As at March 31, 2019	As at March 31, 2018
1	Roshkor Township (Pty) Limited	Namibia	50.00	50.00
2	Gaurav Overseas Private Limited	India	50.00	50.00

			% Ownersh	ip interest
S. No.	Jointly controlled entities	Country of incorporation	As at March 31, 2019	As at March 31, 2018
1	Rampia Coal Mines and Energy Private Limited	India	17.39	17.39
2	Madanpur South Coal Company Limited	India	18.05	18.05
3	Goa Maritime Private Limited	India	50.00	50.00

# 39 (a) The Company has incurred an amount of ₹ 52 Crore (March 31, 2018: ₹ 45 Crore) towards Corporate Social Responsibility (CSR) as per Section 135 of the Companies Act, 2013 and is included in other expenses:

(₹ in Crore)

		As at March 31, 2019		As at March	31 2018
Parti	culars	In- Cash	Yet to be Paid in Cash	In- Cash	Yet to be Paid in Cash
(a)	Gross amount required to be spend by the Company during the year	13		9	
(b)	Amount spent on:*				
i)	Construction/acquisition of assets	-	-	-	-
ii)	On purposes other than (i) above (for CSR projects)	36	16	29	16
	Total	36	16	29	16

<sup>\*</sup>Includes ₹ 24 Crore (March 31,2018: ₹ 16 Crore) paid to related party (Refer Note 36)

<sup>(2)</sup> PR - OSN - 2004/1 block was relinquished on June 30, 2017.

as at and for the year ended March 31, 2019

# (b) Disclosures under Section 22 of the Micro, Small and Medium Enterprises Development Act 2006

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
(i) Principal amount remaining unpaid to any supplier as at the end of the accounting year	59	84
(ii) Interest due thereon remaining unpaid to any supplier as at the end of the accounting year	-	-
(iii) The amount of interest paid along with the amounts of the payment made to the supplier beyond the appointed day	-	-
(iv) The amount of interest due and payable for the year	-	-
(v) The amount of interest accrued and remaining unpaid at the end of the accounting year	-	-
(vi) The amount of further interest due and payable even in the succeeding year, until such date when the interest dues as above are actually paid	-	-

# (c) Loans and Advance(s) in the nature of Loan (Regulation 34 of Listing Obligations & Disclosure Requirements):

(₹ in Crore)

(a)	Name of the Company	Relationship	Balance as at March 31, 2019	MaximumAmount Outstanding during the year	Balance as at March 31, 2018
	Paradip Multi Cargo Berth Private Limited	Wholly owned Subsidiary	0	0	0
	Sterlite Ports Limited	Wholly owned Subsidiary	4	4	4
	Sterlite Iron and Steel Company Limited	Fellow Subsidiary	5	5	5
	Sesa Resources Limited *	Wholly owned Subsidiary	79	79	-
	Vedanta Star Limited	Wholly owned Subsidiary	197	197	-
	Sesa Mining Corporation Limited	Wholly owned Subsidiary	26	26	_

<sup>\*</sup> Sesa Resources Limited and includes ₹ 69 crores as advance/interest receivable converted to loan during the year.

- (b) None of the loanee have made, per se, investment in the shares of the Company.
- (c) Investments made by Sterlite Ports Limited in Maritime Ventures Private Limited - 10,000 equity shares and Goa Sea Port - 50,000 equity shares.

Investments made by Sesa Resources Limited in Sesa Mining Corporation Limited - 11,50,000 equity shares and Goa Maritime Private Limited- 5,000 Shares

# 40 (a) Acquisition of new hydrocarbon blocks

In August, 2018, the Company was awarded 41 hydrocarbon blocks out of 55 blocks auctioned under the open acreage licensing policy (OALP) by Government of India (GOI). The blocks awarded to the Company comprise of 33 onshore and 8 offshore blocks. The Company will share a specified proportion of the net revenue from each block with GOI and has entered into 41 separate revenue sharing contracts (RSC) on October 01, 2018.

The bid cost of ₹ 3,811 Crore represents Company's total committed capital expenditure on the blocks for the committed work programme during the exploration phase. The Company has provided bank guarantees for minimum work programme commitments amounting to ₹ 2,268 Crore for the 41 exploration blocks. These have been disclosed in Note 35.

# (b) Oil & gas reserves and resources

The Company's gross reserve estimates are updated atleast annually based on the forecast of production profiles, determined on an asset-by-asset basis, using appropriate petroleum engineering techniques. The estimates of reserves and resources have been derived in accordance with the Society for Petroleum Engineers "Petroleum Resources Management System (2018)". The changes to the reserves are generally on account of future development projects, application of technologies such as enhanced oil recovery

# Notes forming part of the financial statements

as at and for the year ended March 31, 2019

techniques and true up of the estimates. The management's internal estimates of hydrocarbon reserves and resources at the period end, are as follows:

		Gross proved and probable hydrocarbons initially in place		Gross proved and probable reserves and resources		Net working interest proved and probable reserves and resources		
		(mm	iboe)	(mm	boe)	(mm	boe)	
Particulars	Country	As at March 31, 2019	As at March 31, 2018	As at March 31, 2019	As at March 31, 2018	As at March 31, 2019	As at March 31, 2018	
Rajasthan MBA Fields	India	2,288	2,288	362	371	127	130	
Rajasthan MBA EOR	India	-	-	293	335	103	117	
Rajasthan Block Other Fields	India	3,405	3,460	428	430	150	150	
Ravva Fields	India	724	733	39	45	9	10	
CBOS/2 Fields	India	254	251	33	34	13	13	
Other fields	India	335	335	40	48	22	24	
Total		7,006	7,067	1,195	1,263	423	444	

The Company's net working interest proved and probable reserves is as follows:

	Proved and probable reserves		Proved and probable reserves (developed)	
	Oil	Gas	Oil	Gas
Particulars	(mmstb)	(bscf)	(mmstb)	(bscf)
Reserves as of March 31, 2017*	62	29	53	12
Additions / (revision) during the year	15	8	8	13
Production during the year	(22)	(6)	(22)	(6)
Reserves as of March 31, 2018**	55	31	39	19
Additions / (revision) during the year	132	117	78	60
Production during the year	(23)	(8)	(23)	(8)
Reserves as of March 31, 2019***	164	140	94	71

<sup>\*</sup> Includes probable oil reserves of 20.36 mmstb (of which 11.73 mmstb is developed) and probable gas reserves of 22.69 bscf (of which 4.75 bscf is developed)

mmboe = million barrels of oil equivalent

mmstb = million stock tank barrels

bscf = billion standard cubic feet

1 million metric tonnes = 7.4 mmstb

1 standard cubic meter =35.315 standard cubic feet

MBA = Mangala, Bhagyam & Aishwarya

EOR = Enhanced Oil Recovery

(c) Pursuant to Management Committee recommendation and minutes of Empowered Committee of Secretaries (ECS) filed by Gol, Vedanta Limited had considered cost recovery of ₹ 567 Crore (US\$ 88 million) in FY 2018, being the cost incurred over the initially approved FDP of Pipeline Project. Vedanta Limited's claim for the resultant profit petroleum of ₹ 149 Crore (US\$ 22 million) (refer note 19), which had been previously paid, has been disputed by the Gol. The Company believes that it has a good case on merits to recover the amount and has therefore treated it as a non-current recoverable amount.

<sup>\*\*</sup> Includes probable oil reserves of 15.43 mmstb (of which 2.97 mmstb is developed) and probable gas reserves of 14.51 bscf (of which 3.91 bscf is developed)

<sup>\*\*\*</sup> Includes probable oil reserves of 60.77 mmstb (of which 9.80 mmstb is developed) and probable gas reserves of 47.86 bscf (of which 15.07 bscf is developed)

<sup>#</sup> The increase in reserve is on account of PSC extension for the Rajasthan and Ravva block. For more details, refer note 3(c)(A)(xi).

as at and for the year ended March 31, 2019

### **41 OTHER NOTES**

1) The Scheme of Amalgamation and Arrangement amongst Sterlite Energy Limited ('SEL'), Sterlite Industries (India) Limited ('Sterlite'), Vedanta Aluminium Limited ('VAL'), Ekaterina Limited ('Ekaterina'), Madras Aluminium Company Limited ('Malco') and the Company (the "Scheme") had been sanctioned by the Hon'ble High Court of Madras and the Hon'ble High Court of Judicature of Bombay at Goa and was given effect to in the year ended March 31, 2014.

Subsequently the above orders of the Hon'ble High Court of Bombay and Madras have been challenged by Commissioner of Income Tax, Goa and Ministry of Corporate Affairs through a Special Leave Petition before the Hon'ble Supreme Court and also by a creditor and a shareholder of the Company. The said petitions are currently pending for hearing.

As per our report of even date

For S.R. Batliboi & Co. LLP Chartered Accountants ICAI Firm Registration No. 301003E/E300005

per Raj Agrawal

Membership No.: 82028

Place: Mumbai Date: May 07, 2019 For and on behalf of the Board of Directors

**Navin Agarwal** Executive Chairman DIN 00006303

**GR Arun Kumar** Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

Srinivasan Venkatakrishnan Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya Company Secretary ICSI Membership No. A20856

# **Independent Auditor's Report**

### To the Members of Vedanta Limited

## REPORT ON THE AUDIT OF THE CONSOLIDATED IND AS **FINANCIAL STATEMENTS**

### **OPINION**

We have audited the accompanying consolidated Ind AS financial statements of Vedanta Limited (hereinafter referred to as "the Holding Company"), its subsidiaries (the Holding Company and its subsidiaries together referred to as "the Group") its associates and jointly controlled entities, comprising of the consolidated Balance sheet as at March 31, 2019, the consolidated Statement of Profit and Loss, including other comprehensive income, the consolidated Cash Flow Statement and the consolidated Statement of Changes in Equity for the year then ended, and notes to the consolidated Ind AS financial statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as "the consolidated Ind AS financial statements").

In our opinion and to the best of our information and according to the explanations given to us [and based on the consideration of reports of other auditors on separate financial statements and on the other financial information of the subsidiaries, associates and jointly controlled entities the aforesaid consolidated Ind AS financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Group, its associates and jointly controlled entities as at March 31, 2019, their consolidated profit including other comprehensive income, their consolidated cash flows and the consolidated statement of changes in equity for the year ended on that date.

### **BASIS FOR OPINION**

We conducted our audit of the consolidated Ind AS financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the

Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Consolidated Ind AS Financial Statements' section of our report. We are independent of the Group in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the consolidated Ind AS financial statements.

## **KEY AUDIT MATTERS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated Ind AS financial statements for the financial year ended March 31, 2019. These matters were addressed in the context of our audit of the consolidated Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated Ind AS financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated Ind AS financial statements. The results of audit procedures performed by us and by other auditors of components not audited by us, as reported by them in their audit reports furnished to us by the management, including those procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated Ind AS financial statements.

# How our audit addressed the key audit matter

Recoverability of carrying value of property plant and equipment, capital work in progress and exploration intangible assets under development (as described in note 3c(A)(ii), 3c(A)(iii), 3c(A)(x), 6 and 33 of the consolidated Ind AS financial statements)

As at March 31, 2019, the carrying value of property, plant and equipment, capital work in progress and exploration intangible assets under development was Rs. 121,356 crore. We focused our efforts on the Cash Generating Units ("CGUs") of (a) Tuticorin within the copper segment; and (b) Krishna Godavri basin within the oil and gas segment, as they had impairment and/or impairment reversal indicators.

Recoverability of property plant and equipment, capital work in progress and exploration intangible assets under development has been identified as a key audit matter due to:

- · The significance of the carrying value of assets being assessed.
- The size of impairment charges and reversals in earlier years.
- The assessment of the recoverable amount of the Group's CGUs involves significant judgements about the future cash flow forecasts and the discount rate that is applied.
- The withdrawal of the Holding Company's licenses to operate in current year in one of the jurisdictions' and consequential litigation.

Our audit procedures included the following:

- · Critically assessed through an analysis of internal and external factors impacting the Company, whether there were any indicators of impairment (or reversal of impairment) in line with Ind AS 36.
- Specifically in relation to the CGUs where impairment and impairment reversal indicators were identified, obtained and evaluated the valuation models used to determine the recoverable amount by challenging the key assumptions used by management including:
  - Considering forecasted volumes in relation to asset development plans.
  - Critically assessing management's forecasting accuracy by comparing prior year forecasts to actual results and assessing the potential impact of any variances.
  - Corroborating the price assumptions used in the models against analyst consensus.

### Key audit matters

The key judgements and estimates centered on the likely outcome of the litigations, cash flow forecasts, prices and discount rate assumptions. An impairment reversal of Rs. 261 crore was recorded in the oil and gas segment during the year (refer note 33).

The key judgements and estimates centered on the likely outcome of the litigations, cash flow forecasts, prices and discount rate assumptions. An impairment reversal of Rs. 261 crore was recorded in the oil and gas segment during the year (refer note 33).

### How our audit addressed the key audit matter

- Testing the appropriateness of the weighted average cost of capital used to discount the impairment models through engaging valuation experts.
- Testing the integrity of the models together with their clerical accuracy.

Additionally, wherever impairment trigger arose due to withdrawal of the Holding Company's license to operate, we inspected the external legal opinions in respect of the merits of the case and critically assessed management's position through discussions with the legal counsel to determine the basis of their conclusion.

- · Assessed the competence and objectivity of the external experts, to satisfy ourselves that these parties are appropriate in their roles within the estimation process.
- Assessed the adequacy of the disclosures made by the Group in this regard.

Revenue recognition (as described in note 3a(C), 3c(A)(xi), 3c(B)(iii) and 25 of the consolidated Ind AS financial statements)

For the year ended March 31, 2019 the Group has recognized revenue from operations of Rs. 90,901 crore.

Revenue recognition has been recognized as a key audit matter due to diverse and complex revenue streams across the Group.

We have identified following key areas for consideration:

- Complexity associated with the calculation of profit petroleum in the Oil & Gas segment.
- Complex calculation of power tariff agreements with Grid Corporation of Odisha Limited (GRIDCO) and Punjab State Power Corporation Limited (PSPCL).
- Cut-off: The variety of terms in the zinc, iron ore, copper, aluminum and steel segments that define when control is transferred to the customer, as well as the high value of the transactions, give rise to the risk that revenue is not recognized in the correct period.

• Our audit procedures included considering the appropriateness of the Group's revenue recognition accounting policies and

Our audit procedures included the following:

assessing compliance with the policies in terms of Ind AS 115. · Performed walkthroughs and test of controls, assisted by IT

specialists, of the revenue recognition processes and assessed the

Inspected the terms of production sharing contracts in the Oil & Gas segment and tested the underlying cost recovery and profit petroleum calculations used by the management. Also, inspected external legal opinions (where considered necessary) to evaluate the merits of the claims made by the Company in computing government's share of revenue. We also assessed the adequacy of disclosures made by the Group relating to calculation of profit petroleum within the Oil & Gas segment.

design and operating effectiveness of key controls.

- Inspected the terms of the power purchase agreement to assess the reasonability of the inputs used in the calculation of the power tariff in respect of the revenue recognized for GRIDCO and PSCPL. Other procedures relating to the revenue of the Power division are mentioned in the recoverability of disputed receivables section.
- · Selected a sample of sales, in the zinc, steel, copper, iron ore and aluminum segments, made pre and post year end, agreeing the date of revenue recognition to third party support, such as bills of lading, to confirm sales are recognized according to contract conditions
- Examined invoice samples with various shipping terms to ensure that revenue has been recognized appropriately.

Recoverability of disputed receivables (as described in note 3c(B)(iii) and note 8 of the consolidated Ind AS financial statements)

As of March 31, 2019 the value of disputed receivables in the power segment aggregated to ₹ 4,046 crore.

Due to disagreements over the quantification or timing of the receivables, the recovery of said receivables are subject to increased risk. Some of these balances are also subject to litigation. The risk is specifically related to receivables from Punjab State Power Corporation Limited, GRIDCO and Tamil Nadu Electricity Board. These receivables include long outstanding balances as well and are also subject to counter party credit risk.

Our audit procedures included the following:

- · Examined the underlying power purchase agreements.
- Inspected the relevant state regulatory commission, appellate tribunal and court rulings.
- · Inspected external legal opinions in respect of the merits of the case and critically assessed management's position through discussions with the management's in-house legal team to determine the basis of their conclusion.
- · Examined management's assessment of recoverability of receivables.
- · Assessed the adequacy of the disclosures made by the Group in this regard.

# **Independent Auditor's Report** continued

# Key audit matters

### How our audit addressed the key audit matter

Claims and exposures relating to taxation and litigation (as described in note 3c(B)(ii) and 37 of the consolidated Ind AS financial

The Group is subject to a large number of legal and tax related claims which have been disclosed / provided for in the financial statements based on the facts and circumstances of each case.

Taxation and litigation exposures have been identified as a key audit matter due to the complexities involved in these matters, timescales involved for resolution and the potential financial impact of these on the financial statements. Further, significant management judgement is involved in assessing the exposure of each case and thus a risk that such cases may not be adequately provided for or disclosed.

Our audit procedures included the following:-

- Gained an understanding of the process of identification of claims, litigations and contingent liabilities and identified key controls in the process. For selected controls we have performed tests of controls.
- Obtained the summary of Group's legal and tax cases and critically assessed management's position through discussions with the Legal Counsel, Head of Tax and operational management, on both the probability of success in significant cases, and the magnitude of any potential loss.
- Inspected external legal opinions (where considered necessary) and other evidence to corroborate management's assessment of the risk profile in respect of legal claims.
- Engaged tax specialists to technically appraise the tax positions taken by management with respect to local tax issues.
- · Assessed whether management assessment of similar cases is consistent across the divisions or that differences in positions are adequately justified.
- · Assessed the relevant disclosures made within the financial statements to address whether they appropriately reflect the facts and circumstances of the respective tax and legal exposures and the requirements of relevant accounting standards.

Recoverability of unutilized Minimum Alternate Tax (MAT) credits included under deferred tax assets (as described in note 3c(A)(ix) and 34 of the consolidated Ind AS financial statements)

Deferred tax assets as at March 31, 2019 includes MAT credits of ₹ 3,971 Crore relating to the Holding Company which is available for

utilization against future tax liabilities. The analysis of the recoverability of such deferred tax assets has been identified as a key audit matter because the assessment process involves judgement regarding the future profitability and

likelihood of the realization of these assets, in particular whether there will be taxable profits in future periods that support the recognition of these assets. This requires assumptions regarding future profitability, which is inherently uncertain. Accordingly, the same is considered as a key audit matter.

Of the above MAT credits, we focused our effort on MAT assets of ₹ 1,161 Crore which are expected to be utilized during the last two years of the stipulated fifteen year carry forward period from the year in which, the same arose.

Our audit procedures included the following:-

- Obtained and analysed the future projections estimated by management, assessing the key assumptions used, including the analysis of the consistency of the actual results obtained by the various segments with those projected in the previous year. We further obtained evidence of the approval of the budgeted results included in the current year's projections, and the reasonableness of the future cash flow projections and the consistency of those projections with those used in other areas of estimation such as those used for assessing the recoverability
- Tested the completeness and accuracy of the MAT credits recognized as deferred tax assets.

Purchase of economic interest in a structured investment from a related party (as described in note 38 of the consolidated Ind AS financial statements)

The Group has as part of its cash management activities purchased • from its ultimate parent company the economic interests in a structured investment.

We considered this transaction to be a key audit matter as it was unique and required involvement of third party experts to determine the fair value of the instrument and an analysis of the relevant laws and regulations governing related party transactions.

- Obtained an understanding of the transaction and the key terms through inspection of board and audit committee minutes, underlying agreements and discussions with the management.
- · Examined the reports of the third-party experts engaged by the management to determine the fair value of the instrument. Also evaluated the experience and competence of such experts.
- Engaged valuation specialists to assist us in auditing the said valuation report.
- · Held discussions with the management to assess compliance with the relevant laws and regulations governing related party transactions before undertaking the transaction. Also read the external legal opinion obtained by the Company in this regard.
- · Assessed the adequacy of the disclosures in the financial statements regarding this transaction.

The Holding Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Annual report, but does not include the consolidated Ind AS financial statements and our auditor's report thereon.

Our opinion on the consolidated Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

# **RESPONSIBILITIES OF MANAGEMENT FOR THE CONSOLIDATED IND AS FINANCIAL STATEMENTS**

The Holding Company's Board of Directors is responsible for the preparation and presentation of these consolidated Ind AS financial statements in terms of the requirements of the Act that give a true and fair view of the consolidated financial position, consolidated financial performance including other comprehensive income, consolidated cash flows and consolidated statement of changes in equity of the Group including its associates and jointly controlled entities in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. The respective Board of Directors of the companies included in the Group and of its associates and iointly controlled entities are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Group and of its associates and jointly controlled entities and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the consolidated Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated Ind AS financial statements by the Directors of the Holding Company, as aforesaid.

In preparing the consolidated financial statements, the respective Board of Directors of the companies included in the Group and of its associates and jointly controlled entities are responsible for assessing the ability of the Group and of its associates and jointly controlled entities to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those respective Board of Directors of the companies included in the Group and of its associates and jointly controlled entities are also responsible for overseeing the financial reporting process of the Group and of its associates and jointly controlled entities.

# **AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED IND AS FINANCIAL STATEMENTS**

Our objectives are to obtain reasonable assurance about whether the consolidated Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated Ind AS financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- · Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3) (i) of the Act, we are also responsible for expressing our opinion on whether the Holding Company has adequate internal financial controls system in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Group and its associates and jointly controlled entities to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated Ind AS financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and its associates and jointly controlled entities to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated Ind AS financial statements, including the disclosures, and whether the consolidated Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

# **Independent Auditor's Report** continued

· Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group and its associates and jointly controlled entities of which we are the independent auditors and whose financial information we have audited, to express an opinion on the consolidated Ind AS financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the consolidated financial statements of which we are the independent auditors. For the other entities included in the consolidated financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.

We communicate with those charged with governance of the Holding Company and such other entities included in the consolidated Ind AS financial statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated Ind AS financial statements for the financial year ended March 31, 2019 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

# **OTHER MATTER**

(a) We did not audit the financial statements and other financial information, in respect of 14 subsidiaries, whose Ind AS financial statements include total assets of Rs 17,813 crore as at March 31, 2019, and total revenues of Rs 7,066 crore and net cash inflows of Rs 537 crore for the year ended on that date. These Ind AS financial statement and other financial information have been audited by other auditors, which financial statements, other financial information and auditor's reports have been furnished to us by the management. The consolidated Ind AS financial statements also include the Group's share of net profit of Rs. nil for the year ended March 31, 2019, as considered in the consolidated Ind AS financial statements, in respect of 1 associate, whose financial statements, other financial information have been audited by other auditors and whose reports have been furnished to us by the Management. Our opinion on the consolidated Ind AS financial statements, in so far as it relates to the amounts and disclosures included in respect of these subsidiaries and associate, and our report in terms of sub-sections (3) of Section 143 of the Act, in so far as it relates to the aforesaid subsidiaries and associates, is based solely on the report(s) of such other auditors.

Certain of these subsidiaries and associate are located outside India whose financial statements and other financial information have been prepared in accordance with accounting principles generally accepted in the respective countries and which have been audited by other auditors under generally accepted auditing standards applicable in their respective countries. The Company's management has converted the financial statements of such subsidiaries and associate located outside India from accounting principles generally accepted in their respective countries to accounting principles generally accepted in India. We have audited these conversion adjustments made by the Company's management. Our opinion in so far as it relates to the balances and affairs of such subsidiaries and associate located outside India is based on the report of other auditors and the conversion adjustments prepared by the management of the Company and audited by us.

(b) The accompanying consolidated Ind AS financial statements include unaudited financial information in respect of 3 subsidiaries, whose financial statements and other financial information reflect total assets of Rs 2,899 crore as at March 31, 2019, and total revenues of Rs.706 crore and net cash outflows of Rs 119 crore for the year ended on that date. The consolidated Ind AS financial statements also include the Group's share of net profit of Rs. Nil for the year ended March 31, 2019, as considered in the consolidated Ind AS financial statements, in respect of 1 associate and 3 jointly controlled entities, which financial statements, other financial information have not been audited and whose unaudited financial statements, other unaudited financial information have been furnished to us by the management. Our opinion, in so far as it relates amounts and disclosures included in respect of these subsidiaries, associates and jointly controlled entities, and our report in terms of sub-sections (3) of Section 143 of the Act in so far as it relates to the aforesaid subsidiaries, associates and jointly controlled entities, is based solely on such unaudited financial statement and other unaudited financial information. According to the information and explanations given to us by the management, these financial statements and other financial information are not material to the Group.

Our opinion above on the consolidated Ind AS financial statements, and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial statements and other financial information certified by the management.

### REPORT ON OTHER LEGAL AND REGULATORY **REQUIREMENTS**

As required by Section 143(3) of the Act, based on our audit and on the consideration of report of the other auditors on separate financial statements and the other financial information of subsidiaries, associates and jointly controlled entities, as noted in the 'other matter' paragraph we report, to the extent applicable, that:

(a) We/the other auditors whose report we have relied upon have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated Ind AS financial statements;

- (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidation of the financial statements have been kept so far as it appears from our examination of those books and reports of the other auditors;
- (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Consolidated Cash Flow Statement and Consolidated Statement of Changes in Equity dealt with by this Report are in agreement with the books of account maintained for the purpose of preparation of the consolidated Ind AS financial statements;
- (d) In our opinion, the aforesaid consolidated Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;
- (e) On the basis of the written representations received from the directors of the Holding Company as on March 31, 2019 taken on record by the Board of Directors of the Holding Company and the reports of the statutory auditors who are appointed under Section 139 of the Act, of its subsidiary companies, associate companies and jointly controlled entities, none of the directors of the Group's companies, its associates and jointly controlled entities incorporated in India is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164 (2) of the Act;
- (f) With respect to the adequacy and the operating effectiveness of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements of the Holding Company and its subsidiary companies, associate companies and jointly controlled entities incorporated in India, refer to our separate Report in "Annexure 1" to this report;
- (g) In our opinion and based on the consideration of reports of other statutory auditors of the subsidiaries, associates and jointly controlled entities in India, the managerial remuneration

- for the year ended March 31, 2019 has been paid / provided by the Holding Company, its subsidiaries, associates and jointly controlled entities incorporated in India to their directors in accordance with the provisions of section 197 read with Schedule V to the Act;
- (h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended, in our opinion and to the best of our information and according to the explanations given to us and based on the consideration of the report of the other auditors on separate financial statements as also the other financial information of the subsidiaries, associates and jointly controlled entities, as noted in the 'Other matter' paragraph:
- i. The consolidated Ind AS financial statements disclose the impact of pending litigations on its consolidated financial position of the Group, its associates and jointly controlled entities in its consolidated Ind AS financial statements - Refer Note 37 to the consolidated Ind AS financial statements;
- ii. The Group, its associates and jointly controlled entities did not have any material foreseeable losses in long-term contracts including derivative contracts during the year ended March 31, 2019;
- iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Holding Company, its subsidiaries, associates and jointly controlled entities incorporated in India during the year ended March 31, 2019.

For S.R. Batliboi & Co. LLP

**Chartered Accountants** 

ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal Partner

Place: Mumbai Date: May 07, 2019

Membership Number: 82028

# **Independent Auditor's Report** continued

Annexure 1 referred to in para (f) under the heading "Report on Other Legal and Regulatory Requirements" to the independent auditor's report of even date on the consolidated Ind AS Financial Statements of Vedanta Limited

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

1. In conjunction with our audit of the consolidated Ind AS financial statements of Vedanta Limited as of and for the year ended March 31, 2019, we have audited the internal financial controls over financial reporting of Vedanta Limited (hereinafter referred to as the "Holding Company") and its subsidiary companies, its associate companies and jointly controlled entities, which are companies incorporated in India, as of that date

# MANAGEMENT'S RESPONSIBILITY FOR INTERNAL **FINANCIAL CONTROLS**

2. The respective Board of Directors of the Holding Company, its 12 subsidiary companies, its 1 associate company and 3 jointly controlled entities, which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by them considering the essential components of internal control stated in the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) ("COSO 2013 criteria") and for one of its subsidiary company, which is also a company incorporated in India, based on the internal control over financial reporting criteria established by them considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

# **AUDITOR'S RESPONSIBILITY**

3. Our responsibility is to express an opinion on the Holding Company's internal financial controls over financial reporting with reference to these consolidated financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, both, issued by Institute of Chartered Accountants of India, and deemed to be prescribed under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements and their operating effectiveness. Our audit of internal financial controls over financial reporting

included obtaining an understanding of internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements.

# **MEANING OF INTERNAL FINANCIAL CONTROLS OVER** FINANCIAL REPORTING WITH REFERENCE TO THESE **CONSOLIDATED IND AS FINANCIAL STATEMENTS**

6. A company's internal financial control over financial reporting with reference to these consolidated Ind AS financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting with reference to these consolidated financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

# **INHERENT LIMITATIONS OF INTERNAL FINANCIAL CONTROLS OVER FINANCIAL REPORTING WITH** REFERENCE TO THESE CONSOLIDATED FINANCIAL **STATEMENTS**

7. Because of the inherent limitations of internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements to future periods are subject to the risk that the internal financial control over financial reporting with reference to these consolidated financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### **OPINION**

8. In our opinion, the Holding Company, its subsidiary companies, its associate company and jointly controlled entities, which are companies incorporated in India, have, maintained in all material respects, adequate internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements and such internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements were operating effectively as at March 31,2019, based on the internal control over financial reporting criteria established by the them considering the essential components of internal control stated in the COSO 2013 criteria and the Guidance Note as described in paragraph 2 above.

### **OTHER MATTER**

9. Our report under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements of the Holding Company, insofar as it relates to 1 subsidiary company, which is incorporated in India, is based on the corresponding report of the auditor of such subsidiary.

For S.R. Batliboi & Co. LLP

**Chartered Accountants** 

ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal

Place: Mumbai Partner Date: May 07, 2019 Membership Number: 82028

# **Consolidated Balance Sheet**

as at March 31, 2019

(₹ in crore)

Particulars	Note	As at March 31, 2019	As a March 31, 2018
ASSETS			
Non-current assets			
Property, Plant and Equipment	6	95,515	79,330
Capital work-in-progress	6	22,236	16,14
Intangible assets	6	882	94
Exploration intangible assets under developments	6	2,723	15,91
Financial assets		•	
Investments	7A	4,891	16
Trade receivables	8	3,688	1,34
Loans	9	20	2
Others	10	1,083	3,14
Deferred tax assets (net)	34	3,475	4,93
Income tax assets (net)	34	3,484	3,38
Other non-current assets	11	4,218	4,13
Total non-current assets		1,42,215	1,29,47
Current assets			
Inventories	12	13,198	11,96 <sup>-</sup>
Financial assets			
Investments	7B	28,174	28,53
Trade receivables	8	3,982	3,96
Cash and cash equivalents	13	7,289	4,23
Other bank balances	14	1,080	98
Loans	9	82	8
Derivatives		78	15
Others	10	2,482	1,20
Income tax assets (net)		8	1
Other current assets	11	3,455	3,97
Total current assets		59,828	55,11
Total assets		2,02,043	1,84,58
EQUITY AND LIABILITIES			
Equity			
Equity Share Capital	15	372	37:
Other Equity	16	61,925	62,94
Equity attributable to owners of Vedanta Limited		62,297	63,31
Non-controlling interests	17	15,227	15,96
Total Equity		77,524	79,27
Liabilities			
Non-current liabilities			
Financial liabilities			
Borrowings	19	34,721	26,78
Derivatives		99	11
Other financial liabilities	21	1,569	27
Provisions	23	2,596	2,36
Deferred tax liabilities (net)	34	4,484	4,21
Other non-current liabilities	24	4,409	4,30
Total non-current liabilities		47,878	38,06
Current liabilities			
Financial liabilities			
Borrowings	19	22,982	21,95
Trade payables	20	17,352	17,84
Derivatives		451	14
Other financial liabilities	21	22,288	18,66
Provisions	23	387	41
Income tax liabilities (net)		409	31
Other current liabilities	24	12,772	7,92
Total current liabilities		76,641	67,24
Total Equity and Liabilities		2,02,043	1,84,58

<sup>\*</sup> Restated (Refer note 2(b))

See accompanying notes to the financial statements

As per our report of even date

For **S.R. Batliboi & Co. LLP** Chartered Accountants ICAI Firm Registration No. 301003E/E300005

per **Raj Agrawal** Partner

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of Board of Directors

**Navin Agarwal** 

Executive Chairman DIN 00006303

**GR Arun Kumar** Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

Srinivasan Venkatakrishnan Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya

Company Secretary ICSI Membership No. A20856

# **Consolidated Statement of Profit and Loss**

for the year ended March 31, 2019

(₹ in Crore except otherwise stated)

			t otherwise stated)
Particulars Particulars	Note	Year ended March 31, 2019	Year ended March 31, 2018 *
Revenue from operations (Net of excise duty)		90,901	90,954
Add: Excise duty		-	1,057
Revenue from operations (Gross of excise duty)	25A	90,901	92,011
Other operating income	25B	1,147	912
Other income	26	4,018	3,205
Total Income		96,066	96,128
EXPENSES			
Cost of materials consumed		25,490	31,582
Purchases of stock-in-trade		588	220
Changes in inventories of finished goods, work-in-progress and stock in trade	27	72	450
Power & fuel charges		18,144	14,026
Employee benefits expense	28	3,023	2,496
Excise duty on sales		-	1,057
Finance costs	31	5,689	5,112
Depreciation, depletion and amortisation expense	6	8,192	6,283
Other expenses	32	21,628	18,230
Total expenses		82,826	79,456
Profit before exceptional items and tax		13,240	16,672
Net exceptional gain	33	320	2,897
Profit before tax		13,560	19,569
Tax expense/(benefit) :	34		
On other than exceptional items			
Net current tax expense		2,677	2,867
Net deferred tax expense		1,073	2,472
Distribution tax credit on dividend from subsidiaries		-	(1,536)
On exceptional items			
Net current tax expense		-	51
Net deferred tax expense		112	2,023
Net tax expense:		3,862	5,877
Profit after tax for the year before share in profit of jointly controlled entities and associates and non-controlling interests		9,698	13,692
Add: Share in profit of jointly controlled entities and associates		0	0
Profit for the year after share in profit of jointly controlled entities and associates (A)		9,698	13,692
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Re-measurement (loss)/gain on defined benefit plans		(40)	7
Tax credit		25	3
(Loss)/Gain on FVOCI equity investment		(45)	90
		(60)	100
Items that will be reclassified to profit or loss			
Net gain/(loss) of cash flow hedges recognised during the year		113	(398)
Tax (expense)/ credit		(51)	158
Net (gain)/ loss on cash flow hedges recycled to profit or loss		(184)	353
Tax credit / (expense)		60	(123)
Net loss on FVOCI investments		(150)	(23)
Tax credit		17	2
Exchange differences on translation		737	625
Tax expense		(25)	(3)
Exchange difference and translation reclassified to profit or loss		-	1,485
		517	2,076
Total other comprehensive income (B)		457	2,176
Total comprehensive income for the year (A+B)		10,155	15,868

# Consolidated Statement of Profit and Loss continued

for the year ended March 31, 2019

(₹ in Crore except otherwise stated)

(Cilif Group Carlot wide state			
Particulars	Note	Year ended March 31, 2019	Year ended March 31, 2018 *
Profit attributable to:			
Owners of Vedanta Limited		7,065	10,342
Non-controlling interests	17	2,633	3,350
Other comprehensive income attributable to:			
Owners of Vedanta Limited		585	2,108
Non-controlling interests	17	(128)	68
Total comprehensive income attributable to:			
Owners of Vedanta Limited		7,650	12,450
Non-controlling interests	17	2,505	3,418
Earnings per equity share after tax and exceptional items (₹):			
- Basic	35	19.07	28.30
- Diluted	35	18.98	28.24
Earnings per equity share after tax but before exceptional items (₹):			
- Basic	35	18.50	26.17
- Diluted	35	18.43	26.11

<sup>\*</sup> Restated (Refer note 2(b))

See accompanying notes to the financial statements As per our report of even date

For S.R. Batliboi & Co. LLP

Chartered Accountants
ICAI Firm Registration No. 301003E/E300005

per **Raj Agrawal** Partner

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of Board of Directors

**Navin Agarwal** 

Executive Chairman DIN 00006303

**GR Arun Kumar** Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

Srinivasan Venkatakrishnan

Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya

Company Secretary ICSI Membership No. A20856

# **Consolidated Statement of Cash Flows**

for the year ended March 31, 2019

Particulars	Year ended March 31, 2019	Year ended March 31, 2018*
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit before tax	13,560	19,569
Adjustments for:		
Depreciation, depletion and amortisation	8,220	6,310
Impairment reversal (net)	(261)	(4,327)
Other exceptional items	(59)	1,598
Provision for doubtful debts/advances/ Bad debts written off	-	68
Exploration costs written off	50	-
Fair value gain on financial assets held for trading	(1,988)	(1,676)
Loss on sale/discard of property, plant and equipment (net)	68	15
Foreign exchange Loss (net)	512	82
Unwinding of discount	93	84
Other non-operating income	-	22
Share based payment expense	81	47
Interest and dividend income	(1,447)	(1,304)
Interest expenses	5,593	4,996
Deferred government grant	(183)	(145)
Changes in assets and liabilities:		
Increase in trade and other receivables	(1,755)	(1,685)
Increase in inventories	(418)	(2,215)
Increase in other financial and non-financial assets	(935)	(1,633)
Increase in trade and other payable	932	101
Increase in other current and non-current liabilities	4,304	657
Cash generated from operations	26,367	20,564
Income taxes paid	(2,613)	(3,198)
Net cash from operating activities	23,754	17,366
CASH FLOWS FROM INVESTING ACTIVITIES		
Acquisition of Subsidiary (net of cash & cash equivalents acquired) (refer note 4)	(5,075)	(859)
Purchases of Property, Plant and Equipment (including intangibles)	(8,942)	(7,334)
Proceeds from sale of Property, Plant and Equipment	125	38
Proceeds from redemption of short-term deposits	4,406	6,230
Short-term deposits made	(1,926)	(3,774)
Proceeds from sale of short term investments	83,362	1,02,592
Short-term investments made	(81,523)	(82,841)
Purchase of other investment (refer note 38)	(1,816)	-
Interest received	884	1,405
Dividends received	30	10
Payments made to site restoration fund	(55)	(71)
Net cash (used in) / from investing activities	(10,530)	15,396

# Consolidated Statement of Cash Flows continued

for the year ended March 31, 2019

(₹ in Crore)

		(( 111 01010)
Particulars	Year ended March 31, 2019	Year ended March 31, 2018*
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayment of short term loan (net)	(626)	(3,945)
Proceeds from current borrowings	4,429	4,238
Repayment of current borrowings	(3,179)	(9,291)
Proceeds from long-term borrowings	16,835	8,271
Repayment of long-term borrowings	(9,760)	(16,542)
Interest paid	(6,009)	(5,006)
Payment of dividends to equity holders of the parent, including dividend distribution tax	(8,076)	(14,881)
Payment of dividends to non-controlling interests, including dividend distribution tax	(3,716)	(1,931)
Purchase of Treasury Shares for stock options	(144)	(202)
Exercise of Stock Options	4	34
Net cash used in financing activities	(10,242)	(39,255)
Effect of exchange rate changes on cash and cash equivalents	(64)	84
Net increase/(decrease) in cash and cash equivalents	2,918	(6,409)
Cash and cash equivalents at the beginning of the year (Refer Note 14(e))	4,467	10,876
Cash and cash equivalents at the end of the year (Refer Note 14(e))	7,385	4,467

- 1. The figures in brackets indicate outflows.
- 2. The cash flow statement has been prepared using the indlrect method as set out in Ind AS 7.

See accompanying notes to the financial statements

As per our report of even date

For **S.R. Batliboi & Co. LLP** Chartered Accountants

ICAI Firm Registration No. 301003E/E300005

per **Raj Agrawal** Partner

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of Board of Directors

Navin Agarwal Executive Chairman

DIN 00006303

**GR Arun Kumar** Whole-Time Director and Chief Financial Officer DIN 01874769

Place: Mumbai Date: May 07, 2019

**Srinivasan Venkatakrishnan** Whole-Time Director and

Chief Executive Officer DIN 08364908

Prerna Halwasiya Company Secretary ICSI Membership No. A20856

<sup>\*</sup> Restated (Refer note 2(b))

# **Consolidated Statement of Changes in Equity**

for the year ended March 31, 2019

# A. EQUITY SHARE CAPITAL

Equity shares of ₹1/- each issued, subscribed and fully paid up	Number of shares (₹ in crore)	Amount (₹ in crore)
As at March 31, 2019 and March 31, 2018	372	372

# **B. OTHER EQUITY**

(₹ in Crore)

-			Reserves	and surplus		Items	of OCL				
		Securities		Other reserves	Foreign currency	Equity instruments	Debt instruments	Effective portion of	Total	Non-	
	Capital	premium	Retained	(Refer note	translation	through	through	cash flow	other	controlling	
	reserve	reserve	earnings	below)	reserve	OCI	OCI	hedges	equity	interests	Total
Balance as at April 01, 2017	19,019	19,009	1,716	21,039	(818)	59	99	5	60,128	13,928	74,056
Profit for the year	-	-	10,342	-	-	-	-	-	10,342	3,350	13,692
Other comprehensive income for the year (net of tax impact)	_	_	8	_	2.038	90	(13)	(15)	2,108	68	2,176
Total comprehensive income for					,				,		
the year	-	-	10,350	-	2,038	90	(13)	(15)	12,450	3,418	15,868
Purchase of treasury shares	-	-	-	(202)	-	-	-	-	(202)	-	(202)
Creation of legal reserve	-	_	(22)	22	_			_	_	_	-
Recognition of share based payment	-	_	-	47			-		47	-	47
Stock options cancelled during the											
year	-	-	3	(3)	-	-	-	-	-	-	-
Exercise of stock option	-	-	10	24		-	-	-	34	-	34
Transfer from debenture redemption reserve (net)	_	-	292	(292)	-			-	-	-	-
Acquisition of ASI (Refer note 4(b))	(69)	-	-				-		(69)	109	40
Recognition of put option liability/ derecognition of non controlling interest	14								14	(66)	(52)
Dividend, including tax on dividend	17		(0.100)							, ,	, ,
(Refer note 36)	-	-	(9,462)	-		-	-		(9,462)	(1,428)	(10,890)
<u> </u>	18,964	19,009	2,887	20,635	1,220	149	86	(10)	62,940	15,961	78,901
Profit for the year	-	-	7,065	-	-	-	-	-	7,065	2,633	9,698
Other comprehensive income for the year (net of tax impact)	-	-	(12)	-	791	(45)	(86)	(63)	585	(128)	457
Total comprehensive income for											
the year	-	-	7,053	-	791	(45)	(86)	(63)	7,650	2,505	10,155
Purchase of treasury shares	-	-	-	(144)	-	-	-	-	(144)	-	(144)
Recognition of share based payment	-	-	-	82	-	-	-	-	82	-	82
Stock options cancelled during the year	-	-	7	(7)	-	-		-	-	-	-
Exercise of stock option	-	-	1	3	-	-	-	-	4	-	4
Transfer from debenture redemption reserve (net)		-	174	(174)	-	-	-	-	-	-	-
Recognition of put option liability/ derecognition of non controlling nterest	(196)	_	_	-		_	-	-	(196)	139	(57)
Acquisition of ESL (refer note 4(a))	-	_	_	-		-	-	-	-	196	196
Dividend, including tax on dividend (Refer note 36)	_	_	(8,411)	_	_	_	_	_	(8,411)	(3,574)	(11,985)
· · · · · · · · · · · · · · · · · · ·	18.768	19.009	1.711	20,395	2,011	104		(72)	61,925	15,227	77,152

# Consolidated Statement of Changes in Equity continued

for the year ended March 31, 2019

Note:

Other reserves comprise of:

Particulars	Capital redemption reserve	Debenture redemption reserve	Preference share redemption reserve	Capital reserve on consolidation	Share based payment reserve	Legal reserve	Treasury shares	General reserve	Total
Balance as at April 01, 2017	23	1,769	77	10	155	3	(103)	19,105	21,039
Purchase of treasury shares	-	-	-	-	-	-	(202)	-	(202)
Creation of legal reserve	-	-	-	-	-	22	-	-	22
Recognition of share based payment	-	-	-	-	47	-	-	-	47
Stock options cancelled during the year	-	-	-	-	(3)	-	-	-	(3)
Exercise of stock options	-	-	-	-	(22)	-	46	-	24
Transfer from retained earnings	-	(292)	-	-	-	-	-	-	(292)
Balance as at March 31, 2018	23	1,477	77	10	177	25	(259)	19,105	20,635
Purchase of treasury shares	-	-	-	-	-	-	(144)	-	(144)
Recognition of share based payment	-	-	-	-	82	-	-	-	82
Stock options cancelled during the year	-	-	-	-	(7)	-	-	-	(7)
Exercise of stock option	-	-	-	-	(3)	-	6	-	3
Redemption of preference shares (refer note 16(e))	-	-	3,010	-	-	-	-	(3,010)	-
Transfer to retained earnings	-	(174)	-	-	-	-	-	-	(174)
Balance as at March 31, 2019	23	1,303	3,087	10	249	25	(397)	16,095	20,395

<sup>\*</sup> Restated (Refer note 2(b))

See accompanying notes to the financial statements

As per our report of even date

For S.R. Batliboi & Co. LLP Chartered Accountants

ICAI Firm Registration No. 301003E/E300005

per Raj Agrawal

Membership No.: 82028

Place: Mumbai Date: May 07, 2019

For and on behalf of Board of Directors

**Navin Agarwal** 

Executive Chairman DIN 00006303

**GR Arun Kumar** 

Whole-Time Director and Chief Financial Officer

DIN 01874769

Place: Mumbai Date: May 07, 2019

Srinivasan Venkatakrishnan

Whole-Time Director and Chief Executive Officer DIN 08364908

Prerna Halwasiya

Company Secretary ICSI Membership No. A20856

as at and for the year ended March 31, 2019

### 1. GROUP OVERVIEW

Vedanta Limited ("the Company") and its consolidated subsidiaries (collectively, the "Group") is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group engages in the exploration, production and sale of zinc, lead, silver, copper, aluminium, iron ore and oil and gas and have a presence across India, South Africa, Namibia, Ireland, Australia, Liberia and UAE. The Group is also in the business of commercial power generation, steel manufacturing and port operations in India and manufacturing of glass substrate in South Korea and Taiwan.

The Company was incorporated on September 8, 1975 under the laws of the Republic of India. The registered office of the Company is situated at 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai-400092, Maharashtra. the Company's shares are listed on National Stock Exchange and Bombay Stock Exchange in India. In June 2007, the Company completed its initial public offering of American Depositary Shares, or ADS, each representing four equity shares, and listed its ADSs on the New York Stock Exchange. In July 2009, Vedanta Limited completed its follow-on offering of an additional 131,906,011 ADSs, each representing four equity shares, which are listed on the New York Stock Exchange.

The Company is majority owned by Twin Star Holdings Limited ("Twin Star"), Finsider International Company Limited ("Finsider"), West Globe Limited ("West Globe") and Welter Trading Limited ("Welter") which are in turn wholly-owned subsidiaries of Vedanta Resources PLC ("VRPLC"), which was a public limited company incorporated in the United Kingdom and listed on the London Stock Exchange (VRPLC has been delisted from London Stock Exchange on October 1, 2018 and is renamed as "Vedanta Resources Limited" ("VRL") with effect from October 29, 2018). Twin Star, Finsider, West Globe and Welter held 37.1%, 10.8%, 1.2% and 1.0% respectively of the Company's equity as at March 31, 2019.

Details of Group's various businesses are as follows. The Group's percentage holdings in each of the below businesses are disclosed in note 40.

- Zinc India business is owned and operated by Hindustan Zinc Limited ("HZL").
- Zinc international business is comprised of Skorpion mine and refinery in Namibia operated through THL Zinc Namibia Holdings (Proprietary) Limited ("Skorpion"), Lisheen mine in Ireland operated through Vedanta Lisheen Holdings Limited ("Lisheen") (Lisheen mine ceased operations in December 2015) and Black Mountain Mining (Proprietary) Limited ("BMM"), whose assets include the operational Black Mountain mine and the Gamsberg mine project located in South Africa.
- The Group's oil and gas business is owned and operated by the Company (prior to merger this was owned and operated by erstwhile Cairn India Limited) and its subsidiary, Cairn Energy Hydrocarbons Limited and consists of exploration and development and production of oil and gas.
- The Group's iron ore business is owned by the Company, and by two wholly owned subsidiaries of the Company i.e. Sesa Resources Limited and Sesa Mining Corporation Limited and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke and generation of power for captive use. Pursuant to Honourable Supreme Court of India

order, operations in the state of Goa are currently suspended. The Group's iron ore business includes Western Cluster Limited ("WCL") in Liberia which has iron ore assets and is wholly owned by the Group. WCL's assets include development rights to Western Cluster and a network of iron ore deposits in West Africa. WCL's assets have been fully impaired.

• The Group's copper business is owned and operated by the Company, Copper Mines of Tasmania Pty Ltd ("CMT") and Fujairah Gold FZC and is principally one of custom smelting and includes captive power plants at Tuticorin in Southern

The Group's copper business in Tamil Nadu, India has received an order from the Tamil Nadu Pollution Control Board ("TNPCB") on April 09, 2018, rejecting the Company's application for renewal of consent to operate under the Air and Water Acts for the 400,000 tpa copper smelter plant in Tuticorin for want of further clarification and consequently the operations were suspended. The Company has filed an appeal with TNPCB Appellate authority against the said order. During the pendency of the appeal, TNPCB through its order dated May 23, 2018 ordered for disconnection of electricity supply and closure of copper smelter plant. Post such order, the State government on May 28, 2018 ordered the permanent closure of the plant [Refer note 3(c)(A)(x)].

In addition, the Group owns and operates the Mt. Lyell copper mine in Tasmania, Australia through its subsidiary, CMT and a precious metal refinery and copper rod plant in Fujairah, UAE through its subsidiary Fujairah Gold FZC. The operations of Mt Lyell copper mine were suspended in January 2014 following a mud slide incident and were put into care and maintenance since July 09, 2014 following a rock fall incident in June 2014.

- The Group's Aluminium business is owned and operated by the Company and by Bharat Aluminium Company Limited ("BALCO"). The aluminium operations include a refinery and captive power plant at Lanjigarh and a smelter and captive power plants at Jharsuguda both situated in the State of Odisha in India. BALCO's partially integrated aluminium operations are comprised of two bauxite mines, captive power plants, smelting and fabrication facilities in the state of Chattisgarh, in central India.
- The Group's power business is owned and operated by the Company, BALCO, and Talwandi Sabo Power Limited ("TSPL"), a wholly owned subsidiary of the Company, which are engaged in the power generation business in India. The Company's power operations include a thermal coalbased commercial power facility of 600 MW at Jharsuguda in the State of Odisha in Eastern India. BALCO power operations included 600 MW (2 units of 300 MW each) thermal coal based power plant at Korba, of which a unit of 300 MW was converted to be used for captive consumption vide order from Central Electricity Regulatory Commission (CERC) dated January 1, 2019. Talwandi Sabo Power Limited ("TSPL") power operations include 1,980 MW (three units of 660 MW each) thermal coal-based commercial power facilities. Power business also includes the wind power plants commissioned by HZL and a power plant at MALCO Energy Limited ("MEL") (under care and maintenance) situated at Mettur Dam in the State of Tamil Nadu in southern India.
- The Group's other activities include Electrosteel Steels Limited ("ESL") acquired on June 4, 2018. ESL is engaged in the manufacturing and supply of billets, TMT bars, wire rods and ductile iron pipes in India.

as at and for the year ended March 31, 2019

The Group's other activities also include Vizag General Cargo Berth Private Limited ("VGCB") and Maritime Ventures Private Limited ("MVPL"). Vizag port project includes mechanization of coal handling facilities and upgradation of general cargo berth for handling coal at the outer harbour of Visakhapatnam Port on the east coast of India. MVPL is engaged in the business of rendering logistics and other allied services inter alia rendering stevedoring, and other allied services in ports and other allied sectors. VGCB commenced operations in the fourth quarter of fiscal 2013. The Group's other activities also include AvanStrate Inc. ("ASI"). ASI is involved in the manufacturing of glass substrate in South Korea and Taiwan.

# 2. BASIS OF PREPARATION AND BASIS OF MEASUREMENT OF FINANCIAL STATEMENTS

### (A) Basis of preparation

These consolidated financial statements have been prepared in accordance with Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 and other relevant provisions of the Companies Act, 2013 (the "Act") (as amended from time to time) and Guidance Note on Accounting for Oil and Gas Producing Activities (Ind AS) issued by the Institute of Chartered Accountants of India.

These financial statements have been prepared in accordance with the accounting policies, set out below and were consistently applied to all periods presented unless otherwise stated.

These financial statements are approved for issue by the Board of Directors on May 07, 2019.

Certain comparative figures appearing in these consolidated financial statements have been regrouped and/or reclassified to better reflect the nature of those items.

All financial information presented in Indian Rupees has been rounded off to the nearest crore. Amounts less than ₹ 0.50 Crore have been presented as "0".

# (B) Reclassification/ Restatement

(i) The Group has revised the presentation of forward premium relating to derivative instruments to present it along with the mark-to-market gain/loss on these instruments, as these more appropriately reflect the substance of the forward premiums on derivative transactions. As a result of the change, forward premium expense amounting to ₹ 671 Crore (for the year ended March 31, 2019: ₹ 341 Crore) has been reclassified from 'Finance cost' to 'other income/ other expenses' for the comparative year ended March 31, 2018. Similarly, net cash flows from operating activities in the consolidated statement of cash flows has reduced by an equivalent amount with corresponding effect on the net cash used in financing activities.

(ii) The classification of export incentives from government has also been revised to present it under 'other operating income', as the revised classification is more appropriate. As a result of the change, export incentives amounting to ₹ 418 Crore has been reclassified from 'revenue' to 'other operating income' for the comparative year ended March 31, 2018. Similarly, scrap sales and miscellaneous income amounting to ₹ 177 Crore and ₹ 217 Crore respectively have also been reclassified from 'revenue' to 'other operating income' for the comparative year ended March 31, 2018.

(iii) In the comparative period, the Group acquired equity stake in AvanStrate Inc. (ASI). As permitted by Ind AS 103, the Group had used provisional fair values that were determined as at March 31, 2018 for consolidation. In the current year, these fair values were finalised. Hence, the comparative year amounts have been restated accordingly. Please refer note 4(b) for further details.

None of the above had any effect on the equity as at April 01, 2017.

# (C) Basis of measurement

The consolidated financial statements have been prepared on a going concern basis using historical cost convention and on an accrual method of accounting, except for certain financial assets and liabilities which are measured at fair value as explained in the accounting policies below.

# **3(a) SIGNIFICANT ACCOUNTING POLICIES** (A) Basis of Consolidation i) Subsidiaries:

The consolidated financial statements incorporate the results of the Company and all its subsidiaries (the "Group"), being the entities that it controls. Control is evidenced where the Group has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is demonstrated through existing rights that give the ability to direct relevant activities, which significantly affect the entity's returns.

The financial statements of subsidiaries are prepared for the same reporting year as the parent company. Where necessary, adjustments are made to the financial statements of subsidiaries to align the accounting policies in line with accounting policies of the Group.

For non-wholly owned subsidiaries, a share of the profit/ (loss) for the financial year and net assets is attributed to the non-controlling interests as shown in the consolidated statement of profit and loss and consolidated balance sheet.

Liability for put option issued to non-controlling interests which do not grant present access to ownership interest to the Group is recognised at present value of the redemption amount and is reclassified from equity. At the end of each reporting period, the non-controlling interests subject to put option is derecognised and the difference between the amount derecognised and present value of the redemption amount, which is recorded as a financial liability, is accounted for as an equity transaction.

For acquisitions of additional interests in subsidiaries, where there is no change in control, the Group recognises a reduction to the non-controlling interest of the respective subsidiary with the difference between this figure and the cash paid, inclusive of transaction fees, being recognised in equity. Similarly, upon dilution of controlling interests the difference between the cash received from sale or listing of the subsidiary shares and the increase to non-controlling interest is also recognised in equity. The results of subsidiaries acquired or disposed off during the year are included in the consolidated statement of profit and loss from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Intra-Group balances and transactions and any unrealized profit arising from intra-Group transactions, are eliminated.

as at and for the year ended March 31, 2019

Unrealized losses are eliminated unless costs cannot be recovered.

# ii) Joint arrangements

A Joint arrangement is an arrangement of which two or more parties have joint control. Joint control is considered when there is contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements are classified as either joint operations or joint venture. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby, the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

The Group has both joint operations and joint ventures.

# Joint operations

The Group has joint operations within its Oil and gas segment. It participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities. The Group accounts for its share of assets, liabilities, income and expenditure of joint operations in which the Group holds an interest. Liabilities in unincorporated joint operations, where the Group is the operator, is accounted for at gross values (including share of other partners) with a corresponding receivable from the venture partners. These have been included in the consolidated financial statements under the appropriate headings. Details of joint operations are set out in note 38.

# Joint venture

The Group accounts for its interest in joint venture using the equity method (see (iv) below), after initially being recognised at cost in the consolidated balance sheet. Goodwill arising on the acquisition of joint venture is included in the carrying value of investments in joint venture.

# iii) Investments in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies. Investments in associates are accounted for using the equity method (see (iv) below). Goodwill arising on the acquisition of associates is included in the carrying value of investments in associate.

# iv) Equity method of accounting

Under the equity method of accounting applicable for investments in associates and joint ventures, investments are initially recorded at the cost to the Group and then, in subsequent periods, the carrying value is adjusted to reflect the Group's share of the post-acquisition profits or losses of the investee, and the Group's share of other comprehensive income of the investee, other changes to the investee's net assets and is further adjusted for impairment losses, if any. Dividend received or receivable from associates and joint-ventures are recognised as a reduction in carrying amount of the investment.

The consolidated statement of profit and loss include the Group's share of investee's results, except where the investee is generating losses, share of such losses in excess of the Group's interest in that investee are not recognised. Losses recognised under the equity method in excess of the Group's investment in ordinary shares are applied to the other components of the Group's interest that forms part of Group's net investment in the investee in the reverse order of their seniority (i.e. priority in liquidation).

If the Group's share of losses in an associate or a joint venture equals or exceeds its interests in the associate or joint venture, the Group discontinues recognition of further losses. Additional losses are provided for, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate/joint venture.

Unrealised gains arising from transactions with associates and joint ventures are eliminated against the investment to the extent of the Group's interest in these entities. Unrealised losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment of the asset transferred. Accounting policies of equity accounted investees is changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity accounted investments are tested for impairment in accordance with the policy described in note below 3(a)(I).

# (B) Business combination

Business acquisitions are accounted for under the purchase method. The acquiree's identifiable assets, liabilities and contingent liabilities that meet the conditions for recognition under Ind AS 103 are recognised at their fair value at the acquisition date, except certain assets and liabilities required to be measured as per the applicable standards.

Excess of fair value of purchase consideration and the acquisition date non-controlling interest over the acquisition date fair value of identifiable assets acquired and liabilities assumed is recognised as goodwill. Goodwill arising on acquisitions is reviewed for impairment annually. Where the fair values of the identifiable assets and liabilities exceed the cost of acquisition, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognized at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognized in other comprehensive income and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the Group recognizes the gain directly in equity as capital reserve, without routing the same through other comprehensive income.

Where it is not possible to complete the determination of fair values by the date on which the first post-acquisition financial statements are approved, a provisional assessment of fair value is made and any adjustments required to those provisional fair values are finalised within 12 months of the acquisition date.

Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition

as at and for the year ended March 31, 2019

date that, if known, would have affected the amounts recognised at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed twelve months from the acquisition date.

Any non-controlling interest in an acquiree is measured at fair value or at the non-controlling interest's proportionate share of the acquiree's net identifiable assets. This accounting choice is made on a transaction by transaction basis.

Acquisition expenses are charged to the consolidated statement of profit and loss.

If the Group acquires a group of assets in a company that does not constitute a business in accordance with Ind AS 103 Business Combinations, the cost of the acquired group of assets is allocated to the individual identifiable assets acquired based on their relative fair value.

### **Common control transactions**

A business combination involving entities or businesses under common control is a business combination in which all of the combining entities or businesses are ultimately controlled by the same party or parties both before and after the business combination and the control is not transitory. The transactions between entities under common control are specifically covered by Ind AS 103. Such transactions are accounted for using the pooling-of-interest method. The assets and liabilities of the acquired entity are recognised at their carrying amounts recorded in the parent entity's consolidated financial statements with the exception of certain income tax and deferred tax assets. No adjustments are made to reflect fair values, or recognise any new assets or liabilities. The only adjustments that are made are to harmonise accounting policies. The components of equity of the acquired companies are added to the same components within Group equity. The difference, if any, between the amounts recorded as share capital issued plus any additional consideration in the form of cash or other assets and the amount of share capital of the transferor is transferred to capital reserve and is presented separately from other capital reserves. The company's shares issued in consideration for the acquired companies are recognized from the moment the acquired companies are included in these financial statements and the financial statements of the commonly controlled entities would be combined, retrospectively, as if the transaction had occurred at the beginning of the earliest reporting period presented. However, the prior year comparative information is only adjusted for periods during which entities were under common control.

# (C) Revenue recognition

# Sale of goods/rendering of services (Revenue from contracts with customers)

The Group's revenue from contracts with customers is mainly from the sale of copper, aluminium, iron ore, zinc, oil and gas, power, steel, glass substrate and port operations. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer which usually is on delivery of the goods to the shipping agent at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognised net of discounts, volume rebates, outgoing sales taxes/ goods and service tax and other indirect taxes excluding excise duty. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange (LME) and crude index, as specified in the contract. Revenue in respect of such contracts is recognised when control passes to the customer and is measured at the amount the entity expects to be entitled - being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, provisional pricing features are accounted in accordance with Ind AS 109 'Financial Instruments' rather than Ind AS 115 and therefore the Ind AS 115 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control are included in total revenue from operations on the face of the consolidated statement of profit and loss and disclosed by way of note to the financial statements. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share of oil, gas and condensate production, recognised on a direct entitlement basis, when control is transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived at after reducing government's share of profit petroleum which is accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at a rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues relating to operating and maintenance phase of the port contract are measured at the amount that Group expects to be entitled to for the services provided.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on the Group's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is received. Contract liabilities are recognised as revenue when the Group performs under the contract.

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

as at and for the year ended March 31, 2019

### · Interest income

Interest income from debt instruments is recognised using the effective interest rate method. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses.

### Dividends

Dividend income is recognised in the consolidated statement of profit and loss only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Group, and the amount of the dividend can be measured reliably.

# (D) Property, Plant and Equipment i) Mining properties and leases

When a decision is taken that a mining property is viable for commercial production (i.e. when the Group determines that the mining property will provide sufficient and sustainable return relative to the risks and the Group decided to proceed with the mine development), all further pre-production primary development expenditure other than that on land, buildings, plant, equipment and capital work in progress is capitalized as property, plant and equipment under the heading "Mining properties and leases" together with any amount transferred from "Exploration and evaluation" assets. The costs of mining properties and leases include the costs of acquiring and developing mining properties and mineral rights.

The stripping cost incurred during the production phase of a surface mine is deferred to the extent the current period stripping cost exceeds the average period stripping cost over the life of mine and recognised as an asset if such cost provides a benefit in terms of improved access to ore in future periods and certain criteria are met. When the benefit from the stripping costs are realised in the current period, the stripping costs are accounted for as the cost of inventory. If the costs of inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. The Group uses the expected volume of waste compared with the actual volume of waste extracted for a given value of ore/ mineral production for the purpose of determining the cost of the stripping activity asset.

Deferred stripping costs are included in mining properties within property, plant and equipment and disclosed as a part of mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body.

In circumstances where a mining property is abandoned, the cumulative capitalised costs relating to the property are written off in the period in which it occurs i.e. when the Group determines that the mining property will not provide sufficient and sustainable returns relative to the risks and the Group decides not to proceed with the mine development.

Commercial reserves are proved and probable reserves as defined by the 'JORC' Code, 'MORC' code or 'SAMREC' Code. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

# ii) Oil and gas assets- (developing/producing assets)

For oil and gas assets a successful efforts based accounting policy is followed. Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the consolidated statement of profit and loss.

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated are capitalised within property, plant and equipment development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/ producing asset or replaces part of the existing development/ producing asset. Any remaining costs associated with the part replaced are expensed.

Net proceeds from any disposal of development/producing assets are credited against the previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the consolidated statement of profit and loss to the extent that the net proceeds exceed or are less than the appropriate portion of the net capitalised costs of the asset.

# iii) Other property, plant and equipment

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Land acquired free of cost or at below market rate from the government is recognized at fair value with corresponding credit to deferred income.

If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment. All other expenses on existing property, plant and equipment, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the consolidated statement of profit and loss for the period during which such expenses are incurred.

Gains and losses on disposal of an item of property, plant and equipment computed as the difference between the net disposal proceeds and the carrying amount of the asset is included in the consolidated statement of profit and loss when the asset is derecognised. Major inspection and overhaul expenditure is capitalized, if the recognition criteria are met

### iv) Assets under construction

Assets under construction are capitalized in the assets under construction account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset and any obligations for decommissioning costs are capitalised until the period of

as at and for the year ended March 31, 2019

commissioning has been completed and the asset is ready for its intended use.

# v) Depreciation, depletion and amortisation expense

Mining properties and other assets in the course of development or construction and freehold land are not depreciated or amortised.

# · Mining properties

The capitalised mining properties are amortised on a unit-of-production basis over the total estimated remaining commercial proved and probable reserves of each property or group of properties and are subject to impairment review. Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future capital expenditure required to access the commercial reserves. Changes in the estimates of commercial reserves or future capital expenditure are dealt with prospectively.

Leasehold land and buildings are depreciated on a straight-line basis over the period of the lease or, if shorter, their useful economic life.

## · Oil and gas assets

All expenditures carried within each field are amortised from the commencement of production on a unit of production basis, which is the ratio of oil and gas production in the period to the estimated quantities of depletable reserves at the end of the period plus the production in the period, generally on a field-by-field basis or group of fields which are reliant on common infrastructure.

Depletable reserves are proved reserves for acquisition costs and proved and developed reserves for successful exploratory wells, development wells, processing facilities, distribution assets, estimated future abandonment cost and all other related costs. These assets are depleted within each cost centre. Reserves for this purpose are considered on working interest basis which are reassessed atleast annually. Impact of changes to reserves are accounted for prospectively.

# · Other assets

Depreciation on other Property, plant and equipment is calculated using the straight-line method (SLM) to allocate their cost, net of their residual values, over their estimated useful lives (determined by the management) as given below.

Management's assessment takes into account, inter alia, the nature of the assets, the estimated usage of the assets, the operating conditions of the assets, past history of replacement and maintenance support.

Estimated useful life of assets are as follows:

Asset	Useful life (in years)
Buildings (Residential; factory etc.)	3-60
Plant and equipment	15-40
Railway siding	15
Office equipment	3-6
Furniture and fixture	8-10
Vehicles	8-10

Major inspection and overhaul costs are depreciated over the estimated life of the economic benefit to be derived from such costs. The carrying amount of the remaining previous overhaul cost is charged to the consolidated statement of profit and loss if the next overhaul is undertaken earlier than the previously estimated life of the economic benefit.

The Group reviews the residual value and useful life of an asset at least at each financial year-end and, if expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

The Group has reassessed the economic lives of commercial thermal power plants to be the lower of its technical useful life or the term of the power purchase agreement, which is 25 years. This has had no material impact on these financial statements

# (E) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Subsequently, intangible assets are measured at cost less accumulated amortisation and accumulated impairment losses, if any.

The Group recognises port concession rights as "Intangible Assets" arising from a service concession arrangements, in which the grantor controls or regulates the services provided and the prices charged, and also controls any significant residual interest in the infrastructure such as property, plant and equipment, irrespective whether the infrastructure is existing infrastructure of the grantor or the infrastructure is constructed or purchased by the Group as part of the service concession arrangement. Such an intangible asset is recognised by the Group initially at cost determined as the fair value of the consideration received or receivable for the construction service delivered and is capitalised when the project is complete in all respects. Port concession rights are amortised on straight line basis over the balance of license period. The concession period is 30 years from the date of the award. Any addition to the port concession rights are measured at fair value on recognition. Port concession rights also include certain property, plant and equipment in accordance with Appendix C of Ind AS 115 "service concession arrangements".

Intangible assets are amortised over their estimated useful life on a straight line basis. Software is amortised over the estimated useful life ranging from 0-5 years. Amounts paid for securing mining rights are amortised over the period of the mining lease ranging from 16-25 years. Technological know-how and acquired brand are amortised over the estimated useful life of ten years.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the consolidated statement of profit and loss when the asset is derecognised.

The amortization period and the amortization method are reviewed at least at each financial year end. If the expected useful life of the asset is different from previous estimates, the change is accounted for prospectively as a change in accounting estimate.

as at and for the year ended March 31, 2019

### (F) Exploration and evaluation intangible assets

Exploration and evaluation expenditure incurred prior to obtaining the mining right or the legal right to explore are expensed as incurred.

Exploration and evaluation expenditure incurred after obtaining the mining right or the legal right to explore are capitalised as exploration and evaluation assets (intangible assets) and stated at cost less impairment, if any. Exploration and evaluation intangible assets are transferred to property, plant and equipment when the technical feasibility and commercial viability has been determined. Exploration intangible assets under development are assessed for impairment and impairment loss, if any, is recognised prior to reclassification.

Exploration expenditure includes all direct and allocated indirect expenditure associated with finding specific mineral resources which includes depreciation and applicable operating costs of related support equipment and facilities and other costs of exploration activities:

- Acquisition costs costs associated with acquisition of licenses and rights to explore, including related professional fees.
- General exploration costs costs of surveys and studies, rights of access to properties to conduct those studies (e.g., costs incurred for environment clearance, defence clearance, etc.), and salaries and other expenses of geologists, geophysical crews and other personnel conducting those studies.
- Costs of exploration drilling and equipping exploration and appraisal wells.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised within "Exploration and evaluation assets" (intangible assets) and subsequently allocated to drilling activities. Exploration drilling costs are initially capitalised on a well-bywell basis until the success or otherwise of the well has been established. The success or failure of each exploration effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated, then the related capitalised exploration costs are transferred into a single field cost centre within property, plant and equipment - development/ producing assets after testing for impairment. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written off to the consolidated statement of profit and loss.

Expenditure incurred on the acquisition of a license interest is initially capitalised on a license-by-license basis. Costs are held, undepleted, within exploration and evaluation assets until such time as the exploration phase on the license area is complete or commercial reserves have been discovered.

Net proceeds from any disposal of an exploration asset are initially credited against the previously capitalised costs. Any surplus/ deficit is recognised in the consolidated statement of profit and loss.

# (G) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets and disposal groups classified as held for sale are not depreciated and are measured at the lower of carrying amount and fair value less costs to sell. Such assets and disposal groups are presented separately on the face of the consolidated balance sheet.

# (H) Impairment of non-financial assets

Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The Group assesses at each reporting date, whether there is an indication that an asset may be impaired. The Group conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognised impairment losses. Internal and external factors, such as worse economic performance than expected, changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognised impairment losses.

If any such indication exists or in case of goodwill where annual testing of impairment is required, then an impairment review is undertaken and the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the Group and not applicable to entities in general. Fair value for mineral and oil and gas assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Group's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

as at and for the year ended March 31, 2019

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined. The carrying value is net of deferred tax liability recognised in the fair value of assets acquired in the business

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the consolidated statement of profit and loss.

Any reversal of the previously recognised impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised except if initially attributed to goodwill.

# Exploration and evaluation intangible assets:

In assessing whether there is any indication that an exploration and evaluation asset may be impaired, the Group considers, as a minimum, the following indicators:

- the period for which the Group has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- · substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- · exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Group has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale; and
- reserve information prepared annually by external experts

When a potential impairment is identified, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration and evaluation assets is attributed. Exploration areas in which reserves have been discovered but require major capital expenditure before production can begin, are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is underway or planned. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the consolidated statement of profit and loss.

# (I) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

# (i) Financial Assets - recognition & subsequent measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

For purposes of subsequent measurement, financial assets are classified in four categories:

### Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

- a) he asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
- b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in interest income in consolidated statement of profit and loss. The losses arising from impairment are recognised in consolidated statement of profit and loss.

# Debt instruments at fair value through other comprehensive income (FVOCI)

A 'debt instrument' is classified as at FVOCI if both of the following criteria are met:

- a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
- b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognized in other comprehensive income (OCI). However, interest income, impairment losses and reversals and foreign exchange gain or loss are recognized in the consolidated statement of profit and loss. On derecognition of the asset, cumulative gain or loss previously recognised in other comprehensive income is reclassified from the equity to consolidated statement of profit and loss. Interest earned whilst holding fair value through other comprehensive income debt instrument is reported as interest income using the EIR method.

# · Debt instruments at fair value through profit or loss (FVTPL)

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVOCI, is classified as at FVTPL.

In addition, the Group may elect to designate a debt instrument, which otherwise meets amortized cost or FVOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Group has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes being recognized in consolidated statement of profit and loss.

as at and for the year ended March 31, 2019

### Equity instruments

All equity investments in the scope of Ind AS 109 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which Ind AS 103 applies are classified as at FVTPL. For all other equity instruments, the Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Group decides to classify an equity instrument as at FVOCI, then all fair value changes on the instrument, excluding dividends, are recognized in the OCI. There is no recycling of the amounts from OCI to profit and loss, even on sale of investment. However, the Group may transfer the cumulative gain or loss within equity. For equity instruments which are classified as FVTPL, all subsequent fair value changes are recognised in the consolidated statement of profit and loss.

### (ii) Financial Assets - derecognition

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

## (iii) Impairment of financial assets

In accordance with Ind AS 109, the Group applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on the following financial assets:

- a) Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities and
- b) Financial assets that are debt instruments and are measured as at FVOCI
- c) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of Ind AS 115.

The Group follows 'simplified approach' for recognition of impairment loss allowance on trade receivables, contract assets and lease receivables. The application of simplified approach does not require the Group to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Group determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the Group reverts to recognising impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

ECL impairment loss allowance (or reversal) during the year is recognized as income/ expense in profit or loss. The balance sheet presentation for various financial instruments is described below:

- a) Financial assets measured at amortised cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets in the balance sheet. The Group does not reduce impairment allowance from the gross carrying amount.
- b) Debt instruments measured at FVOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Group combines financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

The Group does not have any purchased or originated credit-impaired (POCI) financial assets, i.e., financial assets which are credit impaired on purchase/origination.

# (iv) Financial liabilities - Recognition & Subsequent measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or as loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are

as at and for the year ended March 31, 2019

also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated statement of profit and loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ loss are not subsequently transferred to profit or loss. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the consolidated statement of profit and loss. The Group has not designated any financial liability as at fair value through profit or loss.

#### · Financial liabilities at amortised cost (Loans and Borrowings and Trade and Other payables)

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the statement of profit and loss.

#### (v) Financial liabilities - Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated statement of profit and loss.

### (vi) Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract - with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of Ind AS 109, the Group does not separate embedded derivatives. Rather, it applies the classification requirements contained in Ind AS 109 to the entire hybrid contract. Derivatives embedded in all other host contracts

are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value though profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in consolidated statement of profit or loss, unless designated as effective hedging instruments.

#### (vii) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs

#### (viii) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated balance sheet if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

#### (ix) Derivative financial instruments and hedge accounting Initial recognition and subsequent measurement

In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Group enters into forward, option, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to consolidated statement of profit and loss, except for the effective portion of cash flow hedges, which is recognised in OCI and later reclassified to profit or loss when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm
- Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting. The documentation includes the Group's risk management objective and strategy for undertaking hedge, the hedging/ economic relationship, the hedged item or transaction,

as at and for the year ended March 31, 2019

the nature of the risk being hedged, hedge ratio and how the Group will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

#### (i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in consolidated statement of profit and loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated statement of profit and loss. Hedge accounting is discontinued when the Group revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

### (ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated statement of profit and loss.

Amounts recognised in OCI are transferred to consolidated statement of profit and loss when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised in OCI are transferred to the initial carrying amount of the non-financial asset or liability.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

## (iii) Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in OCI while any gains or losses relating to the ineffective portion are recognised in the consolidated statement of profit and loss. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is reclassified

to the consolidated statement of profit and loss (as a reclassification adjustment).

#### (J) Financial guarantees

Financial guarantees issued by the Group on behalf of related parties are designated as 'Insurance Contracts'. The Group assesses at the end of each reporting period whether its recognised insurance liabilities (if any) are adequate, using current estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency is recognised in consolidated statement of profit and loss.

#### (K) Leases

### Determining whether an arrangement contains lease

At inception of an arrangement, the Group determines whether the arrangement is or contains a lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

At inception or on reassessment of an arrangement that contains lease, the Group separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the Group's incremental borrowing rate.

#### Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the consolidated statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Group's policy on general borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the consolidated statement of profit and loss on a straight-line basis over the lease term unless the payments are structured to increase in line with general inflation to compensate for the lessor's expected inflationary cost increase.

as at and for the year ended March 31, 2019

#### Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease unless the payments are structured to increase in line with general inflation to compensate for the lessor's expected inflating cost increase. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

#### (L) Inventories

Inventories and work-in-progress are stated at the lower of cost and net realisable value. Cost is determined on the following basis:

- Purchased copper concentrate is recorded at cost on a first-in, first-out ("FIFO") basis; all other materials including stores and spares are valued on weighted average basis except in Oil and Gas business where stores and spares are valued on FIFO basis.
- Finished products are valued at raw material cost plus costs of conversion, comprising labour costs and an attributable proportion of manufacturing overheads based on normal levels of activity and are moved out of inventory on a weighted average basis (except in copper business where FIFO basis is followed) and
- By-products and scrap are valued at net realisable value. Net realisable value is determined based on estimated selling price, less further costs expected to be incurred for completion and disposal.

### (M) Government grants

Grants and subsidies from the government are recognised when there is reasonable assurance that (i) the Group will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognised as income on a systematic basis in the consolidated statement of profit and loss over the periods necessary to match them with the related costs, which they are intended to compensate.

Where the grant relates to an asset, it is recognised as deferred income and released to income in equal amounts over the expected useful life of the related asset and presented within other income.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at fair value amounts and released to profit or loss over the expected useful life in a pattern of consumption of the benefit of the underlying asset. When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favourable interest is regarded as a government grant. The loan or assistance is initially recognised and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

#### (N) Taxation

Tax expense represents the sum of current tax and deferred tax.

Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date and includes any adjustment to tax payable in respect of previous years.

Subject to the exceptions below, deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and on carry forward of unused tax credits and unused tax losses:

- tax payable on the future remittance of the past earnings of subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future;
- deferred income tax is not recognised on initial recognition as well as on the impairment of goodwill which is not deductible for tax purposes or on the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss); and
- deferred tax assets (including MAT credit entitlement) are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Tax relating to items recognized outside consolidated statement of profit and loss is recognised outside consolidated statement of profit and loss (either in other comprehensive income or equity).

The carrying amount of deferred tax assets (including MAT credit entitlement) is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Deferred tax is provided on temporary differences arising on acquisitions that are categorised as Business Combinations. Deferred tax is recognised at acquisition as part of the assessment of the fair value of assets and liabilities acquired.

as at and for the year ended March 31, 2019

Subsequently deferred tax is charged or credited in the profit or loss/other comprehensive income as the underlying temporary difference is reversed.

#### (O) Retirement benefit schemes

The Group operates or participates in a number of defined benefits and defined contribution schemes, the assets of which (where funded) are held in separately administered funds. For defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation each year separately for each plan using the projected unit credit method by third party qualified actuaries.

Remeasurement including, effects of asset ceiling and return on plan assets (excluding amounts included in interest on the net defined benefit liability) and actuarial gains and losses arising in the year are recognised in full in other comprehensive income and are not recycled to the consolidated statement of profit and loss.

Past service costs are recognised in consolidated statement of profit and loss on the earlier of:

- the date of the plan amendment or curtailment, and
- the date that the Group recognises related restructuring costs

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are split into current service cost, past service cost, net interest expense or income and remeasurement and gains and losses on curtailments and settlements. Current service cost and past service cost are recognised within employee benefit expense. Net interest expense or income is recognized within finance costs.

For defined contribution schemes, the amount charged to the consolidated statement of profit and loss in respect of pension costs and other post retirement benefits is the contributions payable in the year, recognised as and when the employee renders related services.

# (P) Share-based payments

Certain employees (including executive directors) of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares ('equity-settled transactions').

The cost of equity-settled transactions with employees is measured at fair value of share awards at the date at which they are granted. The fair value of share awards is determined with the assistance of an external valuer and the fair value at the grant date is expensed on a proportionate basis over the vesting period based on the Group's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the current expectations.

The resultant increase in equity is recorded in share-based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value

recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

Additionally, VRL offered certain share-based incentives under the Long-Term Incentive Plan ("LTIP") to employees and directors of the Company and its subsidiaries. VRL recovers the proportionate cost (calculated based on the grant date fair value of the options granted) from the respective group companies, which is charged to the consolidated statement of profit and loss.

### (Q) Provisions, contingent liabilities and contingent assets The assessments undertaken in recognising provisions and contingencies have been made in accordance with the applicable Ind AS.

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognized when the Group has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation.

If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognized in consolidated statements of profit and loss as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of the Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The Group does not recognize a contingent liability but discloses its existence in the consolidated balance sheet.

In the normal course of business, contingent liabilities may arise from litigation and other claims against the Group. Financial guarantees are also provided in the normal course of business. There are certain obligations which management has concluded, based on all available facts and circumstances, are not probable of payment or are very difficult to quantify reliably, and such obligations are treated as Contingent liabilities and disclosed in the notes but are not reflected as liabilities in the financial statements. Although there can be no assurance regarding the final outcome of the legal proceedings in which the Group is involved, it is not expected that such contingencies will have a material effect on its financial position or profitability.

Contingent assets are not recognised but disclosed in the financial statements when an inflow of economic benefit is probable.

The Group has significant capital commitments in relation to various capital projects which are not recognized on the balance sheet.

as at and for the year ended March 31, 2019

#### (R) Restoration, rehabilitation and environmental costs

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or oil fields. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the consolidated statement of profit and loss over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as finance cost in the consolidated statement of profit and loss.

Costs for the restoration of subsequent site damage, which is caused on an ongoing basis during production, are provided for at their net present value and charged to the consolidated statements of profit and loss as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

# (S) Accounting for foreign currency transactions and

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all principal operating subsidiaries, the functional currency is normally the local currency of the country in which it operates with the exception of oil and gas business operations which have a US dollar functional currency as that is the currency of the primary economic environment in which it operates. The financial statements are presented in Indian rupee (₹).

In the financial statements of individual group companies, transactions in currencies other than the respective functional currencies are translated into their functional currencies at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into functional currencies at exchange rates prevailing on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the consolidated statements of profit and loss except those where the monetary item is designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognized in the other comprehensive income.

Exchange differences which are regarded as an adjustment to interest costs on foreign currency borrowings, are capitalized as part of borrowing costs in qualifying assets.

For the purposes of the consolidated financial statements, items in the consolidated statements of profit and loss of those businesses for which the Indian Rupees is not the functional currency are translated into Indian Rupees at the average rates of exchange during the year/ exchange rates as on the date

of transaction. The related consolidated balance sheet are translated into Indian rupees at the rates as at the reporting date. Exchange differences arising on translation are recognised in the other comprehensive income. On disposal of such entities the deferred cumulative exchange differences recognised in equity relating to that particular foreign operation are recognised in the consolidated statement of profit and loss.

The Group had applied paragraph 46A of AS 11 under Previous GAAP. Ind AS 101 gives an option, which has been exercised by the Group, whereby a first time adopter can continue its Indian GAAP policy for accounting for exchange differences arising from translation of long-term foreign currency monetary items recognised in the Indian GAAP financial statements for the period ending immediately before the beginning of the first Ind AS financial reporting period. Hence, foreign exchange gain/loss on long-term foreign currency monetary items recognized upto March 31, 2016 has been deferred/capitalized. Such exchange differences arising on translation/settlement of long-term foreign currency monetary items and pertaining to the acquisition of a depreciable asset are amortised over the remaining useful lives of the assets.

Exchange differences arising on translation/ settlement of long-term foreign currency monetary items, acquired post April 01, 2016, pertaining to the acquisition of a depreciable asset are charged to the consolidated statement of profit and loss.

### (T) Earnings per share

The Group presents basic and diluted earnings per share ("EPS") data for its equity shares. Basic EPS is calculated by dividing the profit or loss attributable to equity shareholders of the Company by the weighted average number of equity shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to equity shareholders and the weighted average number of equity shares outstanding for the effects of all dilutive potential equity shares.

# (U) Buyers' Credit/ Suppliers' Credit

The Group enters into arrangements whereby financial institutions make direct payments to suppliers for raw materials and project materials. The financial institutions are subsequently repaid by the Group at a later date providing working capital timing benefits. These are normally settled up to twelve months (for raw materials) and up to 36 months (for project materials). Where these arrangements are for raw materials with a maturity of up to twelve months, the economic substance of the transaction is determined to be operating in nature and these are recognised as operational buyers' credit/ suppliers' credit (under Trade payables). Where these arrangements are for project materials with a maturity up to thirty six months, the economic substance of the transaction is determined to be financing in nature, and these are presented within borrowings in the consolidated balance sheet. Interest expense on these are recognised in the finance cost.

#### (V) Current and non-current classification

The Group presents assets and liabilities in the consolidated balance sheet based on current / non-current classification.

An asset is classified as current when it satisfies any of the following criteria:

- it is expected to be realized in, or is intended for sale or consumption in, the Group's normal operating cycle.

as at and for the year ended March 31, 2019

- it is held primarily for the purpose of being traded;
- it is expected to be realized within 12 months after the reporting date; or
- it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

All other assets are classified as non-current.

A liability is classified as current when it satisfies any of the following criteria:

- it is expected to be settled in the Group's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is due to be settled within 12 months after the reporting date; or
- the Group does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non current only.

### (W) Borrowing costs

Borrowing cost includes interest expense as per effective interest rate (EIR) and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost.

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time that the assets are substantially ready for their intended use i.e. when they are capable of commercial production. Borrowing costs relating to the construction phase of a service concession arrangement is capitalised as part of the cost of the intangible asset. Where funds are borrowed specifically to finance a project, the amount capitalised represents the actual borrowing costs incurred. Where surplus funds are available out of money borrowed specifically to finance a qualifying capital project, the income generated from such short-term investments is deducted from the total capitalized borrowing cost. If any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing then becomes part of general borrowing. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the year.

All other borrowing costs are recognised in the consolidated statement of profit and loss in the year in which they are incurred.

Capitalisation of interest on borrowings related to construction or development projects is ceased when substantially all the activities that are necessary to make the assets ready for their

intended use are complete or when delays occur outside of the normal course of business.

EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial liability or a shorter period, where appropriate, to the amortised cost of a financial liability. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options).

#### (X) Treasury shares

The Group has created an Employee Benefit Trust (EBT) for providing share-based payment to its employees. The Group uses EBT as a vehicle for distributing shares to employees under the employee remuneration schemes. The EBT buys shares of the company from the market, for giving shares to employees. The shares held by EBT are treated as treasury shares.

Own equity instruments that are reacquired (treasury shares) are recognised at cost and deducted from equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognised in equity. Share options whenever exercised, would be satisfied with treasury shares.

#### (Y) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand and short-term money market deposits which have maturity of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above and additionally includes unpaid dividend account.

# (Z) Exceptional items

Exceptional items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also tax charges related to exceptional items and certain one-time tax effects are considered exceptional. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with Ind AS.

### **3(b) APPLICATION OF NEW AND REVISED STANDARDS** (A) The Group has adopted with effect from April 1, 2018, the following new standards and amendments:

Ind AS 115: Revenue from contracts with customers The Group has adopted Ind AS 115 Revenue from Contracts with customers with effect from April 1, 2018 which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The standard replaces most of the current revenue recognition guidance. The core principle of the new standard is for companies to recognize revenue when the control of the goods and services is transferred to the customer as against the transfer of risk and rewards. As per

as at and for the year ended March 31, 2019

the Group's current revenue recognition practices, transfer of control happens at the same point as transfer of risk and rewards thus not effecting the revenue recognition. The amount of revenue recognised reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

Under this standard, services provided post transfer of control of goods are treated as separate performance obligation and requires proportionate revenue to be deferred along with associated costs and to be recognized over the period of service. The Group provides shipping and insurances services after the date of transfer of control of goods and therefore has identified it as a separate performance obligation. As per the result of evaluation of contracts of the relevant revenue streams, it is concluded that the impact of this change is immaterial to the Group and hence no accounting changes have been done.

The Group has products which are provisionally priced at the date revenue is recognised. Revenue in respect of such contracts are recognised when control passes to the customer and is measured at the amount the Group expects to be entitled - being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, subsequent movements in provisional pricing are accounted for in accordance with Ind AS 109 "Financial Instruments" rather than Ind AS 115 and therefore the Ind AS 115 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control has been included in total revenue from operations on the face of the consolidated statement of profit and loss. The accounting for revenue under Ind AS 115 does not, therefore, represent a substantive change from the Group's previous practice for recognising revenue from sales to customers.

Further, export incentives received from Government that were included within 'other operating revenue' are now included within 'other operating income'.

The Group has adopted the modified transitional approach as permitted by the standard under which the comparative financial information is not restated. The accounting changes required by the standard are not having material effect on the recognition or measurement of revenues and no transitional adjustment is recognised in retained earnings at April 1, 2018. Additional disclosures as required by Ind AS 115 have been included in these financial statements.

### Previous period accounting policy: Revenue Recognition

Revenues are measured at the fair value of the consideration received or receivable, net of discounts, volume rebates, outgoing sales taxes/ goods & service tax and other indirect taxes excluding excise duty.

Excise duty is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to the Group on its own account, revenue includes excise duty.

### Sale of goods/rendering of services

Revenues from sales of goods are recognised when all significant risks and rewards of ownership of the goods sold are transferred to the customer which usually is on delivery of the goods to the shipping agent. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on The London Metal Exchange ("LME") and crude index, as specified in the contract, when shipped. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represents the Group's share of oil, gas and condensate production, recognized on a direct entitlement basis, when significant risks and rewards of ownership are transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived after reducing government's share of profit petroleum which is accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at rates arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

#### · Amendment to Ind AS 23: Borrowing Cost

The amendment clarifies that an entity considers any borrowings made specifically for the purpose of obtaining a qualifying asset as part of the general borrowings, when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. The amendment is applicable to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. The amendment is effective from April 1, 2019. Since this amendment is clarificatory in nature, the Group has applied the amendment prospectively from the current reporting year i.e. for the borrowing costs incurred on or after April 01, 2018.

Based on the Amendment, the Group has now capitalized certain borrowing costs on general borrowings. This has resulted in capitalization of interest expense of ₹ 545 Crore for the year ended March 31, 2019 and a corresponding increase in depreciation of ₹ 3 Crore. The consequent incremental impact on profit for the year net of tax was ₹ 369 Crore and on the basic and diluted earnings per share was ₹ 1.00/ share and ₹ 0.99/ share respectively.

The change did not have any significant impact on the Group's consolidated balance sheet and the consolidated statement of cash flows.

### (B) Standards issued but not yet effective

The following standards/ amendments to standards have been issued but are not yet effective up to the date of issuance of the Group's Financial Statements. Except specifically disclosed below, the Group is evaluating the requirements of these standards, improvements and amendments and has not yet determined the impact on the financial statements.

### I. Ind AS 116 - Lease

Ind AS 116, Leases, replaces the existing standard on accounting for leases, Ind AS 17, with effect from April 1,

as at and for the year ended March 31, 2019

2019. This standard introduces a single lessee accounting model and requires a lessee to recognize a 'right of use asset' (ROU) and a corresponding 'lease liability' for all leases. Lease costs will be recognised in the consolidated statement of profit and loss over the lease term in the form of depreciation on the ROU asset and finance charges representing the unwinding of the discount on the lease liability. In contrast, the accounting requirements for lessors remain largely unchanged.

The Group acts as a lessee in lease arrangements mainly involving office premises and other properties. The Group has elected to apply the modified retrospective approach on transition, and accordingly the comparative figures will not be restated. For contracts in place at this date, the Group will continue to apply its existing definition of leases under current accounting standards ("grandfathering"), instead of reassessing whether existing contracts are or contain a lease at the date of application of the new standard. Further, as permitted by Ind AS 116, the Group will not bring leases of low value assets or short-term leases with 12 or fewer months remaining on to consolidated balance sheet.

Transition to Ind AS 116 does not have a material effect on the Group's Financial Statements.

#### II. Amendments to standards

The following amendments are applicable to the Group from April 01, 2019. The impacts of these are currently expected to be immaterial:

Reference	Name / Brief
Annual Improvements to Ind AS (2018)	The amendments comprise of changes in Ind AS 103, Ind AS 111 and Ind AS 12
Ind AS 19	Employee benefits - Plan Amendment, Curtailment or Settlement
Ind AS 28	Investments in Associates and Joint Ventures - Long-term Interests in Associates and Joint Ventures
Ind AS 109	Financial Instruments - Prepayment Features with Negative Compensation
Ind AS 12	Income Taxes - Uncertainty over Income Tax Treatments

### **3(c) SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS**

The preparation of consolidated financial statements in conformity with Ind AS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities at the date of these financial statements and the reported amounts of revenues and expenses for the years presented. These judgments and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ materially from the amounts included in the financial statements.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and future periods affected.

The information about significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements are as given below:

# (A) Significant estimates

#### (i) Oil and Gas reserves

Significant technical and commercial judgements are required to determine the Group's estimated oil and natural gas reserves. Reserves considered for computing depletion are proved reserves for acquisition costs and proved and developed reserves for successful exploratory wells, development wells, processing facilities, distribution assets, estimated future abandonment cost and all other related costs. Reserves for this purpose are considered on working interest basis which are reassessed atleast annually. Details of such reserves are given in note 42.

Changes in reserves as a result of change in management assumptions could impact the depreciation rates and the carrying value of assets (refer note 6).

### ii) Carrying value of exploration and evaluation assets

The recoverability of a project is assessed under Ind AS 106. Exploration assets are assessed by comparing the carrying value to higher of fair value less cost of disposal or value in use if impairment indicators exists. Change to the valuation of exploration assets is an area of judgement. Further details on the Group's accounting policies on this are set out in accounting policy above. The amounts for exploration and evaluation assets represent active exploration projects. These amounts will be written off to the consolidated statement of profit and loss as exploration costs unless commercial reserves are established or the determination process is not completed and there are no indications of impairment. The outcome of ongoing exploration, and therefore whether the carrying value of exploration and evaluation assets will ultimately be recovered, is inherently uncertain.

During the financial year ended March 31, 2018, the Group had recognized impairment reversal (net) against exploration and evaluation oil and gas assets. The details of impairment reversal and the assumptions and sensitivities used are disclosed in note 33. Carrying values of exploration and evaluation assets are disclosed in note 6.

### iii) Carrying value of developing / producing oil and gas assets:

Management performs impairment tests on the Group's developing/ producing oil and gas assets where indicators of impairment or impairment reversal of previous recorded impairment are identified in accordance with Ind AS 36.

During the financial year ended March 31, 2018, the Group had recognised impairment reversal of its developing/ producing oil and gas assets in Rajasthan. During the current year, an impairment reversal has been recorded in the oil and gas assets in Krishna Godavari (KG) basin. The details of impairment charge/reversal and the assumptions and sensitivities used are disclosed in note 33.

In the current year, the management has reviewed the key assumptions i.e. future production, oil prices, discount to price, Production sharing contract (PSC) life, discount rates, etc. for all of its oil and gas assets. Based on analysis of events that have occurred since then, there did not exist any indication that the assets may be impaired or previously

as at and for the year ended March 31, 2019

recorded impairment charge may reverse except for the assets in KG basin. Hence, detailed impairment analysis has not been conducted in the current financial year, except for assets in KG basin

Carrying values of oil & gas assets are disclosed in note 6.

### iv) Mining properties and leases

The carrying value of mining property and leases is arrived at by depreciating the assets over the life of the mine using the unit of production method based on proved and probable reserves. The estimate of reserves is subject to assumptions relating to life of the mine and may change when new information becomes available. Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or commodity prices could thus impact the carrying values of mining properties and leases and environmental and restoration provisions.

Management performs impairment tests when there is an indication of impairment. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/assumptions	Basis
Future Production	Proved and probable reserves, resource estimates (with an appropriate conversion factor) considering the expected permitted mining volumes and, in certain cases, expansion projects.
Commodity Prices	Management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Exchange Rates	Management best estimate benchmarked with external sources of information
Discount Rates	Cost of capital risk-adjusted for the risk specific to the asset/CGU

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 33 and 6 respectively.

# v) Assessment of Impairment of Goa iron ore mines:

Pursuant to an order passed by the Hon'ble Supreme Court of India on February 07, 2018, the second renewal of the mining leases granted by the State of Goa in 2014-15 to all miners including the Company were cancelled. Consequentially all mining operations stopped with effect from March 16, 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of The Mines and Minerals (Development and Regulation) (MMDR) Act. Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Group had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge in the financial year ended March 31, 2018. There are no significant changes subsequent to the financial year ended March 31, 2018.

Details of impairment charge and method of estimating recoverable value is disclosed in note 33.

### vi) Restoration, rehabilitation and environmental costs:

Provision is made for costs associated with restoration and rehabilitation of mining sites as soon as the obligation to incur such costs arises. Such restoration and closure costs are typical of extractive industries and they are normally incurred at the end of the life of the mine or oil fields. The costs are estimated on an annual basis on the basis of mine closure plans and the estimated discounted costs of dismantling and removing these facilities and the costs of restoration are capitalised as soon as the obligation to incur such costs arises.

The provision for decommissioning oil and gas assets is based on the current estimates of the costs for removing and decommissioning production facilities, the forecast timing and currency of settlement of decommissioning liabilities and the appropriate discount rate.

A corresponding provision is created on the liability side. The capitalised asset is charged to the consolidated statement of profit and loss through depreciation over the life of the operation and the provision is increased each period via unwinding the discount on the provision. Management estimates are based on local legislation and/or other agreements.

The actual costs and cash outflows may differ from estimates because of changes in laws and regulations, changes in prices, analysis of site conditions and changes in restoration technology. Details of such provisions are set out in Note 23

#### vii) Provisions and liabilities

Provisions and liabilities are recognised in the period when it becomes probable that there will be a future outflow of funds resulting from past operations or events that can be reasonably estimated. The timing of recognition requires the application of judgement to existing facts and circumstances which may be subject to change especially when taken in the context of the legal environment in India. The actual cash outflows may take place over many years in the future and hence the carrying amounts of provisions and liabilities are regularly reviewed and adjusted to take into account the changing circumstances and other factors that influence the provisions and liabilities. This is set out in note 23.

# viii) The HZL and BALCO call options

The Group had exercised its call option to acquire the remaining 49% interest in BALCO and 29.5% interest in HZL. The Government of India has however, contested the validity of the options and disputed their valuation performed in terms of the relevant agreements the details of which are set out in note 41(b). In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value. Accordingly, the value of the option would be nil, and hence, the call options have not been recognized in the financial statements.

# ix) Recoverability of deferred tax and other income

The Group has carry forward tax losses, unabsorbed depreciation and MAT credit that are available for offset against future taxable profit. Deferred tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the unused tax losses or tax credits can be utilized. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available

as at and for the year ended March 31, 2019

to offset the assets. This requires assumptions regarding future profitability, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets and consequential impact in the consolidated statement of profit and loss.

Additionally, the Group has tax receivables on account of refund arising on account of past amalgamation and relating to various tax disputes. The recoverability of these receivables involve application of judgement as to the ultimate outcome of the tax assessment and litigations. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific tax law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision (refer note 34).

The details of MAT assets (recognized and unrecognized) are set out in note 34.

### x) Copper operations India

In an appeal filed by the Group against the closure order of the Tuticorin Copper smelter by Tamil Nadu Pollution Control Board ("TNPCB"), the appellate authority National Green Tribunal ("NGT") passed an interim order on May 31, 2013 allowing the copper smelter to recommence operations and appointed an Expert Committee to submit a report on the plant operations. Post the interim order, the plant recommenced operations on June 23, 2013. Based on Expert Committee's report on the operations of the plant stating that the plant's emission were within prescribed standards and based on this report, NGT ruled on August 08, 2013 that the Copper smelter could continue its operations and recommendations made by the Expert Committee be implemented in a time bound manner. The Group has implemented all of the recommendations. TNPCB has filed an appeal against the order of the NGT before the Supreme Court of India.

In the meanwhile, the application for renewal of Consent to Operate (CTO) for existing copper smelter, required as per procedure established by law was rejected by TNPCB in April 2018. The Company has filed an appeal before the TNPCB Appellate Authority challenging the Rejection Order. During the pendency of the appeal, there were protests by a section of local community raising environmental concerns and TNPCB vide its order dated May 23, 2018 ordered closure of existing copper smelter plant with immediate effect. Further, the Government of Tamil Nadu, issued orders dated May 28, 2018 with a direction to seal the existing copper smelter plant permanently. The Company believes these actions were not taken in accordance with the procedure prescribed under applicable laws. Subsequently, the Directorate of Industrial Safety and Health passed orders dated May 30, 2018, directing the immediate suspension and revocation of the Factory License and the Registration Certificate for the existing smelter plant.

Separately, the Company has filed a fresh application for renewal of the Environmental Clearance for the proposed Copper Smelter Plant 2 (Expansion Project) dated March 12, 2018 before the Expert Appraisal Committee of the MoEF wherein a sub-committee was directed to visit the Expansion Project site prior to prescribing the Terms of Reference. In the meantime, the Madurai Bench of the High Court of Madras in a Public Interest Litigation held vide its order dated May 23, 2018 that the application for renewal of the

Environmental Clearance for the Expansion Project shall be processed after a mandatory public hearing and in the interim, ordered the Company to cease construction and all other activities on site for the proposed Expansion Project with immediate effect. The Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub judice. Separately, SIPCOT vide its letter dated May 29, 2018, cancelled 342.22 acres of the land allotted for the proposed Expansion Project. Further the TNPCB issued orders on June 7, 2018 directing the withdrawal of the Consent to Establish (CTE) which was valid till March 31, 2023. The Company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The Company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB, the matter is pending for adjudication.

The Company has appealed this before the National Green Tribunal (NGT). NGT vide its order on December 15, 2018 has set aside the impugned orders and directed the TNPCB to pass fresh orders for renewal of consent and authorization to handle hazardous substances, subject to appropriate conditions for protection of environment in accordance with law.

The State of Tamil Nadu and TNPCB approached Supreme Court in Civil Appeals on January 02, 2019 challenging the judgment of NGT dated December 15, 2018 and the previously passed judgment of NGT dated August 08, 2013. The Supreme Court vide its judgment dated February 18, 2019 set aside the judgments of NGT dated December 15, 2018 and August 08, 2013 on the basis of maintainability alone.

The Company has also filed a writ petition before Madras High Court challenging the various orders passed against the Company in 2018 and 2013. The case was heard on March 01, 2019 wherein the Company pressed for interim relief for care and maintenance of the plant. The Madras High Court has directed the State of Tamil Nadu and TNPCB to file their counter to our petition for interim relief.

The Company is taking appropriate legal measures to address the matters.

Even though there can be no assurance regarding the final outcome of the process and the timing of such process in relation to the approval for the expansion project, as per the Company's assessment, it is in compliance with the applicable regulations and expects to get the necessary approvals in relation to the existing operations and the expansion project and is not expecting any material loss on this account. The carrying value of the assets under operation and under expansion as at March 31, 2019 is ₹ 2,385 Crore and ₹ 1,046 Crore respectively.

The Company has carried out an impairment analysis considering the key variables and concluded that there exists no impairment. The Company has done an additional sensitivity with a delay in commencement of operations both at the existing and expansion plants by two years and noted that the recoverable amount of the assets would still be in excess of their carrying values.

# xi) PSC Extension

# Rajasthan Block

On October 26, 2018, the Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH) has

as at and for the year ended March 31, 2019

granted its approval for a ten-year extension of the Production Sharing Contract (PSC) for the Rajasthan Block (RJ), with effect from May 15, 2020 subject to certain conditions. The Gol has granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for RJ is sub-judice and pending before the Hon'ble Delhi High Court. To address two of the conditions stated by DGH, the Company has taken the following steps:

- Submission of Audited Accounts and End of year statement: The Company and one of the joint venture partners have divergent views on the cost oil entitlement and therefore the End of Year statement for the year ended March 31, 2018 and Investment Multiple as at March 31, 2018 could not be finalized. To resolve this, the Company has initiated arbitration proceedings against the joint venture partner. Consequentially, profit petroleum pertaining to the said Block for the year ended March 31, 2019 and applicable Investment Multiple calculated based on management's cost oil computation (resulting into Government's share of profit petroleum @ 40% for DA-1 & DA-2 and @20% for DA-3 for FY 2018-19), remains provisional. The computation is after considering relevant independent legal advice.
- Profit Petroleum: DGH has raised a demand for the period upto March 31, 2017 for Government's additional share of Profit Oil based on its computation of disallowance of cost incurred over the initially approved Field Development Plan (FDP) of pipeline project and retrospective allocation of certain common costs between Development Areas (DAs) of Rajasthan Block. The Company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals) for having claimed such costs and for allocating common costs between different DAs and has responded to the government accordingly. Group's view is also supported by an independent legal opinion.

Pursuant to the aforesaid approval of October 26, 2018, the Group has recomputed its reserves till 2030 and has reclassified exploration costs of ₹8126 Crore to property plant and equipment and ₹6724 Crore to capital work-in-progress. This has led to a reduction in depletion charge of ₹ 60 Crore for the period from October 26, 2018 till March 31, 2019.

#### Ravva Block

The Government of India has granted its approval for a ten-year extension of PSC for Ravva Block with effect from October 28, 2019, subject to certain conditions. The extension has been granted with a 10% increase in GOI share of profit oil. Management has reviewed the conditions and is confident of fulfilling or disposing of such conditions.

The Group does not expect any material adjustment to the financial statements on account of the aforesaid matters.

### (B) Significant judgements

### (i) Determining whether an arrangement contains a lease:

The Group has ascertained that the Power Purchase Agreement (PPA) entered into between one of the subsidiaries and a State grid qualifies to be an operating lease under Ind AS 17 "Leases". Accordingly, the consideration receivable under the PPA relating to recovery of capacity charges towards capital cost have been recognised as operating lease rentals and in respect of variable cost that includes fuel costs, operations and maintenance, etc. is considered as revenue from sale of products/services.

Significant judgement is required in segregating the capacity charges due from the State grid, between fixed and contingent payments. The Group has determined that since the capacity charges under the PPA are based on the number of units of electricity made available by its Subsidiary which would be subject to variation on account of various factors like availability of coal and water for the plant, there are no fixed minimum payments under the PPA, which requires it to be accounted for on a straight line basis. The contingent rents recognised are disclosed in Note 25(A).

#### (ii) Contingencies

In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Group. A tax provision is recognised when the Group has a present obligation as a result of past events and it is probable that the Group will be required to settle that obligation.

Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain, the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements.

When considering the classification of legal or tax cases as probable, possible or remote, there is judgement involved. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific applicable law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision. Although there can be no assurance regarding the final outcome of the legal proceedings, the Group does not expect them to have a materially adverse impact on the Group's financial position or profitability. These are set out in note 37.

#### (iii) Revenue recognition and receivable recovery in relation to the power division

In certain cases, the Group's power customers are disputing various contractual provisions of Power Purchase Agreements (PPA). Significant judgement is required in both assessing the tariff to be charged under the PPA in accordance with Ind AS 115 and to assess the recoverability of withheld revenue currently accounted for as receivables.

In assessing this critical judgment, management considered favourable external legal opinions the Group has obtained in relation to the claims. In addition the fact that the contracts are with government owned companies implies the credit risk is low [refer note 8(c)].

#### (iv) Exceptional Items

Exceptional items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also tax charges related to exceptional items and certain one-time tax effects are considered exceptional. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with Ind AS.

The determination as to which items should be disclosed separately requires a degree of judgement. The details of exceptional items are set out in note 33.

as at and for the year ended March 31, 2019

#### 4. BUSINESS COMBINATION

#### a) Electrosteel Steels Limited

On June 04, 2018, the Group, through its subsidiary Vedanta Star Limited (VSL) acquired management control over Electrosteel Steels Limited (ESL) as the previous Board of Directors of ESL was reconstituted on that date. Further, on June 15, 2018, pursuant to the allotment of shares to VSL, the Group holds 90% of the paid-up share capital of ESL through VSL. The acquisition will complement the Group's existing Iron Ore business as the vertical integration of steel manufacturing capabilities has the potential to generate significant efficiencies. ESL was admitted under corporate insolvency resolution process in terms of the Insolvency and Bankruptcy Code, 2016 of India. The financial results of ESL from the date of acquisition have been included in the Consolidated Financial Statements of the Group.

The fair value of the identifiable assets and liabilities of ESL as at the date of the acquisition were as follows:

(₹ in Crore)

	(11101010)
Particulars Particulars	Fair Value At Acquisition
Non-Current Assets	·
Property, Plant and Equipment	4,388
Capital work-in-progress	457
Income tax assets	5
Other non-current assets	56
Total non-current assets	4,906
Current Assets	
Inventories	820
Trade receivables	196
Other financial assets	88
Cash and cash equivalents	245
Other bank balances	311
Other current assets	100
Total current assets	1,760
Total Assets (A)	6,666
Non-current liabilities	
Provisions	10
Total non-current liabilities	10
Current liabilities	
Borrowings	7
Trade payables	778
Other financial liabilities	255
Provisions	2
Other current liabilities	98
Total current liabilities	1,140
Total Liabilities (B)	1,150
Net Assets (C=A-B)	5,516
Satisfied by:	
Fair value of total purchase consideration (D)	5,320
Non-Controlling interest on acquisition (10% of net assets after adjustment of borrowings from immediate parent of ₹ 3,554 Crore) (E)	196
Net Bargain Gain (C-D-E)	-

Since the date of acquisition, ESL has contributed ₹ 4.195 Crore and ₹ 277 Crore to the Group revenue and profit before taxation respectively for the year ended March 31, 2019.

If ESL had been acquired at the beginning of the year, the revenue of the Group would have been ₹ 91,559 Crore and the profit before tax of the Group would have been ₹ 13,540 Crore.

The carrying amount of trade receivables equals the fair value of trade receivables. None of the trade receivables was impaired and the full contractual amounts were expected to be realized. Property has been valued using the Market approach - Sales comparison method (SCM). This method models the behavior of the market by comparing with similar properties that have been recently sold/rented or for which offers to purchase/rentals have been made. Plant and equipment have been valued using the cost approach - Depreciated replacement cost (DRC) method. For estimating DRC, gross current replacement cost is depreciated in order to reflect the value attributable to the remaining portion of the total economic life of the plant and equipment. The method takes into account the age, condition, depreciation, obsolescence (economic and physical) and other relevant factors, including residual value at the end of the plant and equipment's economic life.

as at and for the year ended March 31, 2019

Non-controlling interest has been measured at the non-controlling interest's proportionate share of ESL's identifiable net assets.

Acquisition costs of ₹ 18 Crore related to ESL acquisition have been charged to consolidated statement of profit and loss.

#### b) Avanstrate Inc.

On December 28, 2017, the Group acquired 51,63% equity stake in AvanStrate Inc. (ASI) for a cash consideration of JPY 1 million (₹ 0.06 Crore) and acquired debts for JPY 17,058 million (₹ 964 Crore). Additionally, a loan of JPY 815 million (₹ 46 Crore) was extended to ASI. ASI is involved in manufaturing of glass substrate. Provisional fair values that were determined as at March 31, 2018 for consolidation were finalised during the current year.

As per the shareholding agreement (SHA) entered with the other majority shareholder holding 46.6% in ASI, the Group has call option, conversion option to convert part of its debt given to ASI into equity of ASI as well as it has issued put option to the other majority shareholder. These are exercisable as per the terms mentioned in the SHA.

The fair value of the identifiable assets and liabilities of ASI as adjusted for measurement period adjustments as at the date of the acquisition were as follows. The comparative period amounts have been restated accordingly.

Non-Current Assets         Property, Plant and Equipment         1,385         .         1,385           Capital work-in-progress         163         .         163           Other intangible assets         205         .         205           Deferred tax assets         126         .         266           Other non-current assets         41         .         41           Total non-current assets         1,920         .         1,920           Current Assets         138         .         1,38           Inventories         138         .         138           Trade Receivables         166         .         166           Cash and cash equivalents         151         .         151           Other Current Assets         64         .         64           Total Assets (A)         2,439         .         2,439           Total Assets (A)         2,439         .         2,439           Non-current liabilities         519         .         1,51           Total Assets (A)         2,439         .         2,439           Poffered tax liabilities         40         .         .         2,33         .         2,33         .         .	Particulars	Provisional Fair Value	Fair Value Adjustments	Fair Value At Acquisition
Capital work-in-progress         163         -         163           Other intangible assets         205         -         205           Deferred tax assets         126         -         126           Other non-current assets         1920         -         1,920           Total non-current assets         1,920         -         1,920           Current Assets         1,920         -         1,920           Current Assets         1,920         -         1,920           Current Assets         166         -         1,820           Cash and cash equivalents         151         -         1,66           Cash and cash equivalents         519         -         519           Other Current Assets         54         -         64           Total Current assets         519         -         519           Total Assets (A)         2,439         -         2,439           Non-current liabilities         30         -         2,439           Deffered tax liabilities         30         -         2,52           Total non-current liabilities         23         -         2,23           Total pon-current liabilities         1,054         129         1,18	Non-Current Assets		,	1,1
Other intangible assets         205         -         205           Deferred tax assets         126         -         126           Other non-current assets         41         -         41           Total non-current assets         1,920         -         1,920           Current Assets         1,920         -         1,920           Current Assets         138         -         1,38           Trade Receivables         166         -         1,66           Cash and cash equivalents         151         -         1,51           Other Current Assets         519         -         519           Total Assets (A)         2,439         -         2,439           Non-current liabilities         519         -         2,439           Non-current liabilities         400         129         529           Other non-current liabilities         23         -         23           Total non-current liabilities         1,054         129         1,183           Other current liabilities         1,054         129         1,283           Total Liabilities (B)         1,054         129         1,31           Net Assets (C=A-B)         1,25         1,29	Property, Plant and Equipment	1,385	-	1,385
Deferred tax assets         126         -         126           Other non-current assets         41         -         41           Total non-current assets         1,920         -         1,920           Current Assets         138         -         1,38           Inventories         138         -         1,38           Trade Receivables         166         -         66           Cash and cash equivalents         151         -         151           Other Current Assets         64         -         64           Total Assets (A)         2,43         -         519           Total Assets (A)         2,43         -         2,43           Defrered tax liabilities         631         -         631           Derrowings (excluding borrowings from immediate parent)         631         -         631           Defrered tax liabilities         400         129         529           Other current liabilities         1,054         129         1,183           Ottal non-current liabilities         1,183         1         1,283           Ottal Liabilities (B)         1,28         1         1,28         1,28           Total publicies (B)         1,28	Capital work-in-progress	163	-	163
Other non-current assets         41         -         41           Total non-current assets         1,920         -         1,920           Current Assets         -         1,920           Current Assets         -         1,38         1,38         1,38           Trade Receivables         166         1,66	Other intangible assets	205	-	205
Total non-current assets         1,920         - 1,920           Current Assets           Inventories         138         - 138           Trade Receivables         166         - 166           Cash and cash equivalents         151         - 151           Other Current Assets         64         - 64           Total Current assets         519         - 518           Total Assets (A)         2,439         - 2,439           Non-current liabilities         2,439         - 631           Borrowings (excluding borrowings from immediate parent)         631         - 631           Deffered tax liabilities         400         129         529           Other non-current liabilities         23         - 23         23           Total Liabilities (B)         1,054         129         1,183           Total Liabilities (B)         1,182         129         1,311           Net Assets (C=A-B)         1,257         (129)         1,312           Satisfied by:         2         1,010         - 0         1,010           Less-Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interest on acquisition of Non-controlling interest on acquisition of Non-controlling interest on acquisition of Non	Deferred tax assets	126	-	126
Current Assets           Inventories         138         -         138           Trade Receivables         166         -         166           Cash and cash equivalents         151         -         151           Other Current Assets         64         -         64           Total Current Assets (A)         2,439         -         2,439           Total Assets (A)         2,439         -         2,439           Non-current liabilities         2,439         -         2,439           Non-current liabilities         400         129         529           Other on-current liabilities         23         -         23           Other ourrent liabilities         1,054         129         1,183           Other current liabilities (B)         1,182         129         1,311           Not Assets (C-A-B)         1,257         (129)         1,128           Stiffied by:         2         1,010         -         1,010           Less-Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests         7         108           Total purchase consideration (b)         902         -         902	Other non-current assets	41	-	41
Inventories         138         -         138           Trade Receivables         166         -         166           Cash and cash equivalents         151         -         151           Other Current Assets         64         -         64           Total current assets         519         -         519           Total Assets (A)         2,439         -         2,439           Non-current liabilities         80         2,439         -         2,439           Poffered tax liabilities         400         129         529           Other non-current liabilities         23         -         23           Other current liabilities         1,054         129         1,183           Other current liabilities (B)         1,182         129         1,311           Net Assets (C=A-B)         1,257         (129)         1,128           Satisfied by:         1,257         (129)         1,010           Less:Fair Value of Conversion option asset on debt acquired         1,010         -         1,010           Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests         902         -         902           Non-Control	Total non-current assets	1,920	-	1,920
Trade Receivables         166         -         166           Cash and cash equivalents         151         -         151           Other Current Assets         64         -         64           Total current assets         519         -         519           Total Assets (A)         2,439         -         2,439           Non-current liabilities         8         -         631           Deffered tax liabilities         400         129         529           Other non-current liabilities         23         -         23           Other current liabilities         1,054         129         1,183           Other current liabilities (B)         1,182         129         1,311           Net Assets (C=A-B)         1,257         (129)         1,218           Statisfied by:         2         1,010         -         1,010           Cash consideration paid for 51.63% stake & debt acquired         1,010         -         1,010           cess:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests         7         902           Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair all purchase consideration (D)         902 <t< td=""><td>Current Assets</td><td></td><td></td><td></td></t<>	Current Assets			
Cash and cash equivalents       151       -       151         Other Current Assets       64       -       64         Total current assets       519       -       519         Total Assets (A)       2,439       -       2,439         Non-current liabilities       -       631       -       631         Deffered tax liabilities       400       129       529         Other non-current liabilities       400       129       529         Other current liabilities       1,054       129       1,183         Other current liabilities (B)       1,182       129       1,311         Net Assets (C=A-B)       1,182       129       1,311         Net Assets (C=A-B)       1,257       (129)       1,128         Satisfied by:       2       2       1,010	Inventories	138	-	138
Other Current Assets         64         -         64           Total current assets         519         -         519           Total Assets (A)         2,439         -         2,439           Non-current liabilities         2         339         -         2,439           Non-current liabilities         631         -         -         23         -         23         -         23         -         23         -         23         -         1,23         -         1,23         -         1,23         -         1,23         -         1,23         -         1,23         -         1,23         - <td>Trade Receivables</td> <td>166</td> <td>-</td> <td>166</td>	Trade Receivables	166	-	166
Total current assets         519         -         519           Total Assets (A)         2,439         -         2,439           Non-current liabilities         Borrowings (excluding borrowings from immediate parent)         631         -         631           Deffered tax liabilities         400         129         529           Other non-current liabilities         23         -         23           Other current liabilities         1,054         129         1,183           Other current liabilities (B)         1,182         129         1,311           Net Assets (C=A-B)         1,257         (129)         1,128           Satisfied by:         2         1,257         (129)         1,128           Cash consideration paid for 51.63% stake & debt acquired         1,010         -         1,010           Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests         902         -         902           Total purchase consideration (D)         902         -         902           Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Cash and cash equivalents	151	-	151
Total Assets (A)2,439-2,439Non-current liabilitiesBorrowings (excluding borrowings from immediate parent)631-631Deffered tax liabilities400129529Other non-current liabilities23-23Total non-current liabilities1,0541291,183Other current liabilities128-128Total Liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,128Satisfied by:Cash consideration paid for 51.63% stake & debt acquired1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)2107109	Other Current Assets	64	-	64
Non-current liabilitiesControl of the fair value of Conversion of Non-controlling interest on acquisition (48.37% of net assets after adjustment of \$10.000.631-631Borrowings (excluding borrowings from immediate parent)631-631Deffered tax liabilities400129529Other non-current liabilities23-23Total non-current liabilities1,0541291,183Other current liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,28Satisfied by:-1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)-107109	Total current assets	519	-	519
Borrowings (excluding borrowings from immediate parent)631-631Deffered tax liabilities400129529Other non-current liabilities23-23Total non-current liabilities1,0541291,183Other current liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,218Satisfied by:1,010-1,010Cash consideration paid for 51.63% stake & debt acquired1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of porrowings from immediate parent of ₹ 902 Crore) (E)2107109	Total Assets (A)	2,439	-	2,439
Deffered tax liabilities400129529Other non-current liabilities23-23Total non-current liabilities1,0541291,183Other current liabilities (B)1,28-128Total Liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,128Satisfied by:-1,010-1,010Less: Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Non-current liabilities			
Other non-current liabilities23-23Total non-current liabilities1,0541291,183Other current liabilities128-128Total Liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,128Satisfied by:1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Borrowings (excluding borrowings from immediate parent)	631	-	631
Total non-current liabilities1,0541291,183Other current liabilities128-128Total Liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,128Satisfied by:1,010-1,010Cash consideration paid for 51.63% stake & debt acquired1,010-1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)-107109	Deffered tax liabilities	400	129	529
Other current liabilities  128 - 128  Total Liabilities (B) 1,182 129 1,311  Net Assets (C=A-B) 1,257 (129) 1,128  Satisfied by:  Cash consideration paid for 51.63% stake & debt acquired 1,010 - 1,010  Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests  Total purchase consideration (D) 902 - 902  Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Other non-current liabilities	23	-	23
Total Liabilities (B)1,1821291,311Net Assets (C=A-B)1,257(129)1,128Satisfied by:Cash consideration paid for 51.63% stake & debt acquired1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)107109	Total non-current liabilities	1,054	129	1,183
Net Assets (C=A-B)1,257(129)1,128Satisfied by:Cash consideration paid for 51.63% stake & debt acquired1,010-1,010Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests(108)-(108)Total purchase consideration (D)902-902Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)2107109	Other current liabilities	128	-	128
Satisfied by:  Cash consideration paid for 51.63% stake & debt acquired 1,010 - 1,010  Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests  Total purchase consideration (D) 902 - 902  Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Total Liabilities (B)	1,182	129	1,311
Cash consideration paid for 51.63% stake & debt acquired 1,010 - 1,010  Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests  Total purchase consideration (D) 902 - 902  Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Net Assets (C=A-B)	1,257	(129)	1,128
Less:Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests  Total purchase consideration (D)  Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)  (108)  - (108)  - 902  - 902  - 107  109	Satisfied by:			
option liability towards acquisition of Non-controlling interests  Total purchase consideration (D) 902 - 902  Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of ₹ 902 Crore) (E)	Cash consideration paid for 51.63% stake & debt acquired	1,010	-	1,010
Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair 2 107 109 value of borrowings from immediate parent of ₹ 902 Crore) (E)		(108)	-	(108)
value of borrowings from immediate parent of ₹ 902 Crore) (E)	Total purchase consideration (D)	902	-	902
Bargain Gain (C-D-E) 353 (236) 117		2	107	109
	Bargain Gain (C-D-E)	353	(236)	117

The net debit of ₹ 69 Crore recognized in Capital Reserve in the Statement of Changes in Equity, is the difference between the above bargain gain of ₹ 117 Crore and ₹ 186 Crore being the excess of gross fair value of the put option liability, held by the non controlling shareholder of ASI, over the mark to market loss on such liability on the date of acquisition.

The carrying amount of trade and other receivables equals the fair value of trade and other receivables. None of the trade receivables was impaired and the full contractual amounts were expected to be realised. Property, plant and equipment have been valued using cost approach - cost of reproduction new (CRN) method. For estimating CRN, appropriate indices were used to develop trend factors that have been applied on the acquisition/ historical costs of the different assets over the period during which the asset has been commissioned or in other words life spent. The estimated CRN was further adjusted for applicable physical deterioration to arrive at fair value. The physical deterioration was based on the estimated age and

as at and for the year ended March 31, 2019

remaining useful life. Fair value of assumed debt was determined using yield-method, wherein, the expected cash flows including interest component and principal repayments have been discounted at an appropriate market interest rate.

Non-controlling interest has been measured at the non-controlling interest's proportionate share of ASI's identifiable net assets.

Acquisition costs of ₹ 45 Crore related to ASI was charged to the consolidated statement of profit and loss for the year ended March 31, 2018 under exceptional items.

# c) Acquisition of new hydrocarbon blocks

In August, 2018, Vedanta Limited was awarded 41 hydrocarbon blocks out of 55 blocks auctioned under the open acreage licensing policy (OALP) by Government of India (GOI). The blocks awarded to Vedanta Limited comprise of 33 onshore and 8 offshore blocks. Vedanta Limited will share a specified proportion of the net revenue from each block with GOI and has entered into 41 separate revenue sharing contracts (RSC) on October 01, 2018.

The bid cost of ₹ 3,811 Crore represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programs during the exploration phase. Vedanta Limited has provided bank guarantees for minimum work programme commitments amounting to ₹ 2,137 Crore for the 41 exploration blocks. These have been disclosed in note 37.

#### **5. SEGMENT INFORMATION**

# A) Description of segment and principal activities

The Group is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group produces zinc, lead, silver, copper, aluminium, iron ore, oil and gas and commercial power and has a presence across India, South Africa, Namibia, U.A.E, Ireland, Australia, Japan, South Korea, Taiwan and Liberia. The Group is also in the business of port operations and manufacturing of

glass substrate and steel. The Group has seven reportable segments: copper, aluminium, iron ore, power, Zinc India (comprises of zinc and lead India), Zinc international, oil and gas and others. The management of the Group is organized by its main products: copper, zinc (comprises of zinc and lead India, silver India and zinc international), aluminium, iron ore, oil and gas, power and others. Each of the reportable segments derives its revenues from these main products and hence these have been identified as reportable segments by the Group's chief operating decision maker ("CODM").

Segment Revenue, Results, Assets and Liabilities include the respective amounts identifiable to each of the segments and amount allocated on a reasonable basis. Unallocated expenditure consist of common expenditure incurred for all the seaments and expenses incurred at corporate level. The assets and liabilities that cannot be allocated between the segments are shown as unallocated assets and unallocated liabilities respectively.

The accounting policies of the reportable segments are the same as the Group's accounting policies described in Note 3. The operating segments reported are the segments of the Group for which separate financial information is available. Earnings before interest, depreciation and amortisation and tax (EBITDA) are evaluated regularly by the CODM in deciding how to allocate resources and in assessing performance. The Group's financing (including finance costs and finance income) and income taxes are reviewed on an overall basis and are not allocated to operating segments.

Pricing between operating segments are on an arm's length basis in a manner similar to transactions with third parties except from power segment sales amounting to ₹ 67 Crore and ₹ 133 Crore, which is at cost, for the year ended March 31, 2019 and March 31, 2018 respectively.

The following table presents revenue and profit information and certain assets and liabilities information regarding the Group's business segments as at and for the year ended March 31, 2019 and March 31, 2018 respectively.

as at and for the year ended March 31, 2019

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										(₹ in Crore)
					<b>Business Segments</b>	nents				
Particulars	Zinc India	Zinc International	Oil & Gas	Aluminium	Copper	Iron Ore	Power	Others	Eliminations	Total
Revenue External revenue*	20.656	2.738	13.223	29.208	10.739	2,903	6.456	4.978	,	90.901
Inter segment revenue		) ' ) Î	'	21	'	ο <b>Φ</b>	89	45	(142)	
Segment revenue	20,656	2,738	13,223	29,229	10,739	2,911	6,524	5,023	(142)	106,06
Results										
EBITDA**	10,600	869	7,656	2,202	(235)	584	1,527	980		24,012
Depreciation, depletion and amortisation	1,959	429	2,492	1,874	209	118	712	399		8,192
Other income ***	78	-	-	71	9	8	17	3	-	183
Segment Results	8,719	269	5,164	399	(438)	474	832	584		16,003
Less: Unallocated expenses										(203)
Less: Finance costs										5,689
Add: Other income (excluding exchange difference										3,435
and those included in segment results)										
Add: Net exceptional gain										320
Net profit/(loss) before tax										13,560
Other information										
Segment assets	19,884	6,034	28,519	58,422	8,347	3,122	19,573	8,844	•	1,52,745
Financial Assets investments										33,065
Deferred tax Assets										3,475
Income tax Assets										3,492
										8,392
Others										874
Total assets										2,02,043
Segment liabilities	6,155	1,361	9,851	23,062	4,163	1,367	2,045	1,463	1	49,467
Deferred tax liabilities										4,484
Borrowing										66,226
Income tax liabilities (net of payments)										409
Others										3,933
Total liabilities										1,24,519
Capital expenditure****	3,883	1,575	3,876	1,552	304	36	09	5,191	1	16,490
Impairment reversal/(charge) - net / provision	1	1	261	1	1			•	1	261

Export incentive has been reclassified from 'segment revenue' to 'other operating income'. Refer note 2 (b),

<sup>\*\*</sup> EBITDA is a non-GAAP measure.

<sup>\*\*\*</sup> Amortisation of duty benefits relating to assets recognised as government grant.

<sup>\*\*\*\*</sup> Total of capital expenditure includes capital expenditure of ₹ 3 Crore which is not allocable to any segment. It also includes acquisition through business combination.

58,159 311 1,472

1,05,312

1,797

63

48

1,515

1,039 6,907

1,649

3,295

he year ended March 31, 2018	

										(≰ in Crore)
					Business Segments	nents				
Particulars	Zinc India	Zinc International	Oil & Gas	Aluminium	Copper	Iron Ore	Power	Others	Eliminations	Total
Revenue										
External revenue*	22,050	3,446	9,536	23,131	24,951	3,136	5,500	261	ı	92,011
Inter segment revenue	ı	•	ı	25	ı	26	152	12	(215)	•
Segment revenue	22,050	3,446	9,536	23,156	24,951	3,162	5,652	273	(215)	92,011
Results										
EBITDA**	12,254	1,415	5,429	2,654	1,055	400	1,665	28	ı	24,900
Depreciation, depletion and amortisation***	1,530	183	1,577	1,894	214	226	587	65	ı	6,276
Other income ****	47	•	1	69	က	00	17	<u></u>	1	145
Segment Results	10,771	1,232	3,852	829	844	182	1,095	(36)		18,769
Unallocated expenses ***										(42)
Less: Finance costs										5,112
Add: Other income (excluding exchange difference										3,060
and those included in segment results)										
Add: Net exceptional gain										2,897
Net profit/(loss) before tax										19,569
Other information										
Segmentassets	17,777	5,597	23,361	55,523	10,168	3,246	20,615	2,821	1	1,39,108
Financial Assets investments										28,700
Deferred tax Assets										4,934
Income tax Assets										3,404
Cash and bank balances (Including restricted cash										7,654
and bank balances)										
Others										785
Total assets										1,84,585
Segment liabilities	5,074	1,108	5,525	16,382	9,016	1,688	2,130	229	ı	41,152
Deferred tax liabilities										4,218

Impairment reversal/(charge) - net / provision

Capital expenditure\*\*\*\*\*

Total liabilities

Income tax liabilities (net of payments)

Borrowing

<sup>\*</sup> Export incentive has been reclassified from 'segment revenue' to 'other operating income'. Refer note 2 (b).

<sup>\*\*</sup> EBITDA is a non-GAAP measure.

<sup>\*\*\*</sup> Depreciation, depletion and amortisation expense excludes and unallocated expenses includes unallocated depreciation of ₹ 7 Crore

<sup>\*\*\*\*</sup> Amortisation of duty benefits relating to assets recognised as government grant.

<sup>\*\*\*\*\*</sup> Total of capital expenditure includes capital expenditure of ₹ 11 Crore which is not allocable to any segment. It also includes acquisition through business combination

as at and for the year ended March 31, 2019

#### II) Geographical segment analysis

The following table provides an analysis of the Group's sales by region in which the customer is located, irrespective of the origin of the goods.

(₹ in Crore)

Geographical segments	Year ended March 31, 2019	Year ended March 31, 2018
Revenue by geographical segment (Gross of excise duty)		
India	59,160	53,612
China	3,787	8,387
UAE	1,015	3,457
Malaysia	4,866	5,322
Others	22,073	21,233
Total	90,901	92,011

The following is an analysis of the carrying amount of non-current assets, excluding deferred tax assets and financial assets, analysed by the geographical area in which the assets are located:

(₹ in Crore)

	As at	As at
Geographical Segment	March 31, 2019	March 31, 2018
Carrying amount of non-current assets		
India	1,21,676	1,12,953
South Africa	4,186	3,708
Namibia	995	1,110
Taiwan	1,220	1,225
Other	981	865
Total	1,29,058	1,19,861

# Information about major customer

No single customer has accounted for more than 10% of the Group's revenue for the year ended March 31, 2019 and March 31, 2018.

# **Disaggregation of Revenue**

Below table summarises the disaggregated revenue from contracts with customers

	Year ended March 31, 2019
Oil	12,643
Gas	527
Zinc Metal	17,205
Lead Metal	3,757
Silver Metals and bars	2,583
Iron Ore	691
Metallurgical coke	53
Pig Iron	2,061
Copper products	9,293
Aluminium products	28,073
Power	4,784
Steel products	4,186
Others	4,219
Revenue from contracts with customers	90,075
Revenue from contingent rents (refer note 25(A))	1,672
Gains/ (losses) on provisionally priced contracts	(846)
Total revenue	90,901

# Notes forming part of the consolidated financial statements as at and for the year ended March 31, 2019

Freehold Fre													() () () ()
Friend   F					Property,	Plant & Equ	pment						
Part		Freehold		Plant and	Mining	Oil & gas producing	Furniture		Office		Capital work- in-progress	Exploration intangible assets under	Total including capital work-in-progress and Exploration intangible assets under
Control   Cont	Particulars	Land	Buildings	equipment	and leases	facilities	fixtures	Vehicles e	quipment	Total	(CWIP)*	developemnt	development
2.008         11,941         83.727         7915         46,071         306         106         676         15.839         18.833         6           2.008         71         6.521         1.624         5         26         7         1.608         5.456         6         6         6         6         6         7.103         6.603         9         6         6         6         7.103         6         6         7.103         6	i) Gross Block												
198   198	As at April 1, 2017	2,088	11,941	83,727	7,915	46,071	306	106	9/9	1,52,830	18,893	62,057	2,33,780
ombination	Additions	39	28	751	529	164	2	26	37	1,608	5,456	94	7,158
ombination - 314 1,051 - 1 1,061 - 1 1,061 - 1 1,385 163  - 4,4 (769) 68 (14,4) (1) (1,1) (14,1) (8) (742) - 1 1,000  - 1,14 4,61 1,024 46,715 336 126 172 1,63,384 17,689 6  - 1,14 4,61 1,024 46,715 336 126 172 1,63,384 17,689 6  - 1,14 399 3,881 2,03 3,287 20 226 8 3,495 19,673 (19,1) (1	Transfers/ Reclassifications	24	120	5,531	1,097	308	4	2	16	7,103	(6,903)	(200)	1
1,	Acquisition through Business Combination (refer note 4(b))	1	314	1,051	•	•	19	_	1	1,385	163	1	1,548
5         114         461         425         186         3         5         1         1,200         30           2,166         12,543         90,752         10,344         46,715         336         126         722         163,384         17,659         6           ombination         332         559         3,490         2,03         32,887         20         236         8         3,495         1,047         7,061         1,061         1,047         1,045         1,061 <th< td=""><td>Less: Disposals/ Adjustments</td><td>ı</td><td>(4)</td><td>(169)</td><td>89</td><td>(14)</td><td>(1)</td><td>(14)</td><td>(8)</td><td>(742)</td><td>ı</td><td>(64)</td><td>(808)</td></th<>	Less: Disposals/ Adjustments	ı	(4)	(169)	89	(14)	(1)	(14)	(8)	(742)	ı	(64)	(808)
2,156         12,543         90,752         10,034         46,715         336         126         722         1,63,364         17,639         6           39         484         2,248         1,147         249         16         20         109         4,314         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         7,061         (9,14)         1,062         (1,045)         (1,045)         7,063         9,06,062         1,079         1	Exchange differences	Ŋ		461	425	186	က	S	· -	1,200	30	196	1,426
99 484 2,248 1,147 249 18 20 109 4,314 7,061 and bindration 332 559 3,490 1.07 249 18 20 236 8 39,495 19,673 (figuration) 332 559 3,490 2.073 32,867 20 236 8 39,495 19,673 (figuration) 2,558 14,030 99,853 12,737 82,434 384 359 831 2,13,186 44,495 appletion, 189 4,294 2,3,804 3,006 44,946 192 23 541 76,995 1,222 19 27 474 4,205 827 614 30 16 59 6,252 1,049 6,277 1	As at April 1, 2018	2,156	12,543	90,752	10,034	46,715	336	126	722	1,63,384	17,639	62,083	2,43,106
ombination 332 559 3,490 2.073 32,867 20 236 8 39,495 19,673 (67 100 10 10 10 10 10 10 10 10 10 10 10 10	Additions	39	484	2,248	1,147	249	18	20	109	4,314	7,061	200	11,875
ombination 332 559 3.490	Transfers/ Reclassifications		399	3,881	2,073	32,867	20	236	00	39,495	19,673	(59,169)	(1)
Figure 132) - (16) (934) (53) - (3) (14) (25) (1,045) (58) (58) - (14,030) 99,853 12,737 82,434 384 359 831 2,13,186 44,495 apletion,  2,558 14,030 99,853 12,737 82,434 384 359 831 2,13,186 44,495 apletion,  189 4,294 23,804 3,006 44,946 192 23 541 76,995 1,222 194 (17) (17) (14) (17) (18) (19) (19) (19) (19) (19) (19) (19) (19	Acquisition through Business Combination (refer note 4(a))	332	228	3,490	1	1	4	ı	ო	4,388	457	1	4,845
Figure 132)  2,558 14,030 99,853 12,737 82,434 384 359 831 2,13,186 44,495 apletion,  189 4,294 23,804 3,006 44,946 192 23 541 76,995 1,222 82 4,924 4,205 177 111 1,506 (796) 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Disposals/ Adjustments	1	(16)	(934)	(53)		(3)	(14)	(22)	(1,045)	(58)	1	(1,103)
2,556 14,030 99,853 12,737 82,434 384 359 831 2,13,186 44,495 44,495 apletion,  189 4,294 23,804 3,006 44,946 192 23 541 76,995 1,222 3  2, 11	Unsuccessful Exploration cost (refer note 32)	1									1	(20)	(20)
2,558         14,030         99,853         12,737         82,434         384         359         831         2,13,186         44,495           appletion,         189         4,294         3,006         44,946         192         23         541         76,995         1,222         8           7         474         4,206         827         614         30         16         59         6,252         -           9         4,294         4,206         827         614         30         16         61         17         1           1         1,1         1,1         1,1         1,206         (796)         0         1         0         6625         1         -           1         1,1         1,1         1,1         1,1         1         0         1         0         6625         1         -           1         1,2         1,1         1,1         1,1         1,1         1         1         0         6625         1         2           1         1         1,1         1,1         1,2         1         1         0         806         2         7         1         1         1 <td< td=""><td>Exchange differences</td><td>20</td><td>61</td><td>416</td><td>(464)</td><td>2,603</td><td>0</td><td>(6)</td><td>14</td><td>2,650</td><td>(277)</td><td>4,542</td><td>6,915</td></td<>	Exchange differences	20	61	416	(464)	2,603	0	(6)	14	2,650	(277)	4,542	6,915
Papletion,  189	As at March 31, 2019	2,558	14,030	99,853	12,737	82,434	384	359	831	2,13,186	44,495	7,906	2,65,587
reints - (1) (611) - (14) (1) (6) (8) (6) (8) (641) - (14) (1) (1) (1) (1) (11) - (14) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Accumulated depreciation, depletion, amortisation and impairment												
rents - (1) (611) - (144) (1) (6) (8) (641) - (149) (1) (6) (8) (641) - (149) (1) (6) (8) (641) - (149) (1) (6) (8) (641) - (149) (1) (10) (10) (10) (10) (10) (10) (10)	As at April 1, 2017	189	4,294	23,804	3,006	44,946	192	23	541	76,995	1,222	52,171	1,30,388
Figure 19 Figure	Charge for the year	27	474	4,205	827	614	30	16	29	6,252	ı	1	6,252
1   1   1,506   138   141   1   2   1   542	Disposals/ Adjustments	1	(1)	(611)	•	(14)	(1)	(9)	(8)	(641)	ı	1	(641)
cest         1         53         205         138         141         1         2         1         542         -           3         284         4,837         27,714         5,477         44,891         222         36         593         84,064         1,499           r         1         23         569         4,353         1,305         1,750         45         18         78         8,141         -           r         1         1         668         -         -         (2)         (9)         (24)         (718)         -           s/(reversal) for the year         -         -         (261)         -         -         (261)         -         -         (261)         -           r         1/8/(reversal) for the year         -         -         (261)         -         -         (261)         -         -         (261)         -	Impairment charge/(reversal) for the year (refer note 33)*	29	17		1,506	(296)	0	_	0	906	277	(6,111)	(4,928)
3         284         4,837         27,714         5,477         44,891         222         36         593         84,064         1,499           r         1         1         1         1         1,305         1,750         45         18         78         8,141         -           reents         -         (15)         (668)         -         -         (2)         (9)         (24)         (718)         -           s/(reversal) for the year         -         -         (261)         -         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         (261)         -         -         (261)         -         -         (261)         -         -         -         (261)         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td>Exchange differences</td> <td>_</td> <td>53</td> <td>205</td> <td>138</td> <td>141</td> <td>_</td> <td>2</td> <td>_</td> <td>542</td> <td>٠</td> <td>108</td> <td>650</td>	Exchange differences	_	53	205	138	141	_	2	_	542	٠	108	650
rents - (15) (668) (2) (9) (24) (718) (20) (9) (24) (718) (20) (9) (24) (718) (20) (9) (24) (718) (20) (9) (24) (718) (20) (9) (24) (718) (20) (9) (24) (718) (201)	As at April 1, 2018	284	4,837	27,714	5,477	44,891	222	36	593	84,054	1,499	46,168	1,31,721
lents - (15) (668) - (261) - (2) (9) (24) (718) - (261) - (2) (4) (718) - (261	Charge for the year	23	269	4,353	1,305	1,750	45	18	78	8,141		1	8,141
	Disposals/ Adjustments	1	(15)	(899)	1		(2)	(6)	(24)	(718)	1	1	(718)
figation         2         40         (65)         -         23,396         2         48         (28)         23,395         20,975           oss         13         82         474         (115)         2,588         6         (6)         18         3,060         (215)           019         322         5,513         31,808         6,667         72,364         273         87         637         1,17,671         22,259           1,899         7,647         59,923         4,909         1,125         114         90         129         75,835         17,671           1,872         7,706         63,038         4,557         1,824         114         90         129         79,330         16,140           2,236         8,517         68,045         6,070         10,070         111         272         194         95,515         22,236	Impairment charge/(reversal) for the year (refer note 33)		1			(261)			1	(261)	1	1	(261)
598         13         82         474         (115)         2,588         6         (6)         18         3,060         (215)           919         32         5,513         31,808         6,667         72,364         273         87         637         1,7,671         22,259           1,899         7,647         59,923         4,909         1,125         114         83         135         75,835         17,671         1           1,872         7,706         63,038         4,557         1,824         114         90         129         79,330         16,140         1           2,236         8,517         68,045         6,070         10,070         111         272         194         95,515         22,236	Transfers/ Reclassification	2	40	(65)	1	23,396	2	48	(28)	23,395	20,975	(44,371)	(1)
919         322         5,513         31,808         6,667         72,364         273         87         637         1,17,671         22,259           1,899         7,647         59,923         4,909         1,125         114         83         135         75,835         17,671           1,872         7,706         63,038         4,557         1,824         114         90         129         79,330         16,140         1           2,236         8,517         68,045         6,070         10,070         111         272         194         95,515         22,236	Exchange differences	13	82	474	(115)	2,588	9	(9)	2	3,060	(215)	3,386	6,231
1,899     7,647     59,923     4,909     1,125     114     83     135     75,835     17,671       1,872     7,706     63,038     4,557     1,824     114     90     129     79,330     16,140     1       2,236     8,517     68,045     6,070     10,070     111     272     194     95,515     22,236	As at March 31, 2019	322	5,513	31,808	6,667	72,364	273	87	637	1,17,671	22,259	5,183	1,45,113
1,899     7,647     59,923     4,909     1,125     114     83     135     75,835     17,671       1,872     7,706     63,038     4,557     1,824     114     90     129     79,330     16,140     1       019     2,236     8,517     68,045     6,070     10,070     111     272     194     95,515     22,236	Net Book Value												
1,872     7,706     63,038     4,557     1,824     114     90     129     79,330     16,140     1       019     2,236     8,517     68,045     6,070     10,070     111     272     194     95,515     22,236	As at April 1, 2017	1,899	7,647	59,923	4,909	1,125	114	83	135	75,835	17,671	9,886	1,03,392
2,236 8,517 68,045 6,070 10,070 111 272 194 95,515 22,236	As at April 1, 2018	1,872	7,706	63,038	4,557	1,824	114	06	129	79,330	16,140	15,915	1,11,385
	As at March 31, 2019	2,236	8,517	68,045	6,070	10,070	111	272	194	95,515	22,236	2,723	1,20,474

\* Impairment charge/(reversal) in CWIP for the year ended March 31, 2018 includes ₹ 251 Crore of provision for loss on unusable items.

as at and for the year ended March 31, 2019

### Intangible assets

						(11101010)
Particulars	Software License	Right to use	Mining Rights	Port concession rights (refer note k)	Brand & Technological know-how	Total
i) Gross Block	2,001,00	ragne to doo	mining rugines	note ity	idilow now	Total
As at April 1, 2017	298	68	381	672	-	1,419
Additions	28	1	0	7	-	36
Acquisition through Business Combination (refer note 4(b))	2	-	-	-	203	205
Disposals/ Adjustments	(9)	-	-	(2)	-	(11)
Exchange differences	2	-	-	-	17	19
As at April 1, 2018	321	69	381	677	220	1,668
Additions	15	-	-	4	-	19
Transfers from Property, Plant & Equipment	1	-	-	-	-	1
Disposals/ Adjustments	(4)	-	-	(3)	-	(7)
Exchange differences	9	-	-	-	4	13
As at March 31, 2019	342	69	381	678	224	1,694
Accumulated amortisation and impairment						
As at April 1, 2017	242	8	151	97	-	498
Charge for the year	28	3	18	25	5	79
Disposals/ Adjustments	(9)	-	-	(0)	-	(9)
Impairment charge for the year (refer note 33)	-	-	150	-	-	150
Exchange differences	1	-	-	-	0	1_
As at April 1, 2018	262	11	319	122	5	719
Charge for the year	35	3	5	24	22	89
Disposals/ Adjustments	(4)	-	-	(1)	-	(5)
Transfers from Property, Plant & Equipment	1	-	-	-	-	1
Exchange differences	8	-	-		(0)	8
As at March 31, 2019	302	14	324	145	27	812
Net Book Value						
As at April 1, 2017	56	60	230	575	-	921
As at April 1, 2018	59	58	62	555	215	949
As at March 31, 2019	40	55	57	533	197	882

- a) Plant and equipment include refineries, smelters, power plants, railway sidings, ships, aircrafts, river fleets and related facilities.
- b) During the year ended March 31, 2019, interest capitalised was ₹834 Crore (March 31, 2018: ₹349 Crore).
- c) Freehold land includes gross block of ₹ 259 Crore (March 31, 2018: ₹ 240 Crore), accumulated amortisation of ₹ 226 Crore (March 31, 2018: ₹ 191 Crore), which is available for use during the lifetime of the Production Sharing Contract of the respective Oil and Gas blocks.
- d) Certain property, plant and equipment are pledged as collateral against borrowings, the details related to which have been described in Note 19 on "Borrowings".
- e) Freehold land includes 40 quarters at Bidhan Bagh Unit and ₹ 300.88 acres of land at Korba and Bidhan Bagh which have been occupied without authorisation for which Group is evaluating evacuation options and the Group has filed the civil suits for the same.
- f) The land transferred to BALCO by National Thermal Power Corporation Ltd. (NTPC) vide agreement dated June 20, 2002 comprising of 171.44 acres land for BALCO's 270 MW captive power plant and it's allied facilities and 34.74 acres land for staff quarters of the said captive power plant is yet to be registered in favour of BALCO due to non availability of title deeds from NTPC. The arbitration is pending between Balco and NTPC (presently in appeal before Delhi High Court), in which transfer of title deeds is also sub-judice and is posted for hearing on October 15, 2019.
- g) The Division Bench of the Hon'ble High Court of Chhattisgarh has vide its order dated February 25, 2010, upheld that BALCO is in legal possession of 1,804.67 acres of Government land. Subsequent to the said order, the State Government has decided to issue the lease deed in favour of BALCO after the issue of forest land is decided by the Hon'ble Supreme Court. In the proceedings before the Hon'ble Supreme Court, pursuant to public interest litigations filed, it has been alleged that land in possession of BALCO is being used in contravention of the Forest Conservation Act, 1980 even though the said land has been in its possession prior to

as at and for the year ended March 31, 2019

the promulgation of the Forest Conservation Act, 1980 on which its Aluminium complex, allied facilities and township were constructed between 1971-76. The Central Empowered Committee of the Supreme Court has already recommended ex-post facto diversion of the forest land in possession of BALCO.The matter is presently sub-judice before the Hon'ble Supreme Court and fixed for hearing on May 8, 2019.

h) Property, plant and Equipments, Capital work-in-progress and exploration intangibles assets under development net block includes share of jointly owned assets with the joint venture partners ₹ 23,387 Crore (March 31, 2018: ₹ 21,235 Crore). Refer note 3(c)(A)(xi) for reasons for transfer of exploration intangibles assets under development to property, plant and equipment and capital work-in-progress.

i) In accordance with the exemption given under Ind AS 101, which has been exercised by the Group, a first time adopter

can continue its previous GAAP policy for accounting for exchange differences arising from translation of long-term foreign currency monetary items recognised in the previous GAAP financial statements for the period ending immediately before the beginning of the first Ind AS financial reporting period i.e. April 01, 2016.

Accordingly, foreign currency exchange loss arising on translation/settlement of long-term foreign currency monetary items acquired before April 01, 2016 pertaining to the acquisition of a depreciable asset amounting to ₹85 Crore (March 31, 2018: ₹81 Crore) are adjusted to the cost of respective item of property, plant and equipment.

Capital work-in-progress includes foreign currency exchange of NIL incurred during the year (March 31, 2018: ₹ 17 Crore loss) on such long term foreign currency monetary liabilities.

j) Reconciliation of depreciation, depletion and amortisation expense

(₹ in Crore)

Particulars	For the year ended March 31, 2019	For the year ended March 31, 2018
Depreciation/Depletion/Amortisation expense on:		
Property, Plant and equipment	8,141	6,252
Intangible assets	89	79
As per Property, Plant and Equipment and Intangibles schedule	8,230	6,331
Less: Depreciation capitalised	(10)	(21)
Less: Cost allocated to joint ventures	(28)	(27)
As per Consolidated Statement of Profit and Loss	8,192	6,283

k) Vizag General Cargo Berth Private Limited (VGCB), a special purpose vehicle and wholly owned by the Company, was incorporated for the coal berth mechanization and upgradation at Visakhapatnam port.

The project is to be carried out on a design, build, finance, operate and transfer basis and the concession agreement between Visakhapatnam Port and VGCB was signed in 2010. Visakhapatnam Port has provided, in lieu of Royalty, an exclusive license to VGCB for designing, engineering, financing, constructing, equipping, operating, maintaining, and transferring the project/project facilities and services. The concession period is 30 years from the date of the award of the concession. The capacity of upgraded berth is 10.18 mmtpa and that the Vishakhapatnam Port is entitled to receive 38.10% share of the gross revenue as royalty. VGCB is entitled to recover a tariff from the user(s) of the project facilities and services as per Tariff Authority for Major Project (TAMP) notification. The changes in tariff rates are linked to the variation in Wholesale Price Index (WPI) and would accordingly be adjusted as specified in the concession agreement every year. The ownership of all infrastructure assets, buildings, structures, berths, wharfs, equipment and other immovable

and movable assets constructed, installed, located, created or provided by VGCB at the project site and/or in the port's assets pursuant to concession agreement would be with VGCB until expiry of this concession agreement. The cost of any repair, replacement or restoration of the project facilities and services shall be borne by VGCB during the concession period. VGCB has to transfer all its rights, titles and interest in the project facilities and services free of cost to Visakhapatnam Port at the end of the concession period. The project is in commercial operations since 2013.

I) Title deeds of freehold land of 206 acres relating to Electrosteel Steels Limited is not available with the Group. The Group is in the process of having the same regularised.

m) As at March 31, 2019, TSPL's assets consisting of land, building and plant and machinery having net carrying value of ₹ 391 Crore (March 31, 2018: ₹ 391 Crore), ₹ 193 Crore (March 31, 2018: ₹ 193 Crore) and ₹ 9,353 Crore (March 31, 2018: ₹ 9,753 Crore) respectively have been given on operating lease (refer note 3(c)(B)(i)).

as at and for the year ended March 31, 2019

### 7. FINANCIAL ASSETS - INVESTMENTS

# A) Non-current Investments

(₹ in Crore)

	Particulars	As at March 31, 2019	As at March 31, 2018
(I)	Investments at fair value through other comprehensive income		
	Investment in Equity Shares - Quoted		
	Sterlite Technologies Limited- 47,64,295 shares of ₹ 2 each (including 60 shares held jointly with nominees)	104	149
	Investment in Equity Shares - unquoted		
	Sterlite Power Transmission Limited - 9,52,859 equity shares of $\ref{2}$ each (including 12 shares held jointly with nominees)	11	11
	Other Investments	0	0
(11)	Investments at fair value through profit and loss		
	Investment in structured instrument - Unquoted (refer note 38)	4,772	-
(III)	Investment in Equity Shares (fully paid)		
	Associate Companies - Unquoted		
	Gaurav Overseas Private Limited - 3,23,000 (March 31, 2018 - 3,23,000) equity shares of ₹ 10 each	0	0
	RoshSkor Township (Proprietary) Limited- 50 equity shares of NAD 1 each	4	4
	Joint ventures - Unquoted		
	Rampia Coal Mines and Energy Private Limited - 2,72,29,539 equity shares of ₹ 1 each	3	3
	Madanpur South Coal Company Limited - 1,52,266 equity shares of ₹ 10 each	2	2
	Goa Maritime Private Limited: 5,000 equity shares of ₹ 10 each	0	0
	Less: Impairment in the value of investment in joint ventures	(5)	(5)
	Total	4,891	164

(₹ in Crore)

			( ,
		As at	As at
a)	Particulars	March 31, 2019	March 31, 2018
	Aggregate amount of quoted investments, and market value thereof	104	149
	Aggregate amount of unquoted investments	4,792	20
	Aggregate amount of impairment in the value of investments	(5)	(5)
	Total	4,891	164

# **B) Current Investments**

(₹ in Crore)

		, ,
	As at	As at
Particulars	March 31, 2019	March 31, 2018
Investments carried at fair value through other comprehensive income (fully paid)		
Investment in Bonds - quoted	-	2,803
Investments carried at fair value through profit and loss (fully paid)		
Investment in mutual funds - quoted	8,409	11,536
Investment in mutual funds - unquoted	6,383	7,444
Investment in bonds - quoted <sup>b</sup>	13,276	6,631
Investment in India Grid trust - quoted <sup>b</sup>	106	122
Total	28,174	28,536

(₹ in Crore)

		As at	As at
a)	Particulars	March 31, 2019	March 31, 2018
	Aggregate amount of quoted investments, and market value thereof	21,791	21,092
	Aggregate amount of unquoted investments	6,383	7,444
	Total	28,174	28,536

b) Includes investment in related parties ₹ 329 Crore (March 31, 2018: ₹ 534 Crore) Refer note 38.

as at and for the year ended March 31, 2019

#### 8. FINANCIAL ASSETS - TRADE RECEIVABLES

(₹ in Crore)

	As at	As at March 31, 2019 As at March 31,			March 31, 2018	
Particulars	Non-current	Current	Total	Non-current	Current	Total
Unsecured	4,219	4,020	8,239	1,572	4,309	5,881
Less: Provision for expected credit loss	(531)	(38)	(569)	(225)	(340)	(565)
Total	3,688	3,982	7,670	1,347	3,969	5,316

a) The interest free credit period given to customer is up to 90 days. Also refer note 22C(d)

b) For amount due and terms and conditions of related party receivables see note 38.

c) In July 2017, the Appellate Tribunal for Electricity dismissed the appeal filed by one of the Group's subsidiaries, Talwandi Sabo Power Limited (TSPL) with respect to the interpretation of how the calorific value of coal and costs associated with it should be determined. However, APTEL had allowed payment of shunting and unloading charges, TSPL filed an appeal before the Honourable Supreme Court, which by an order dated March 07, 2018 has decided the matter in favour of TSPL. PSPCL has not paid the due amount as per the direction of the Supreme court. Therefore, TSPL filed its contempt petition before the Supreme court. The matter is pending for adjudication. The outstanding trade receivables in relation to this dispute as at March 31, 2019 is ₹ 1,135 Crore (March 31, 2018: ₹ 802 Crore).

In another matter relating to assessment of whether there has been a change in law following the execution of the Power Purchase Agreement, the Appellate Tribunal for Electricity has dismissed the appeal in July 2017 filed by TSPL. TSPL filed an appeal before the Honourable Supreme Court to seek relief which is yet to be listed. The outstanding trade receivables in relation to this dispute and other matters as at March 31, 2019 is ₹ 1,065 Crore (March 31, 2018: ₹ 831 Crore). The Group, based on external legal opinion and its own assessment of the merits of the case, remains confident that it is highly probable that the Supreme court will uphold TSPL's appeal and has thus continued to treat these balances as recoverable.

Additionally, as at March 31, 2018, ₹ 767 Crore was outstanding on account of certain disputes relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalisation by the Odisha State Regulatory Commission. During the current year the said disputes were settled. However, the customer has raised certain claims on the Company in respect of short supply of power for which a provision of ₹218 Crore has been made. A Minutes of Meeting (MOM) has been signed with the customer and subsequently Vedanta Limited has received payment of ₹ 55 Crore in March 2019. Pending ratification of MOM by Odisha Electricity Regulatory Commission (OERC) and adjudication on certain issues related to the claim, the customer has withheld ₹ 1,248 Crore, which the Company is confident of recovering.

# 9. FINANCIAL ASSETS - LOANS

	As at March 31, 2019			As at	March 31, 2018	
Particulars	Non-current	Current	Total	Non-current	Current	Total
Unsecured, considered good						
Loans to related parties (Refer Note 38)	5	74	79	7	70	77
Loan to employees	1	8	9	2	9	11
Security Deposit	14	-	14	14	-	14
Others	-	-	-	-	3	3
Total	20	82	102	23	82	105

as at and for the year ended March 31, 2019

#### **10. FINANCIAL ASSETS - OTHERS**

(₹ in Crore)

	<b>As at March 31, 2019</b> As at March 31, 2018			March 31, 2018		
Particulars	Non-current	Current	Total	Non-current	Current	Total
Bank deposits <sup>a,b</sup>	23	-	23	2,438	-	2,438
Site restoration asset <sup>b</sup>	546	-	546	471	-	471
Unsecured, considered good						
Receivables from related parties (refer Note 38)	-	47	47	-	26	26
Security deposits	165	23	188	167	19	186
Advance recoverable (oil and gas business)	-	2,166	2,166			
Others °	349	246	595	66	1,160	1,226
Unsecured, considered credit impaired						
Security deposits	42	1	43	43	7	50
Balance with government authorities	-	18	18	-	18	18
Others °	-	415	415	-	349	349
Less: Provision for expected credit loss	(42)	(434)	(476)	(43)	(374)	(417)
Total	1,083	2,482	3,565	3,142	1,205	4,347

a) Bank deposits includes fixed deposit with maturity more than twelve months of ₹ 20 Crore (March 31, 2018; ₹ 20 Crore) under lien with bank and margin money of ₹ 2 Crore (March 31, 2018: NIL). As at March 31, 2018, bank deposits also include interest reserve created against interest payment on loans from banks of ₹ 103 Crore.

# 11. OTHER ASSETS

	As at March 31, 2019 As at March 31, 2018					
Particulars	Non-current	Current	Total	Non-current	Current	Total
Unsecured, considered good						
Capital advances	2,132	-	2,132	2,381	-	2,381
Advances other than capital advances						
Security deposits	0	-	0	0	-	0
Advances for supplies to related party	-	558	558	-	386	386
Advances for supplies	-	1,478	1,478	-	1,879	1,879
Others						
Balance with government authorities a,b	521	609	1,130	596	755	1,351
Leasehold land prepayments °	431	14	445	371	12	383
Others <sup>d</sup>	1,134	796	1,930	790	940	1,730
Unsecured, considered doubtful						
Capital advances	12	-	12	37	-	37
Advance for supplies	-	48	48	-	49	49
Balance with government authorities	3	-	3	3	-	3
Others <sup>d</sup>	390	5	395	397	5	402
Less: Provision for doubtful advances	(405)	(53)	(458)	(437)	(54)	(491)
Total	4,218	3,455	7,673	4,138	3,972	8,110

a) Includes ₹ 58 Crore (March 31, 2018: ₹ 58 Crore), being Company's share of gross amount of ₹ 86 Crore (March 31, 2018: ₹ 86 Crore) paid under protest on account of Education Cess and Secondary Higher Education Cess for the year ended 2013-14.

b) Bank deposits and site restoration asset earns interest at fixed rate based on respective deposit rate

c) Others include claims receivables, unbilled revenue (contract assets). It also includes advance profit petroleum ₹ 297 Crore (Refer note 41(d)). The outstanding balance of contract assets was ₹ 146 Crore.

b) Includes ₹18 Crore (March 31, 2018: ₹97 Crore), being Company's share of gross amount of ₹26 Crore (March 31, 2018: ₹ 139 Crore), of excess oil cess paid under Oil Industry (Development) Act.

c) Represents prepayments in respect of land taken under operating leases, being amortised equally over the period of the lease.

d) Others include claim receivables, advance recoverable (oil and gas business), prepaid expenses and export incentive receivables.

as at and for the year ended March 31, 2019

#### **12. INVENTORIES**

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Raw materials	3,860	3,189
Goods-in transit	1,732	2,561
Work-in-progress	2,481	2,986
Goods-in transit	46	26
Finished good	1,329	535
Goods-in transit	109	91
Fuel stock	1,080	478
Goods-in transit	652	591
Stores and spares	1,838	1,465
Goods-in transit	71	45
Total	13,198	11,967

- a) Inventory held at net realisable value ₹ 3,760 Crore (March 31, 2018: ₹ 103 Crore) as at March 31, 2019.
- b) The write down of inventories amounting to ₹ 156 Crore (March 31, 2018: ₹ 44 Crore) has been charged to the consolidated statement of profit and loss.
- c) For method of valuation for each class of inventories, refer Note 3(a)(L).

#### 13. CASH AND CASH EQUIVALENTS

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Balances with banks <sup>a</sup> Bank deposits with original maturity of less than 3 months (including interest accrued thereon) <sup>b,c</sup>	4,236 3,052	3,468 767
Cash on Hand Total	7,289	4,236

- a) Includes Nil (March 31, 2018: ₹ 1,646 Crore) in unpaid dividend account of the subsidiary, attributable to the Company's shareholding which has been remitted subsequent to the year end.
- b) Restricted funds of ₹ 60 Crore (March 31, 2018: ₹ 17 Crore) held as collateral in respect of closure costs.
- c) Bank deposits earn interest at fixed rate based on respective deposit rate.
- d) Cash and cash equivalents for the purpose of Statement of Cash Flows comprise the following:

(₹ in Crore)

	As at	As at
Particulars	March 31, 2019	March 31, 2018
Cash and cash equivalents as above	7,289	4,236
Earmarked unpaid dividend accounts (Refer note 14)	96	231
Total	7,385	4,467

### 14. OTHER BANK BALANCES

Particulars	As at March 31, 2019	As at March 31, 2018
Bank deposits with original maturity of more than 3 months but less than 12 months (including interest accrued thereon) <sup>a</sup>	845	402
Bank deposits with original maturity of more than 12 months (including interest accrued thereon) bc.d	131	347
Earmarked unpaid dividend accounts <sup>e</sup>	96	231
Earmarked escrow account <sup>9</sup>	8	-
Total	1,080	980

- a) Includes ₹ 591 Crore (March 31, 2018: ₹ 193 Crore) on lien with banks and margin money of ₹ 134 Crore (March 31, 2018: ₹ 39 Crore).
- b) Includes NIL (March 31, 2018: ₹ 8 Crore) on lien with banks.
- c) Restricted funds of NIL (March 31, 2018: ₹ 60 Crore) held as collateral in respect of closure costs.
- d) Restricted funds of ₹ 127 Crore (March 31, 2018: Nil) held as interest reserve created against interest payment on loans from banks.
- e) Earmarked unpaid dividend accounts are restricted in use as it relates to unclaimed dividends or unpaid dividend.
- f) Bank deposits earns interest at fixed rate based on respective deposit rate.
- g) Earmarked escrow account includes amount restricted in use as it relates to unclaimed redeemable preference shares.

as at and for the year ended March 31, 2019

#### 15. SHARE CAPITAL

		As at March 31, 2019		As at March	As at March 31, 2018	
Part	ticulars	Number (in Crore)	Amount (₹ in Crore)	Number (in Crore)	Amount (₹ in Crore)	
A)	Authorised equity share capital					
	Opening and closing balance (equity shares of ₹1 each with voting rights)	4,402	4,402	4,402	4,402	
	Authorised preference share capital <sup>a</sup>					
	Opening and closing balance (preference shares of ₹10 each)	301	3,010	301	3,010	
B)	Issued, subscribed and paid up					
	Equity shares of ₹1 each with voting rights bc	372	372	372	372	
	Total	372	372	372	372	

a) Redeemable Preference Shares of ₹ 3.010 Crore were redeemed on October 27, 2018 i.e. 18 months from the date of allotment as per the scheme of amalgamation of Cairn India Limited with Vedanta Limited. An equivalent amount of ₹3,010 Crore has been transferred from General Reserve to Capital Redemption Reserve.

c) Includes 1,49,98,702 (March 31, 2018: 92,33,871) equity shares held by Vedanta Limited ESOS Trust (Refer Note 16).

#### C) Shares held by ultimate holding company and its subsidiaries/associates \*

	As at March 31, 2019		As at March 31, 2018	
Particulars	No. of Shares held (in Crore)	% of holding	No. of Shares held (in Crore)	% of holding
Twin Star Holdings Limited	128.01	34.44	128.01	34.44
Twin Star Holdings Limited (2)	9.93	2.67	9.93	2.67
Finsider International Company Limited	40.15	10.80	40.15	10.80
Westglobe Limited	4.43	1.19	4.43	1.19
Welter Trading Limited	3.82	1.03	3.82	1.03
Total	186.34	50.13	186.34	50.13

<sup>\*</sup> The % of holding has been calculated on the issued and subscribed share capital as at the respective balance sheet date.

### D) Aggregate number of bonus shares issued, shares issued for consideration other than cash and shares bought back during the period of five years immediately preceding the reporting date

Particulars	As at March 31, 2019	As at March 31, 2018
Equity shares issued pursuant to Scheme of Amalgamation (in FY 2017-18)	75	75
Preference shares issued pursuant to Scheme of Amalgamation (in FY 2017-18)*	301	301

<sup>\*</sup> These were redeemed on October 27, 2018.

# E) Details of shareholders holding more than 5% shares in the Company \*

	As at March	As at March 31, 2019		31, 2018
Particulars	No. of Shares held (in Crore)	% of holding	No. of Shares held (in Crore)	% of holding
Twin Star Holdings Limited	128.01	34.44	128.01	34.44
Twin Star Holdings Limited #	9.93	2.67	9.93	2.67
Finsider International Company Limited	40.15	10.80	40.15	10.80

<sup># 2,48,23,177</sup> ADS, held by CITI Bank N.A. New York as a depository.

As per the records of the Company, including its register of shareholders/members, the above shareholding represents legal ownership of shares.

b) Includes 3,08,232 (March 31, 2018: 3,08,232) equity shares kept in abeyance. These shares are not part of listed equity capital and pending allotment as they are sub-judice.

<sup>(1)</sup> All the above entities are subsidiaries of Volcan Investments Limited, the ultimate holding company.

<sup>(2)</sup> Represented by 2,48,23,177 American Depository Shares ("ADS").

<sup>\*</sup> The % of holding has been calculated on the issued and subscribed share capital as at respective balance sheet date.

as at and for the year ended March 31, 2019

#### F) Other disclosures

i) The Company has one class of equity shares having a par value of ₹ 1 per share. Each shareholder is eligible for one vote per share held and dividend as and when declared by the Company. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend which is paid as and when declared by the Board of Directors. In the event of liquidation of the Company, the holders of equity shares will be entitled to receive any of the remaining assets of the Company, after distribution of all preferential amounts, in proportion to their shareholding.

ii) The Company had one class of 7.5% non-cumulative redeemable preference shares having a par value of ₹ 10 per share. Each preference shareholder is eligible for one vote per share as per terms of Section 47(2) of the Companies Act 2013 and dividend as and when declared by the Company. As per the terms of preference shares, these shares are redeemable at par on expiry of 18 months from the date of their allotment. In the event of winding up of Vedanta Limited, the holders of Preference Shares shall have a right to receive repayment of capital paid up and arrears of dividend, whether declared or not, up to the commencement of winding up, in priority to any payment of capital on the equity shares out of the surplus of Vedanta Limited.

iii) ADS shareholders do not have right to attend General meetings in person and also do not have right to vote. They are represented by depository, CITI Bank N.A. New York. As on March 31, 2019 - 24,87,79,452 equity shares were held in the form of 6,21,94,863 ADS (March 31, 2018 - 24,84,24,696 equity shares in form of 6,21,06,174 ADS).

iv) In terms of Scheme of Arrangement as approved by the Hon'ble High Court of Judicature at Mumbai, vide its order dated April 19, 2002, the erstwhile Sterlite Industries (India) Limited (merged with the Company during 2013-14) during 2002-2003 reduced its paid up share capital by ₹ 10 Crore. There are 2,01,305 equity shares (March 31, 2018: 204,525 equity shares) of ₹ 1 each pending clearance from NSDL/CDSL. The Company has filed an application in Hon'ble High Court of Mumbai to cancel these shares, the final decision on which is pending. Hon'ble High Court of Judicature at Mumbai, vide its interim order dated September 06, 2002 restrained any transaction with respect to subject shares.

# 16. OTHER EQUITY (REFER CONSOLIDATED STATEMENT **OF CHANGES IN EQUITY)**

a) General reserve: Under the erstwhile Companies Act 1956, a general reserve was created through an annual transfer of net income at a specified percentage in accordance with applicable regulations. The purpose of these transfers was to ensure that if a dividend distribution in a given year is more than 10.0% of the paid-up capital of the Company for that year, then the total dividend distribution is less than the total distributable reserves for that year. Consequent to introduction of Companies Act 2013, the requirement to mandatory transfer a specified percentage of the net profit to general reserve has been withdrawn.

b) Debenture redemption reserve: The Companies Act, 2013 requires companies that issue debentures to create a debenture redemption reserve from annual profits until such debentures are redeemed. Companies are required to maintain 25% as a reserve of outstanding redeemable debentures. The amounts credited to the debenture redemption reserve may not be utilised except to redeem debentures.

c) Preference share redemption reserve: The Companies Act, 2013 provides that companies that issue preference shares may redeem those shares from profits of the Company which otherwise would be available for dividends, or from proceeds of a new issue of shares made for the purpose of redemption of the preference shares. If there is a premium payable on redemption, the premium must be provided for, either by reducing the additional paid in capital (securities premium account) or net income, before the shares are redeemed. If profits are used to redeem preference shares, the value of the nominal amount of shares redeemed should be transferred from profits (retained earnings) to the preference share redemption reserve account. This amount should then be utilised for the purpose of redemption of redeemable preference shares. This reserve can be used to issue fully paid-up bonus shares to the shareholders of the Company. During the year, on redemption of preference shares, ₹ 3,010 Crore has been transferred from General reserve to Preference share redemption reserve.

d) Capital reserve: The balance in capital reserve has mainly arisen pursuant to extinguishment of non-controlling interests of erstwhile Cairn India Limited and acquisition of ASI. Further, changes in capital reserve are due to recognition/ derecognition of put option liability and non controlling interests pertaining to ASI.

e) Legal reserve is created at Fujairah Gold FZC in accordance with free zone regulations.

f) Treasury share represents 1,49,98,702 (March 31, 2018: 92,33,871) equity shares (face value of ₹ 1 each) of the Company purchased by Vedanta Limited ESOP Trust pursuant to the Company's stock option scheme as detailed in note 29.

# 17. NON-CONTROLLING INTERESTS (NCI)

The Non-controlling interests that are material to the Group relate to Hindustan Zinc Limited (HZL) and Bharat Aluminium Company Limited ("BALCO").

As at March 31, 2019, NCIs hold an economic interest by virtue of their shareholding of 35.08%, 49.00%, 26.00%, 48.37% and 10.00% in Hindustan Zinc Limited (HZL), Bharat Aluminium Company Limited (BALCO), Black Mountain Mining (BMM), Avanstrate Inc. (ASI) and Electrosteel Steels Limited (ESL) respectively. As at March 31, 2018 NCIs hold an economic interest by virtue of their shareholding of 35.08%, 49.00%, 26.00% and 48.37% in HZL, BALCO, BMM and ASI respectively.

The principal place of business of HZL, BALCO and ESL is in India, that of BMM is in South Africa, that of Avanstrate (Japan) Inc. is in Japan, South Korea and Taiwan.

as at and for the year ended March 31, 2019

The table below shows summarized financial information of subsidiaries of the Group that have non-controlling interests. The amounts are presented before inter-company elimination.

(₹ in Crore)

	As at March 31, 2019			
Particulars	HZL	BALCO	Others	Total
Non-current assets	21,427	12,965	11,166	45,558
Current assets	21,575	2,728	3,461	27,764
Non-current liabilities	1,168	4,686	8,363	14,217
Current liabilities	7,744	5,928	1,986	15,658
Equity attributable to owners of the Group	22,131	2,591	3,571	28,293
Non-controlling interests*	11,959	2,488	780	15,227

<sup>\* ₹ 73</sup> Crore loss attributable to NCI of ASI transferred to put option liability. Refer note 4(b) & 21.

(₹ in Crore)

		As at March 31, 2018			
Particulars	HZL	BALCO	Others	Total	
Non-current assets	19,401	13,110	5,830	38,341	
Current assets	24,145	2,023	938	27,106	
Non-current liabilities	1,062	4,941	3,812	9,815	
Current liabilities	6,004	4,982	475	11,461	
Equity attributable to owners of the Group	23,683	2,657	1,804	28,144	
Non-controlling interests*	12,797	2,553	611	15,961	

<sup>\* ₹ 66</sup> Crore gain attributable to NCI of ASI transferred to put option liability. Refer note 4(b) & 21.

		For the year ended	March 31, 2019	
Particulars	HZL	BALCO	Others*	Total
Revenue	22,909	10,554	6,482	39,945
Profit after tax for the year	7,892	(96)	128	7,924
Profit attributable to the equity shareholders of the Company	5,123	(49)	216	5,290
Profit attributable to the non-controlling interests	2,769	(47)	(88)	2,634
Other comprehensive income during the year	(94)	(36)	(307)	(437)
Other comprehensive income attributable to the equity shareholders	(61)	(18)	(229)	(308)
of the Company				
Other comprehensive income attributable to non-controlling interests	(33)	(18)	(78)	(129)
Total comprehensive income during the year	7,798	(132)	(181)	7,485
Total comprehensive income attributable to the equity shareholders of	5,062	(67)	(13)	4,982
the Company				
Total comprehensive income attributable to non-controlling interests	2,736	(65)	(167)	2,504
Dividends paid/payable to non-controlling interests, including dividend tax	3,574	-	-	3,574
Net cash inflow from operating activities	8,781	2,061	1,428	12,270
Net cash outflow from investing activities	(1,092)	(574)	(1,903)	(3,569)
Net cash inflow/(outflow) from financing activities	(9,630)	(1,155)	671	(10,114)
Net cash inflow/(outflow)	(1,941)	332	196	(1,413)

<sup>\*</sup>Refer note 4(a) for acquisition of ESL

as at and for the year ended March 31, 2019

(₹ in Crore)

	Fo	or the year ended Mar	ch 31, 2018	
Particulars	HZL	BALCO	Others**	Total
Revenue	24,272	9,028	1,842	35,142
Profit after tax for the year	9,282	38	363	9,683
Profit attributable to the equity shareholders of the Company	6,026	19	288	6,333
Profit attributable to the non-controlling interests	3,256	19	75	3,350
Other comprehensive income during the year	(80)	54	272	246
Other comprehensive income attributable to the equity shareholders of the Company	(52)	28	202	178
Other comprehensive income attributable to non-controlling interests	(28)	26	70	68
Total comprehensive income during the year	9,202	92	635	9,929
Total comprehensive income attributable to the equity shareholders of the Company	5,974	47	490	6,511
Total comprehensive income attributable to non-controlling interests	3,228	45	145	3,418
Dividends paid/payable to non-controlling interests, including dividend tax	1,428	-	-	1,428
Net cash inflow from operating activities	9,837	744	632	11,213
Net cash inflow/(outflow) from investing activities	2,396	(200)	(1,230)	966
Net cash outflow from financing activities	(18,649)	(549)	381	(18,817)
Net cash outflow	(6,416)	(5)	(217)	(6,638)

<sup>\*\*</sup>Refer note 4(b) for acquisition of ASI

The effect of changes in ownership interests in subsidiaries that did not result in a loss of control is as follows:

(₹ in Crore)

	For the year ended March 31, 2019			
Particulars	HZL	BALCO	Others	Total
Changes in NCI <sup>(1)</sup>	-	-	196	196

(₹ in Crore)

	For the year ended March 31, 2018			
Particulars	HZL	BALCO	Others	Total
Changes in NCI <sup>(2)</sup>	-	-	109	109

- (1) Refer note 4 (a) for acquisition of ESL
- (2) Refer note 4 (b) for acquisition of ASI

### **18. CAPITAL MANAGEMENT**

The Group's objectives when managing capital is to safeguard continuity, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth. The Group's overall strategy remains unchanged from previous year.

The Group sets the amount of capital required on the basis of annual business and long-term operating plans which include capital and other strategic investments.

The funding requirements are met through a mixture of equity, internal fund generation and other current borrowings. The Group's policy is to use current and non-current borrowings to meet anticipated funding requirements.

The Group monitors capital on the basis of the net gearing ratio which is Net debt / Total Capital (equity + net debt). The Group is not subject to any externally imposed capital requirements.

Net debt are non-current and current debt as reduced by cash and cash equivalents, other bank balances and current investments. Equity comprises all components including other comprehensive income.

as at and for the year ended March 31, 2019

The following table summarizes the capital of the Group:

(₹ in Crore except otherwise stated)

Particulars	As at March 31, 2019	As at March 31, 2018
Cash and cash equivalents (Note 13)	7,289	4,236
Other bank balances (Note 14)	1,080	980
Non-current bank deposits (Note 10)	23	2,438
Current investments (Note 7 B)	28,174	28,536
Structured investment net of related liabilities (refer note 38)	2,702	-
Total (a)	39,268	36,190
Non-current borrowings (Note 19)	34,721	26,789
Current borrowings (Note 19)	22,982	21,951
Current maturities of long term debt (Note 21)	8,523	9,419
Total (b)	66,226	58,159
Net debt (c=(b-a))	26,958	21,969
Total equity (d)	77,524	79,273
Total capital (e = equity + net debt)	1,04,482	1,01,242
Gearing ratio (times) (c/e)	0.26	0.22

### 19. FINANCIAL LIABILITIES - BORROWINGS

### A) Non-current borrowings

Particulars	As at March 31, 2019	As at March 31, 2018
At amortised cost		
Secured		
Non convertible debentures	14,072	11,575
Term loans from banks		
- Rupee term loans	24,185	16,969
- Foreign currency term loans	3,543	3,264
- External commercial borrowings	653	617
Others	516	513
Unsecured		
Deferred sales tax liability	87	91
Non convertible bonds	126	114
Term loans from banks (Foreign currency)	60	55
Redeemable preference shares	2	3,010
Non-current borrowings (A)	43,244	36,208
Less: Current maturities of long term debt (Refer note 21(b))	(8,523)	(9,419)
Total non-current borrowings (Net)	34,721	26,789
Current borrowings (Refer Note 19B)	22,982	21,951
Total borrowings (A+B)	66,226	58,159

# **B) Current borrowings**

Particulars	As at March 31, 2019	As at March 31, 2018
Secured		
Project buyers credit from banks	16	127
Loans repayable on demand from banks	798	477
Working capital loan	42	41
Packing credit in foreign currencies from banks	-	636
Amounts due on factoring	640	718
Others	41	-
Unsecured		
Loans repayable on demand from banks	24	-
Commercial paper	18,456	17,687
Packing credit in foreign currencies from banks	492	2,105
Working capital loan	1,690	95
Amounts due on factoring	718	65
Others	65	-
Total	22,982	21,951

as at and for the year ended March 31, 2019

The Group has discounted trade receivables on recource basis of ₹ 1,358 Crore (March 31, 2018: ₹ 783 Crore). Accordingly, the monies received on this account are shown as borrowings as the trade receivables do not meet de-recognition criteria.

a) Details of Non-convertible debentures issued by Group have been povided below (Carrying value):

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
8.75% due September 2021	250	250
9.18% due July 2021	1,000	
9.27% due July 2021	999	_
8.50% due June 2021	1.649	_
8.75% due April 2021	250	250
8.50% due April 2021	2,349	-
8.55% due April 2021	1,000	_
7.80% due December 2020	500	500
9.00% due November 2020*	200	-
8.25% due September 2020	425	425
7.85% due August 2020	500	500
9.45% due August 2020	2,000	2,000
8.00% due July 2020**	200	200
8.00% due July 2020	300	300
8.70% due April 2020	600	600
7.95% due April 2020**	300	300
7.50% due November 2019	200	200
8.20% due November 2019	300	300
8.25% due October 2019	300	300
7.75% due September 2019	250	250
8.65% due September 2019	150	150
7.60% due May 2019	350	350
9.17% due July 2018	-	1,200
9.10% due April 2018	-	2,500
8.91% due April 2018	-	1,000
Total	14,072	11,575

<sup>\*</sup> The debenture holders of these NCDs and the Company have put and call option at the end of 1 year from the respective date of the allotment

b) The Group has taken borrowings in various countries towards funding of its acquisitions, capital expenditure and working capital requirements. The borrowings comprise of funding arrangements from various banks and financial institutions taken by the parent and subsidiaries. The details of security provided by the Group in various countries, to various lenders on the asset of the parent and subsidiaries are as follows -

Particulars	As at March 31, 2019	As at March 31, 2018
Secured long term borrowings	42,969	32,938
Secured short term borrowings	1,537	1,999
Total	44,506	34,937

<sup>\*\*</sup> The debenture holders of these NCDs and the Company have put and call option at the end of 5 years from the respective date of the allotment of the NCDs

# Notes forming part of the consolidated financial statements as at and for the year ended March 31, 2019

Facility Category	Security details	As at March 31, 2019	As at March 31, 2018
Project buyers' credit from banks	Secured by exclusive charge on the assets of Vedanta Limited's aluminium division at Jharsuguda imported under facility and first charge on Jharsuguda aluminium's current assets on pari passu basis	16	125
Jairs	Other secured project buyer's credit	-	2
Working capital	Secured by first pari passu charge on current assets present and future of Vedanta Limited	114	308
loans*	Secured by hypothecation of stock of raw materials, work-in-progress, semi-finished, finished products, consumable stores and spares, bills receivables, book debts and all other movables, both present and future in BALCO. The charges rank pari passu among banks under the multiple banking arrangements, for fund based facilities	124	170
	First pari passu charge on the entire current assets of Vedanta Limited, both present and future. First pari passu charge on all rights, title, claim and benefit in all the whole of the current assets of the Vedanta Limited, both present and future, including stock and raw material, stock in process, semi finished and finished goods, stores and spares not relating to plant, and machinery (consumable stores and spares)	552	639
	First charge on the entire current asset of Vedanta Limited, present and future, on pari passu basis	49	-
	Secured by a first pari passu charge on all present and future inventories, book debts and all other current assets of TSPL	280	588
	First pari passu charge on current assets of Vedanta Limited	360	-
	Secured by charge on current assets of AvanStrate.	42	- 107
External	Other secured working capital loans  The facility is secured by first pari passu charge on all movable property, plant and	309	167 292
commercial borrowings	equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	303	232
J	The facility is secured by first pari passu charge on all movable project assets related to 1200 MW power project and 3.25 LTPA Smelter project both present and future along with secured lenders at BALCO	344	325
Non convertible debentures	Secured by way of movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project with a minimum security cover of 1 time of the outstanding amount of the debenture and specifically exclude the 1MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions	850	850
	Secured by the whole of the movable fixed assets of the 1.6 MTPA Aluminium Smelter along with 1215 MW captive power plant in Jharsuguda and 1 MTPA alumina refinery alongwith 90 MW co-generation plant in Lanjigarh, including its movable plant and machinery, capital works-in-progress, machinery spares, tools and accessories, and other movable fixed assets	800	800
	Secured by way of first ranking pari passu charge on movable fixed assets in relation to the Lanjigarh Refinery Expansion Project (having capacity beyond 2 MTPA and upto 6 MTPA) situated at Lanjigarh, Odisha. The Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related capacity expansions	1,250	1,250
	Secured by way of "movable fixed assets" in relation to the 1.6 MTPA Aluminium Smelter alongwith 1215 MW (135MW * 9) captive power plant located in Jharsuguda and 1 MTPA Alumina Refinery alongwith 90 MW Co-generation power plant located at Lanjigarh in Odisha State and shall include all present movable plant and machinery, machinery spares, tools and accessories, fixtures, mechanical and electrical equipments, machinery and all other movable fixed assets and all estate, right, title, interest, property, claims and demands whatsoever in relation to assets	2,000	2,000
	Secured by a first pari passu charge on the whole of the present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location	3,998	2,500
	Secured by first pari passu charge on movable and/or immovable fixed assets of TSPL with a minimum asset cover of 1 times during the tenure of NCD	3,249	1,050
	Secured by way of first pari-passu charge on the specific movable and/or immovable Fixed Assets of VGCB, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of Bonds outstanding at any point of time	425	425
	Secured by way of first pari passu charge on all present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of debentures outstanding at any point of time	1,000	-
	First pari passu charge over the immovable property (excluding of leasehold land and coal block assets) of BALCO. First pari passu charge on the hypothecated assets (excluding current assets) of BALCO.	500	500
	Other secured non- convertible debuntures.	-	2,200

as at and for the year ended March 31, 2019

			(₹ in Crore)
Facility Category	Security details	As at March 31, 2019	As at March 31, 2018
Term loans from banks (Include rupee	Secured by first pari passu charge on fixed assets of the TSPL both present and future	3,623	4,075
term loans and foreign currency term loans)	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium Division of Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha, both present and future	5,102	5,521
	A pari passu charge by way of hypothecation of all the movable fixed assets of Vedanta Limited pertaining to its Aluminium Division project consisting of (i) alumina refinery having output of 1 MTPA (Refinery) along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha (Power Plant); and (ii) aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha (Smelter) (the Refinery, Power Plant and Smelter). Also, a first pari passu charge by way of equitable mortgage on the land pertaining to the mentioned project of aluminium division	3,551	3,939
	Secured by a pari passu charge by way of hypothecation on the movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project. Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related expansions	482	-
	A pari passu charge by way of hypothecation on the movable fixed assets of Vedanta Limited pertaining to its Aluminium Division comprising of 1 MTPA alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 MTPA aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	1,734	-
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immoveable assets of the Aluminium Division of Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Orissa; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Orissa and additional charge on Lanjigarh Expansion project, both present and future	1,184	1,232
	A pari passu charge by way of hypothecation/equitable mortgage of the movable/immovable fixed assets of Vedanta Limited pertaining to its Aluminium Division comprising of 1 MTPA alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 MTPA aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	2,984	-
	Secured by charge on Cairn Energy Hydrocarbons Limited's (CEHL) all banks accounts, cash & investments, all receivables and current assets (but excluding any shares issued to CEHL by its subsidaries, all of its right, title and interest in and to Production Sharing Contract and all of its fixed assets of any nature)	2,624	2,773
	As security for the Parent's (THL Zinc Limited) obligations under the limited guarantee, the Parent pledges all of its shares and other securities held by it in BMM and is a security cession and not an outright cession of all its rights, title and interest in and to all and any claims held by the Parent in and against BMM	415	-
	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	206	194
	Secured by first pari passu charge on movable property, plant and equipments (except for coal block) of BALCO	1,480	1,511
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery ,spares, tools and accessories of BALCO (excluding coal block assets ) by way of a deed of hypothecation	968	988
	Unattested deed of Hypothecation executed in favor of Vistra ITCL (India) Limited, Security Trustee for the lenders of Vedanta Star limited by providing security for the facility, by a charge, by way of hypothecation over the hypothecated properties of ESL	3,375	-
Others	Secured by Fixed asset (platinum) of AvanStrate	516	513
		44,506	34,937

<sup>\*</sup> Includes loans repayable on demand from banks, packing credit in foreign currencies from banks, amounts due on factoring and others.

as at and for the year ended March 31, 2019

c) The Company facilities are subject to certain financial and non-financial convenants. The primary convenants which must be complied with include interest service coverage ratio, current ratio, debt service coverage ratio, total outside liabilities to total net worth, fixed assets coverage ratio, ratio of total term liabilities to net worth, debt to EBITDA ratio and return on fixed assets. The Group has complied with the covenants as per the terms of the loan agreement.

d) Term of repayment of total borrowings outstanding as at March 31, 2019 are provided below:

(₹ in Crore)

	Weighted average of						(¢ III Glote)
	interest as at March	Total carrying					
Borrowings	31, 2019	value	<1 year	1-3 years	3-5 years	•	Remarks
Foreign currency term loan	3.96%	3,603	2,684	555	105	261	Repayable in 4 monthly installments, 44 quarterly installments, 13 annual installments
Rupee term loan	8.97%	24,185	3,694	7,452	4,630	8,497	Repayable in 757 quarterly installments, 5 installments payable in the gap of 5 months and 7 months, 2 half yearly installments and 2 bullet payments
External commercial borrowings	5.32%	653	90	463	104	-	Repayable in 4 annual installments for three external commercial borrowings.
Non convertible debentures	8.62%	14,072	2,049	12,025	-	-	Repayable in 21 bullet payments
Commercial paper	6.09%	18,456	18,456	-	-	-	Repayable in 99 bullet payments
Working capital loan *	6.15%	3,046	3,046	-	-	-	Export packing credit is repayable within 1-6 months from the date of drawal, cash credit can be repaid anytime as per the availability of business surplus during the validity of the facility and working capital loan is repayable in one bullet payment.
Project buyers' credit from banks	3.51%	16	16	-	-	-	Repayable in 15 bullet payments
Amounts due on factoring and others (Current)	9.36%	1,464	1,464	-	-	-	Repayable within 6 months
Deferred sales tax liability	NA	87	17	32	46	12	Repayable in 90 monthly installments
Redeemable preference shares	7.50%	2	2	-	-	-	The redemption and dividend paid to the preference shares unclaimed if any, is payable on claim.
Non-convertible bonds	0.00%**	126	-	-	6	406	Repayable in 10 annual installments
Other (Non-current)	5.00%	516	-	172	344	-	Repayable in 6 Half yearly installments starting from April 2021.
Total		66,226	31,518	20,699	5,235	9,176	

The above maturity is based on the total principal outstanding gross of issue expenses and discounting impact of deferred sales tax liability.

<sup>\*</sup>Includes loans repayable on demand from banks for ₹822 Crore and packing credit in foreign currency from banks

<sup>\*\*</sup> Increasing interest rate from 0.00% to 0.50% till maturity

as at and for the year ended March 31, 2019

e) Terms of repayment of total borrowings outstanding as at March 31, 2018 are provided below:

(₹ in Crore)

Total						
Other	2.67%	513	-	-	328	164 Repayable in 6 half yearly installments starting from 4th Year till 6th Year
Non-convertible bonds	0.00% **	114	-	-	-	412 Repayable in 10 annual installments
Redeemable preference shares	7.50%	3,010	3,010	-	-	<ul> <li>Repayable in 1 bullet payment upon 18 months from date of issuance</li> </ul>
Deferred sales tax liability	NA	91	10	37	41	29 Repayable in 103 monthly installments
Amounts due on factoring	7.16%	783	783	-	-	- Repayable in 12 bullet payments
Project buyers' credit from banks	1.77%	127	127	-	-	- Repayable in 15 bullet payments
Working capital loan *	7.94%	3,354	3,354	-	-	<ul> <li>Export packing credit is repayable within 1-6 months from the date of drawal and cash credit can be repaid anytime as per the availability of business surplus during the validity of the facility.</li> </ul>
Commercial paper	7.37%	17,687	17,687	-	-	- Repayable in 99 bullet payments
Non convertible debentures	8.40%	11,575	4,700	6,375	500	- Repayable in 21 bullet payments
External commercial borrowings	2.72%	617	-	273	345	<ul> <li>Repayable in 4 annual installments for three external commercial borrowings.</li> </ul>
Rupee term loan	7.33%	16,969	1,348	6,999	3,845	4,830 Repayable in 522 quarterly installments, 6 installments payable in the gap of 5 months and 7 months, 10 half yearly installments and 2 bullet payments
Foreign currency term loan	3.79%	3,319	354	1,510	1,213	337 Repayable in 48 quarterly installments and 10 annual installments
Borrowings	Weighted average of interest as at March 31, 2018	Total carrying value	<1 year	1-3 years	3-5 years	>5 years Remarks

The above maturity is based on the total principal outstanding gross of issue expenses and discounting impact of deferred sales tax liability.

f) Movement in borrowings during the year is provided below:

(₹ in Crore)

Particulars	Borrowings due within one year	Borrowings due after one year	Total
As at April 1, 2017	41,314	30,255	71,569
Cash flow	(8,998)	(8,271)	(17,269)
Borrowings on acquisition through business combination	-	631	631
Other non cash changes	(905)	4,069	3,164
Foreign exchange currency translation differences	(41)	105	64
As at March 31, 2018	31,370	26,789	58,159
Cash flow	624	7,075	7699
Borrowings on acquisition through business combination	7	-	7
Other non cash changes	(853)	935	82
Foreign exchange currency translation differences	357	(78)	279
As at March 31, 2019	31,505	34,721	66,226

Other non-cash changes comprises of amortisation of borrowing costs, foreign exchange difference on borrowings and reclassification between borrowings due within one year and borrowings due after one year. Additionally non-cash changes for the year ended March 31, 2018 includes prefrence shares issued on merger of Cairn India Limited with Vedanta Limited.

<sup>\*</sup>Includes loans repayable on demand from banks for ₹ 477 Crore and packing credit in foreign currency from banks

<sup>\*\*</sup> Increasing interest rate from 0.00% to 0.50% till maturity

as at and for the year ended March 31, 2019

#### **20. TRADE PAYABLES**

(₹ in Crore)

Particulars	As at March 31, 2019	As at March 31, 2018
Trade payables	9,211	8,385
Trade payables to related party	25	41
Operational buyers' credit / suppliers' credit	8,116	9,417
Total	17,352	17,843

- a) Trade Payables are majorly non-interest bearing and are normally settled upto 180 days terms.
- b) For amount due and terms and conditions of related party payables refer note 38.
- c) Operational Buyers' Credit and Suppliers' Credit is availed in foreign currency from offshore branches of Indian banks or foreign banks at an interest rate ranging from 2.5% to 4% per annum and in rupee from domestic banks at interest rate ranging from 8%-9%. These trade credits are largely repayable within 180 days from the date of draw down. Operational Buyers' credit availed in foreign currency is backed by Standby Letter of Credit issued under working capital facilities sanctioned by domestic banks. Part of these facilities are secured by first pari passu charge over the present and future current assets of the Group.

### 21. FINANCIAL LIABILITIES - OTHERS

(₹ in Crore)

	As a	March 31, 2018				
Particulars	Non-current	Current	Total	Non-current	Current	Total
Liabilities for capital expenditure	52	6,011	6,063	125	3,993	4,118
Security deposits from vendors and	11	162	173	10	221	231
others						
Interest Accrued but not due	255	1,036	1,291	3	886	889
Put option liability with non-	195	-	195	138	-	138
controlling interest <sup>a</sup>						
Current maturities of long term debt <sup>b</sup>	-	8,523	8,523	-	9,419	9,419
Unpaid/unclaimed dividend	-	96	96	-	90	90
Profit petroleum payable	-	1,025	1,025	-	827	827
Dues to related parties (Refer note 38)	-	96	96	-	33	33
Interim dividend payable	-	-	-	-	142	142
Liability for Structured Investment	994	1,076	2,070	-	-	-
(Refer note 38)						
Other Liabilities °	62	4,263	4,325	-	3,057	3,057
Total	1,569	22,288	23,857	276	18,668	18,944

a) The non-controlling shareholders of ASI have an option to offload their shareholding to the Group. The option is exercisable at any time within the period of three years following the fifth anniversary of the date of shareholders' agreement (December 22, 2017) at a price higher of ₹ 52 (US\$ 0.757) per share and the fair market value of the share. Therefore, the liability is carried at higher of the two. Subsequent changes to the put option liability are treated as equity transaction and hence accounted for in equity. (Refer note 4(b))

b) Current maturities of long-term debt consist of:

Particulars	As at March 31, 2019	As at March 31, 2018
Deferred sales tax liability	17	10
Term loans from banks		
Rupee term loans	3,681	1,345
Foreign currency term loans	2,684	354
External commercial borrowings	90	-
Redeemable non convertible debentures	2,049	4,700
Redeemable preference shares	2	3,010
Total	8,523	9,419

c) Includes revenue received in excess of entitlement interest of ₹ 2,878 Crore (March 31, 2018: ₹ 1,297 Crore) and reimbursement of expenses, interest accrued on other than borrowings, liabilities related to claim etc.

as at and for the year ended March 31, 2019

### **22. FINANCIAL INSTRUMENTS**

### A. Financial assets and liabilities:

The accounting classification of each category of financial instruments, their carrying amounts and their fair values are set out below:

### As at March 31, 2019

(₹ in Crore)

Financial Assets	Fair value through profit or loss	Fair value through other comprehensive income	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Investments*	32,946	115	-	-	33,061	33,061
Trade receivables	227	-	-	7,443	7,670	7,670
Loans	-	-	-	102	102	102
Other financial assets	-	-	-	3,565	3,565	3,565
Derivatives	30	-	48	-	78	78
Cash and cash equivalents	-	-	-	7,289	7,289	7,289
Other bank balances	-	-	-	1,080	1,080	1,080
Total	33,203	115	48	19,479	52,845	52,845

(₹ in Crore)

Financial Liabilities	Fair value through profit or loss	Derivatives designated as hedging instruments	Amortised cost	Others**	Total carrying value	Total fair value
Borrowings	-	-	66,226	-	66,226	66,185
Trade payables	1,064	-	16,288	-	17,352	17,352
Other financial liabilities	-	-	15,139	195	15,334	15,334
Derivatives	543	7	-	-	550	550
Total	1,607	7	97,653	195	99,462	99,421

### As at March 31, 2018

Trade receivables         521         -         -         4,795         5,316           Loans         -         -         -         -         105         105           Other financial assets         -         -         -         -         4,347         4,347           Derivatives         33         -         119         -         152           Cash and cash equivalents         -         -         -         4,236         4,236           Other bank balances         -         -         -         980         980	28,696 5,316 105 4,347 152 4,236 980
Loans         -         -         -         105         105           Other financial assets         -         -         -         -         4,347         4,347           Derivatives         33         -         119         -         152	5,316 105 4,347 152
Loans         -         -         -         105         105           Other financial assets         -         -         -         4,347         4,347	5,316 105 4,347
Loans 105 105	5,316 105
	5,316
Trade receivables 521 4,795 5,316	,
	28,696
Investments* 25,733 2,963 28,696	
Fair value Derivative Fair value through other designated through profit comprehensive as hedging Amortised Total carrying Financial Assets or loss income instruments cost value	Total fair value

Fair value through profit Financial LiabilitiesFair value through profit or lossdesignated as hedging instrumentsAmortised costTotal carrying valueBorrowings58,159-58,159Trade payables3,633-14,210-17,843Other financial liabilities9,3871389,525Derivatives16695261	85,865	85,788	138	81,756	95	3,799	Total
Financial Liabilitiesthrough profit or lossas hedging instrumentsAmortised costTotal carrying or lossBorrowings58,159-58,159Trade payables3,633-14,210-17,843	261	261	-	-	95	166	Derivatives
through profit as hedging Amortised Total carrying Financial Liabilities or loss instruments cost Others** value  Borrowings 58,159 - 58,159	9,525	9,525	138	9,387	-	-	Other financial liabilities
through profit as hedging Amortised Total carrying Financial Liabilities or loss instruments cost Others** value	17,843	17,843	-	14,210	-	3,633	Trade payables
through profit as hedging Amortised Total carrying	58,236	58,159	-	58,159	-	-	Borrowings
Derivatives	Total fair value	, ·	Others**		designated as hedging	through profit	Financial Liabilities

<sup>\*</sup> Investments exclude equity investment in associates and joint ventures which are accounted as per the equity method of accounting and hence not considered. Also includes structured investment (Refer note 38).

<sup>\*\*</sup> Represents net put option liability with non-controlling interests accounted for at fair value. (Refer note 4(b) and note 21).

as at and for the year ended March 31, 2019

#### B. Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

(i) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

(ii) Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).

(iii) Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

The below table summarises the categories of financial assets and liabilities as at March 31, 2019 and March 31, 2018 measured at fair value:

#### As at March 31, 2019

(₹ in Crore)

Financial Assets	Level 1	Level 2	Level 3
At fair value through profit or loss			
Investments*	6,712	26,153	81
Derivative financial assets**	-	30	-
Trade receivables	-	227	-
At fair value through other comprehensive income			
Investments	104	-	11
Derivatives designated as hedging instruments			
Derivative financial assets**	-	48	-
Total	6,816	26,458	92

(₹ in Crore)

Financial Liabilities	Level 1	Level 2	Level 3
At fair value through profit or loss			
Derivative financial liabilities**	-	543	-
Trade payable	-	1,064	-
Derivatives designated as hedging instruments			
Derivative financial liabilities**		7	-
Other financial liabilities - Net put option liability with non-controlling interests accounted for at fair value. (Refer note 4(b) and note 21).	-	-	195
Total	-	1,614	195

#### As at March 31, 2018

(₹ in Crore)

Total	7,715	21,643	11
Derivative financial assets**	-	119	
Derivatives designated as hedging instruments			
Investments	149	2,803	11
At fair value through other comprehensive income			
Trade receivables	-	521	-
Derivative financial assets**	-	33	-
Investments	7,566	18,167	-
At fair value through profit or loss			
Financial Assets	Level 1	Level 2	Level 3

Total	_	3.894	138
accounted for at fair value. (Refer note 4(b) and note 21).			
Other financial liabilities - Net put option liability with non-controlling interests	-	-	138
Derivative financial liabilities**	-	95	-
Derivatives designated as hedging instruments			
Trade payable	-	3,633	-
Derivative financial liabilities**	-	166	-
At fair value through profit or loss			
Financial Liabilities	Level 1	Level 2	Level 3

<sup>\*</sup> Includes structured investment (Refer note 38)

<sup>\*\*</sup> Refer D below

as at and for the year ended March 31, 2019

The below table summarises the fair value of borrowings which are carried at amortised cost as at March 31, 2019 and March 31, 2018

#### As at March 31, 2019

(₹ in Crore)

Financial Liabilities	Level 1	Level 2	Level 3
Borrowings	-	66,185	-
Total	-	66,185	-

#### As at March 31, 2018

(₹ in Crore)

Financial Liabilities	Level 1	Level 2	Level 3
Borrowings	-	58,236	-
Total	-	58,236	_

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate the fair values:

- Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments and structured investments are valued by referring to market inputs including quotes, trades, poll, primary issuances for securities and /or underlying securities issued by the same or similar issuer for similar maturities and movement in benchmark security etc.
- Trade receivables, cash and cash equivalents, other bank balances, loans, other financial assets, current borrowings, trade payables and other current financial liabilities: Fair values approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Non-current fixed-rate and variable-rate borrowings: Fair value has been determined by the Group based on parameters such as interest rates, specific country risk factors, and the risk characteristics of the financed project.
- Derivative financial assets/liabilities: The Group enters into derivative financial instruments with various counterparties. Interest rate swaps, foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques include the forward pricing and swap models, using present value calculations. The models incorporate various inputs including foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom
- · Other non-current financial assets and liabilities: Fair value is calculated using a discounted cash flow model with market assumptions, unless the carrying value is considered to approximate to fair value.

For all other financial instruments, the carrying amount is either the fair value, or approximates the fair value.

The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationship and the value of other financial instruments recognised at fair value.

The estimated fair value amounts as at March 31, 2019 and March 31, 2018 have been measured as at respective date. As such, the fair values of these financial instruments subsequent to reporting date may be different than the amounts reported at each year-end.

There were no significant transfers between Level 1, Level 2 and Level 3 during the year.

#### C. Risk management framework

The Group's businesses are subject to several risks and uncertainties including financial risks.

The Group's documented risk management policies act as an effective tool in mitigating the various financial risks to which the businesses are exposed in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty credit risk and capital management. Risks are identified at both the corporate and individual subsidiary level with active involvement of senior management. Each operating subsidiary in the Group has in place risk management processes which are in line with the Group's policy. Each significant risk has a designated 'owner' within the Group at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Group's Audit Committee. The Audit Committee is aided by the other Committees of the Board including the Risk Management Committee, which meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

as at and for the year ended March 31, 2019

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- · identify, control and monitor key risks
- · identify risk accumulations
- · provide management with reliable information on the Group's risk situation
- · improve financial returns

#### **Treasury management**

Treasury management focuses on liability management, capital protection, liquidity maintenance and yield maximisation. The treasury policies are approved by the Committee of the Board. Daily treasury operations of the subsidiary companies are managed by their respective finance teams within the framework of the overall Group treasury policies. Long-term fund raising including strategic treasury initiatives are managed jointly by the business treasury team and the central team at corporate treasury while short-term funding for routine working capital requirements is delegated to subsidiary companies. A monthly reporting system exists to inform senior management of the Group's investments and debt position, exposure to currency, commodity and interest rate risk and their mitigants including the derivative position. The Group has a strong system of internal control which enables effective monitoring of adherence to

Group's policies. The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Group is independently reviewed by CRISIL Limited and Group portfolio has been rated as Tier I or "Very Good" meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximization.

The Group uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts, interest rate and currency swaps and these are in line with the Group's policies.

#### **Equity price risk**

As at March 31, 2019, the Group held economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, having fair value of ₹ 4,772 Crore (31 March 2018: Nil). The instrument is exposed to equity price movements of AA Plc, subject to a put option embedded therein (Refer note 38).

Set out below is the impact of 10% increase/ decrease in equity prices on pre-tax profit/ (loss) for the year ended March 31, 2019 and pre-tax equity as a result of changes in value of the investment:

#### For the year ended March 31, 2019

(₹ in Crore)

Financial asset investment	Total Exposure (fair value)	Effect on pre-tax profit/(loss) of a 10% increase in the equity price	Effect on pre-tax equity of a 10% increase in the equity price	Effect on pre-tax profit/(loss) of a 10% decrease in the equity price	Effect on pre-tax equity of a 10% decrease in the equity price
Structured investment	4,772	412	-	(193)	-

The above sensitivities are based on change in price of the underlying equity shares of AA plc and provide the estimated impact of the change on profit and equity assuming that all other variables remain constant.

#### Commodity price risk

The Group is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Group produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Group aims to sell the products at prevailing market prices. The commodity price risk in import input commodity such as of Copper Concentrate & Alumina, for our copper and aluminium business respectively, is hedged on back-to back basis ensuring no price risk for the business. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level, basis clearly laid down guidelines.

Whilst the Group aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

Group is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to following activities:

- · economic hedging of prices realised on commodity contracts
- · cash flow hedging of revenues, forecasted highly probable transactions

#### Aluminium

The requirement of the primary raw material, alumina, is partly met from own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present the Group on selective basis hedges the aluminium content in outsourced alumina to protect its margins. The Group also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

The Group's custom smelting copper operations at Tuticorin is benefited by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. The Group's policy on custom smelting is to generate margins from Treatment charges /Refining charges (TC/RC), improving operational efficiencies, minimising conversion

as at and for the year ended March 31, 2019

cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales. Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. The Group hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of copper concentrate and sales of finished products, both of which are linked to the LME price.

TC/RCs are a major source of income for the Indian copper smelting operations. Fluctuations in TC/RCs are influenced by factors including demand and supply conditions prevailing in the market for mine output. The Group's copper business has a strategy of securing a majority of its concentrate feed requirement under long-term contracts with mines.

#### Zinc, lead and silver

The sales prices are linked to the LME prices. The Group also enters into hedging arrangements for its Zinc, Lead and Silver sales to realise average month of sale LME prices.

#### Zinc International

Raw material for zinc and lead is mined in Namibia and South Africa with sales prices linked to the LME prices.

The Group sells its Iron Ore production from Goa on the prevailing market prices and from Karnataka through e-auction route as mandated by State Government of Karnataka in India.

### For the year ended March 31, 2019

The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors like supply and demand. The regional producers price their crude basis these benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, which are USA (Henry Hub Prices), UK (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

#### Provisionally priced financial instruments

On March 31, 2019, the value of net financial assets linked to commodities (excluding derivatives) accounted for on provisional prices was ₹ 186 Crore (March 31, 2018: liability of ₹ 2,988 Crore). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning April 01, 2019.

Set out below is the impact of 10% increase in LME prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the Group's commodity financial instruments:

	Total Exposure	Effect on pre-tax profit/(loss) of a 10% increase in the LME	Effect on total equity of a 10% increase in the LME
Copper	185	(19)	-

#### For the year ended March 31, 2018

(₹ in Crore)

	Total Exposure	Effect on pre-tax profit/(loss) of a 10% increase in the LME	Effect on total equity of a 10% increase in the LME
Copper	3,558	(356)	-

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on the Group's financial statements.

The impact on pre-tax profit/(loss) mentioned above includes the impact of a 10% increase in closing copper LME for provisionally priced copper concentrate purchased at Copper division custom smelting operations in India of ₹ 74 Crore (March 31, 2018: ₹ 368 Crore), which is pass through in nature and as such will not have any impact on the profitability.

#### (a) Financial risk

The Group's Board approved financial risk policies include monitoring, measuring and mitigating the liquidity, currency, interest rate and counterparty risk. The Group does not engage in speculative treasury activity but seeks to manage risk and optimize interest and commodity pricing through proven financial instruments.

#### Liquidity risk

The Group requires funds both for short-term operational needs as well as for long-term investment programmes mainly in growth projects. The Group generates sufficient cash flows from the current operations which together with the available cash and cash equivalents, short-term investments and and structured investment net of deferred consideration payable for such investments provide liquidity both in the short-term as well as in the long-term. The Group has been rated by CRISIL Limited (CRISIL) and India Ratings and Research Private Limited (India Rating) for its capital market issuance in the form of CPs and NCDs and for its banking facilities in line with Basel II norms.

CRISIL changed the outlook for the Group's long-term bank facilities and its Non-Convertible Debentures (NCD) programme to CRISIL AA / Stable from CRISIL AA / Positive during the year on account of delay in deleveraging amid weaker commodity prices. India Ratings has revised the outlook on Vedanta Limited's ratings to IND AA / Stable from IND AA/ Positive on account of weaker profitability resulting in

as at and for the year ended March 31, 2019

delay in deleveraging. Vedanta Limited has the highest short term rating on its working capital and Commercial Paper Programme at A1+ from CRISIL and India Ratings.

Anticipated future cash flows, together with undrawn fund based committed facilities of ₹ 6,508 Crore, and cash, bank, structured investment (net of related liabilities) and current investments of ₹ 39,268 Crore as at March 31, 2019, are expected to be sufficient to meet the liquidity requirement of the Group in the near future.

The Group remains committed to maintaining a healthy liquidity, a low gearing ratio, deleveraging and strengthening our balance sheet. The maturity profile of the Group's financial liabilities based on the remaining period from the date of balance sheet to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Group.

#### As at March 31, 2019

(₹ in Crore)

					(( 111 01010)
Payments due by year	<1 year	1-3 years	3-5 years	>5 years	Total
Borrowings*	35,591	25,591	7,374	11,148	79,704
Derivative financial liabilities	451	99	-	-	550
Trade Payables and Other financial liabilities**	30,239	1,119	195	-	31,553
	66,281	26,809	7,569	11,148	1,11,807

#### As at March 31, 2018

(₹ in Crore)

rrade Payables and Other Illiancial liabilities	20.270	133	130	-	20.349
Trade Pavables and Other financial liabilities**	26.276	135	138		26.549
Derivative financial liabilities	143	118	_	_	261
Borrowings*	34,624	18,093	7,417	7,440	67,574
Payments due by year	<1 year	1-3 years	3-5 years	>5 years	Total

<sup>\*</sup>Includes Non-current borrowings, current borrowings, current maturities of non-current borrowings, committed interest payments on borrowings and interest accrued on borrowings.

The Group had access to following funding facilities:

#### As at March 31, 2019

(₹ in Crore

			(* 111 01010)
Funding facility	Total Facility	Drawn	Undrawn
Fund/non-fund based	66,793	51,780	15,013

#### As at March 31, 2018

(₹ in Crore)

Funding facility	Total Facility	Drawn	Undrawn
Fund/non-fund based	57,190	46,486	10,704

#### Collateral

The Group has pledged financial instruments with carrying amount of ₹ 21,751 Crore and inventories with carrying amount of ₹ 9,678 Crore as per the requirements specified in various financial facilities in place. The counterparties have an obligation to release the securities to the Group when financial facilities are surrendered.

#### (b) Foreign exchange risk

Fluctuations in foreign currency exchange rates may have an impact on the consolidated statement of profit and loss, the consolidated statement of change in equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

Considering the countries and economic environment in which the Group operates, its operations are subject to risks arising from the fluctuations primarily in the US dollar, Australian dollar, Namibian dollar, AED, ZAR, GBP, JPY, INR and Euro against the functional currencies of Vedanta Limited and its subsidiaries.

Exposures on foreign currency loans are managed through the Group wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange rates are appropriately managed. The Group strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged.

The Group's presentation currency is the Indian Rupee (INR). The majority of the assets are located in India and the Indian Rupee is the functional currency for the Indian operating subsidiaries except for Oil and Gas business operations which have a US dollar functional currency. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

<sup>\*\*</sup>Includes both Non-current and current financial liabilities and committed interest payment, as applicable. Excludes current maturities of non-current borrowings and interest accrued on borrowings.

as at and for the year ended March 31, 2019

The following analysis is based on the gross exposure as at the reporting date which could affect the consolidated statement of profit and loss. The exposure is mitigated by some of the derivative contracts entered into by the Group as disclosed under the section on "Derivative financial instruments".

The carrying amount of the Group's financial assets and liabilities in different currencies are as follows:

(₹ in Crore)

	As at March 31	As at March 31, 2019		2018
	Financial	Financial	Financial	Financial
Currency	Asset	liabilities	Asset	liabilities
INR	33,001	69,524	35,709	61,588
USD	14,186	25,782	7,189	22,289
Others	5,658	4,156	934	1,911
Total	52,845	99,462	43,832	85,788

The Group's exposure to foreign currency arises where a Group entity holds monetary assets and liabilities denominated in a currency different to the functional currency of the respective business, with US dollar being the major non-functional currency.

The foreign exchange rate sensitivity is calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rates shift in the foreign currencies by 10% against the functional currency of the respective entities.

Set out below is the impact of a 10% strengthening in the functional currencies of the respective businesses on pre-tax profit/ (loss) and pre-tax equity arising as a result of the revaluation of the Group's foreign currency monetary financial assets/liabilities:

#### For the year ended March 31, 2019

(₹ in Crore)

(* 111 01010)		
Effect of 10% strengthening of foreign currency on equity	Effect of 10% strengthening of functional currency on pre-tax profit/ (loss)	
-	1,029	USD
-	(101)	INR

#### For the year ended March 31, 2018

(CITOTOIC)		
Effect of	Effect of	
10% strengthening	10% strengthening	
of functional currency on	of functional currency on	
equity	pre-tax profit/ (loss)	
0	1,504	USE
-	(64)	INR

A 10% weakening of functional currencies of the respective businesses would have an equal and opposite effect on the Group's financial statements.

#### (c) Interest rate risk

At March 31, 2019, the Group's net debt of ₹ 26,958 Crore (March 31, 2018: ₹ 21,969 Crore) comprises debt of ₹ 66,226 Crore (March 31, 2018: ₹ 58,159 Crore) offset by cash, bank, structured investment (net of related liabilities) and current investments of ₹ 39,268 Crore (March 31, 2018: ₹ 36,190 Crore).

The Group is exposed to interest rate risk on short-term and long-term floating rate instruments and on the refinancing of fixed rate debt. The Group's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates. The borrowings of the Group are principally denominated in Indian Rupees and US dollars with mix of fixed and floating rates of interest. The USD floating rate debt is linked to US dollar LIBOR and INR Floating rate debt to Bank's base rate. The Group has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements. These exposures are reviewed by appropriate levels of management on a monthly basis. The Group invests cash and liquid investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve the Group's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk.

as at and for the year ended March 31, 2019

The exposure of the Group's financial assets as at March 31, 2019 to interest rate risk is as follows:

(₹ in Crore)

				Non-interest
		Floating rate	Fixed rate	bearing financial
	Total	financial assets	financial assets	assets
Financial Assets	52,845	14,674	19,226	18,945

The exposure of the Group's financial liabilities as at March 31, 2019 to interest rate risk is as follows:

(₹ in Crore)

				Non-interest
		Floating rate	Fixed rate	bearing financial
	Total	financial liabilities	financial liabilities	liabilities
Liabilities	99,462	30,923	43,691	24,848

The exposure of the Group's financial assets as at March 31, 2018 to interest rate risk is as follows:

(₹ in Crore)

				Non-interest
		Floating rate	Fixed rate	bearing financial
	Total	financial assets	financial assets	assets
Financial Assets	43,832	19,653	14,682	9,497

The exposure of the Group's financial liabilities as at March 31, 2018 to interest rate risk is as follows:

(₹ in Crore)

				Non-interest
		Floating rate	Fixed rate financial	bearing financial
	Total	financial liabilities	liabilities	liabilities
Financial Liabilities	85,788	23,242	44,303	18,243

Considering the net debt position as at March 31, 2019 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

The table below illustrates the impact of a 0.5% to 2.0% movement in interest rates on floating rate financial assets/liabilities (net) on profit/(loss) and equity assuming that the changes occur at the reporting date and has been calculated based on risk exposure outstanding as of date. The year end balances are not necessarily representative of the average debt outstanding during the year. This analysis also assumes that all other variables, in particular foreign currency rates, remain constant.

(₹ in Crore)

Increase in interest rates	Effect on pre-tax profit/(loss) during the year ended March 31, 2019	Effect on pre-tax profit/(loss) during the year ended March 31, 2018
0.50%	(81)	(18)
1.00%	(162)	(36)
2.00%	(325)	(72)

An equivalent reduction in interest rates would have an equal and opposite effect on the Group's financial statements.

#### (d) Counterparty and concentration of credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults.

The Group is exposed to credit risk for trade receivables, contract assets, investments, loans, other financial assets, and derivative financial instruments.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standing.

Moreover, given the diverse nature of the Group's businesses, trade receivables are spread over a number of customers with no significant concentration of credit risk. No single customer accounted for 10.0% or more of revenue on a consolidated basis in any of the years presented. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Group does not expect any material risk on account of non-performance by any of the Group's counterparties.

The Group has clearly defined policies to mitigate counterparty risks. For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. This, therefore, results in diversification of credit risk for our mutual fund and bond investments. For derivative and financial instruments, the Group attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

as at and for the year ended March 31, 2019

The carrying value of the financial assets represents the maximum credit exposure. The Group's maximum exposure to credit risk as at March 31, 2019 and March 31, 2018 is ₹ 52,845 Crore and ₹ 43,832 Crore respectively.

The maximum credit exposure on financial guarantees given by the Group for various financial facilities is described in Note 37 on "Contingent liability and capital commitments".

None of the Group's cash equivalents, including time deposits with banks, are past due or impaired. Regarding trade

receivables, loans and other financial assets (both current and non-current), there were no indications as at March 31, 2019, that defaults in payment obligations will occur except as described in Note 8 and 10 on allowance for impairment of trade receivables and other financial assets.

Of the year end trade receivables, loans and other financial assets (excluding bank deposits, site restoration fund and derivatives) balance the following, though overdue, are expected to be realised in the normal course of business and hence, are not considered impaired as at March 31, 2019 and March 31, 2018:

(₹ in Crore)

Particulars Particulars	As at March 31, 2019	As at March 31, 2018
Neither impaired nor past due	6,428	3,421
Past due but not impaired		
- Less than 1 month	873	773
- Between 1-3 months	336	390
- Between 3-12 months	599	728
- Greater than 12 months	2,532	1,547
Total	10,768	6,859

Receivables are deemed to be past due or impaired with reference to the Group's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above tables are those that have not been settled within the terms and conditions that have been agreed with that customer. The Group based on past experiences does not expect any material loss on its receivables.

The credit quality of the Group's customers is monitored on an ongoing basis and assessed for impairment where indicators of such impairment exist. The Group uses simplified approach for impairment of financial assets. If credit risk has not increased significantly, 12-month expected credit loss is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime expected credit loss is used. The solvency of the debtor and their ability to repay the receivable is considered in assessing receivables for impairment. Where receivables have been impaired, the Group actively seeks to recover the amounts in question and enforce compliance with credit terms.

#### Movement in allowances for Financial Assets (Trade receivables and Financial assets - others)

The change in the allowance for financial assets (current and non-current) is as follows:

(₹ in Crore)

As at March 31, 2019	569	476
Exchange differences	0	19
Reversals/ write off during the year	0	(5)
Allowance made during the year	4	45
As at March 31, 2018	565	417
Exchange differences	0	2
Reversals/ write off during the year	(215)	0
Allowance made during the year	234	4
As at April 01, 2017	546	411
Particulars	Trade receivables	Financial assets - Others

#### **D** Derivative financial instruments

The Group uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Group guidelines and policies.

The fair values of all derivatives are separately recorded in the consolidated balance sheet within current and non-current assets and liabilities. Derivatives that are designated as hedges are classified as current or non-current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Group tries to control credit risk as far as possible by only entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by

as at and for the year ended March 31, 2019

appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

#### Cash flow hedges

The Group enters into forward exchange and commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognized in equity through OCI until the hedged transaction occurs, at which time, the respective gain or losses are reclassified to profit or loss. These hedges have been effective for the year ended March 31, 2019.

The Group uses foreign exchange contracts from time to time to optimize currency risk exposure on its foreign currency transactions. The Group hedged part of its foreign currency exposure on capital commitments during the year ended 2019. Fair value changes on such forward contracts are recognized in comprehensive income.

The majority of cash flow hedges taken out by the Group during the year comprise non-derivative hedging instruments for hedging the foreign exchange rate of highly probable forecast transactions and commodity price contracts for hedging the commodity price risk of highly probable forecast transactions.

The cash flows related to above are expected to occur during the year ending March 31, 2020 and consequently may impact profit or loss for that year depending upon the change in the commodity prices and foreign exchange rates movements. For cash flow hedges regarded as basis adjustments to initial carrying value of the property, plant and equipment, the depreciation on the basis adjustments made is expected to affect profit or loss over the expected useful life of the property, plant and equipment.

#### Fair value hedges

The fair value hedges relate to forward covers taken to hedge currency exposure and commodity price risks.

The Group's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Group enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. Net gains and losses are recognized in the consolidated statement of profit and loss.

The Group uses foreign exchange contracts from time to time to optimize currency risk exposure on its foreign currency transactions. Fair value changes on such forward contracts are recognized in the consolidated statement of profit and loss.

#### Non-designated economic hedges

The Group enters into derivative contracts which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Hedging instruments include copper, aluminium future contracts on the LME and certain other derivative instruments. Fair value changes on such derivative instruments are recognized in the consolidated statement of profit and loss.

The fair value of the Group's derivative positions recorded under derivative financial assets and derivative financial liabilities are as follows:

				(₹ in Crore)
	As at Marcl	h 31, 2019	As at March	
Derivative Financial Instruments	Assets	Liabilities	Assets	Liabilities
Current				
Cash flow hedge*				
- Commodity contracts	3	6	118	95
- Forward foreign currency contracts	37	1	1	0
Fair value hedge				
- Commodity contracts	3	-	-	-
- Forward foreign currency contracts	5	-	-	-
Non - qualifying hedges/economic hedge				
- Commodity contracts	5	72	6	16
- Forward foreign currency contracts	25	366	27	31
- Cross currency swap	0	6	0	1
Total	78	451	152	143
Non-current				
Non - qualifying hedges/economic hedge				
- Forward foreign currency contracts	-	99	-	117
- Commodity contracts	-	-	-	1
Total	-	99	-	118

<sup>\*</sup> Refer consolidated statement of profit and loss and consolidated statement of changes in equity for the change in the fair value of cash flow hedges.

as at and for the year ended March 31, 2019

#### 23. PROVISIONS

(₹ in Crore)

	As at March 31, 2019 As at I			March 31, 2018		
Particulars	Non-current	Current	Total	Non-current	Current	Total
Provision for employee benefits <sup>a</sup> (Refer Note 30)						
- Retirement benefit	145	122	267	151	122	273
- Others	10	200	210	59	187	246
Provision for restoration, rehabilitation and environmental costs <sup>b</sup>	2,441	13	2,454	2,151	50	2,201
Other Provisions <sup>b</sup>	-	52	52	-	51	51
Total	2,596	387	2,983	2,361	410	2,771

a) Includes gratuity, compensated absences, deferred cash bonus etc. Others include leave encashment etc.

(₹ in Crore)

		(* 111 01010)
Particulars	Restoration, rehabilitation and environmental costs (Refer c)	Others (Refer d)
As at April 01, 2017	1,934	50
Additions	174	1
Utilised	(46)	-
Unused amounts reversed	(41)	-
Unwinding of discount (Refer note 31)	84	-
Revision in estimates	8	-
Acquisitions through business combinations	24	-
Exchange differences	64	-
As at March 31, 2018	2,201	51
Additions	18	1
Amounts Utilised	(13)	-
Unused amounts reversed	(8)	-
Unwinding of discount (Refer note 31)	93	-
Revision in estimates	136	-
Exchange differences	27	-
As at March 31, 2019	2,454	52

#### c) Restoration, rehabilitation and environmental

The provisions for restoration, rehabilitation and environmental liabilities represent the management's best estimate of the costs which will be incurred in the future to meet the Group's obligations under existing Indian, Australian, Namibian, South African and Irish law and the terms of the Group's exploration and other licences and contractual arrangements.

Within India, the principal restoration and rehabilitation provisions are recorded within Oil & Gas division where a legal obligation exists relating to the oil and gas fields, where costs are expected to be incurred in restoring the site of production facilities at the end of the producing life of an oil field. The Group recognises the full cost of site restoration as a liability when the obligation to rectify environmental damage arises.

These amounts are calculated by considering discount rates within the range of 2% to 10%, and become payable on closure of mines and are expected to be incurred over a period of one to thirty years . The lower range of discount rate is at Cairn India & Zinc International operations in Ireland and higher range is at Zinc International operations in African Countries.

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production from a producing field.

#### d) Other provisions

Other provisions include provision for disputed cases

as at and for the year ended March 31, 2019

#### 24. OTHER LIABILITIES

(₹ in Crore)

	As at March 31, 2019			As at	March 31, 2018	
Particulars	Non-current	Current	Total	Non-current	Current	Total
Amount payable to owned post-employment benefit trust (refer note 38)		77	77	-	84	84
Other Statutory Liabilities <sup>a</sup>	-	3,121	3,121	-	2,527	2,527
Deferred government grants <sup>b</sup>	4,409	182	4,591	4,303	168	4,471
Advance from customer °	-	9,194	9,194	-	4,944	4,944
Advance from related party	-	2	2	-	-	-
Other liabilities	-	196	196	-	198	198
Total	4,409	12,772	17,181	4,303	7,921	12,224

- a) Statutory liabilities mainly includes contribution to Provided fund, ESIC, withholding taxes, goods & services tax, VAT,
- b) Represents government assistance in the form of the duty benefit availed under Export Promotion Capital Goods (EPCG) Scheme and SEZ scheme on purchase of property, plant and equipment accounted for as government grant and being amortised over the useful life of such assets.
- c) Advance from customers are contract liabilities and include amounts received under long term supply agreements. The advance payment plus a fixed rate of return/ discount will be settled by supplying respective commodity over a period up to twenty four months under an agreed delivery schedule as per the terms of the respective agreements. As these are contracts that the Group expects, and has the ability, to fulfil through delivery of a non-financial item, these are recognised as advance from customers and will be recognised as revenue as and when control of respective commodities is transfered to customers under the agreements. The portion of the advance that is expected to be settled within the next 12 months has been classified as a current liability.

### 25. A) REVENUE FROM OPERATIONS

(₹ in Crore)

	Year ended March 31, 2019	Year ended March 31, 2018
Sale of products (Net of excise duty) <sup>a</sup>	89,009	89,090
Add: Excise duty	-	1,057
Total Sale of products (Gross of excise duty) <sup>b</sup>	89,009	90,147
Sale of services	220	308
Revenue from contingent rents (refer note 37)	1,672	1,556
Total	90,901	92,011

- a) With effect from July 01, 2017, Goods and Services Tax ('GST') has been implemented which has replaced several indirect taxes including excise duty. While Ind-AS required excise duty to be included while computing revenues, GST is required to be excluded from revenue computation. Accordingly "Revenue from operations (Net of excise duty)" has been additionally disclosed to enhance comparability of financial information.
- b) Revenue from sale of products and from sale of services for the year ended March 31, 2019 comprises of revenue from contracts with customers of ₹ 90,075 Crore and a net loss on mark-to-market of ₹ 846 Crore on account of gains/ losses relating to sales that were provisionally priced as at March 31, 2019 with the final price settled in the current year, gains/ losses relating to sales fully priced during the year, and marked to market gains/ losses relating to sales that were provisionally priced as at March 31, 2019. It further includes ₹ 3,787 Crore for which contract liabilities existed at the beginning of the year.

Revenue from sale of products are recorded at a point in time and those from sale of services are recognised over a period of time.

#### **B) OTHER OPERATING INCOME**

		(
	Year ended March 31, 2019	Year ended March 31, 2018
Export incentives	458	418
Scrap sales	396	277
Miscellaneous income	293	217
Total	1,147	912

as at and for the year ended March 31, 2019

#### **26. OTHER INCOME**

(₹ in Crore)

	Year ended March 31, 2019	Year ended March 31, 2018
Net gain on investment measured at FVTPL <sup>a</sup>	1,988	1,676
Interest income from investments measured at FVTPL	929	469
Interest income from investments measured at FVOCI	-	258
Interest income from financial assets at amortised cost		
- Bank deposits	143	133
- Loans	8	6
- Others	217	211
Interest on income tax refund	119	217
Dividend Income from		
- financial assets at FVTPL	30	10
- financial assets at FVOCI	1	0
Deferred government grant income (Refer note 23)	183	145
Miscellaneous income	400	80
Total	4,018	3,205

a) Includes mark to market gain of ₹1,041 Crore relating to structured investment (Refer note 38)

#### 27. CHANGES IN INVENTORIES OF FINISHED GOODS AND WORK-IN-PROGRESS\*

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Opening Stock:		
Finished Goods	626	756
Work in Progress	3,012	3,298
	3,638	4,054
Less: Impairment of Inventory (Refer note 33(b))	-	(35)
Add: Foreign exchange translation	(9)	28
Add: Finished Goods acquired as part of business combination	205	41
Closing Stock		
Finished Goods	1,438	626
Work in Progress	2,527	3,012
	3,965	3,638
Sub-total	(131)	450
Add / (Less) : Copper Concentrate (raw material) sold during the year	203	-
Total	72	450

<sup>\*</sup> Inventories include goods-in-transit

#### 28. EMPLOYEE BENEFITS EXPENSE

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Salaries and Wages	3,121	2,582
Share based payments (Refer note 29)	118	118
Contributions to provident and other funds (Refer note 30)	180	157
Staff welfare expenses	245	227
Less: Cost allocated/directly booked in joint ventures	(641)	(588)
Total	3,023	2,496

as at and for the year ended March 31, 2019

#### 29. SHARE BASED PAYMENTS

The Company offers equity based and cash based option plans to its employees, officers and directors through the Company's stock option plan introduced in 2016, Cairn India's stock option plan now administered by the Company pursuant to merger with the Company and Vedanta Resources Limited (earlier known as Vedanta Resources Plc) plans [Vedanta Resources Long-Term Incentive Plan ("LTIP"), Employee Share Ownership Plan ("ESOP"), Performance Share Plan ("PSP") and Deferred Share Bonus Plan ("DSBP")] collectively referred as 'VRL ESOP' scheme.

#### The Vedanta Limited Employee Stock Option Scheme (ESOS) 2016

The Company introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders to provide equity settled incentive to all employees of the Company including subsidiary companies. The ESOS scheme includes tenure based, business performance (EBIDTA) based and market performance based stock options.

The maximum value of options that can be awarded to members of the wider management group is calculated by reference to the grade average cost-to-company ("CTC") and individual grade of the employee. The performance conditions attached to the option is measured by comparing Company's performance in terms of Total Shareholder Return ("TSR") over the performance period with the performance of two group of comparator companies (i.e. Indian and global comparator companies) defined in the scheme. The extent to which an option vests will depend on the Company's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. Dependent on the level of employee, part of these options will be subject to a continued service condition only with the remainder measured in terms of TSR.

The exercise price of the options is ₹ 1 per share and the performance period is three years, with no re-testing being allowed.

The details of share options for the year ended March 31, 2019 is presented below:

Year of Grant	Exercise Period	Options outstanding April 1, 2017	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding March 31, 2018
2017	December 15, 2019 - June 14, 2020	70,98,602	-	5,90,376	-	-	65,08,226
2018	September 1, 2020 - February 28, 2021	96,17,340	-	8,48,381	4,94,566	-	82,74,393
2018	October 16, 2020 - April 15, 2021	11,570	-	-	444	-	11,126
2018	November 1, 2020 - April 30, 2021	28,740	-	-	1,102	-	27,638
2019	November 1, 2021 - April 30, 2022		1,37,93,980	2,27,780	-	-	1,35,66,200
2019	November 1, 2021 - April 30, 2022		10,76,120	28,460	-	-	10,47,660
	(Cash settled)						
		1,67,56,252	1,48,70,100	16,94,997	4,96,112	-	2,94,35,243

The details of share options for the year ended March 31, 2018 is presented below:

Year of Grant	Exercise Period	Options outstanding April 1, 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding March 31, 2019
2017	December 15, 2019 - June 14, 2020	78,03,400	-	7,04,798	-	-	70,98,602
2018	September 1, 2020 - February 28, 2021	-	1,00,48,650	4,31,310	-	-	96,17,340
2018	October 16, 2020 - April 15, 2021	-	11,570	-	-	-	11,570
2018	November 1, 2020 - April 30, 2021	-	28,740	-	-	-	28,740
		78,03,400	1,00,88,960	11,36,108	-	-	1,67,56,252

The fair value of all options has been determined at the date of grant of the option allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of options that will eventually vest as a result of non-market conditions, is expensed over the vesting period.

The fair values were calculated using the Black-Scholes Model for tenure based and EBIDTA based options and Monte Carlo simulation model for TSR based options. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the option. The volatilities of the industry peers have been modelled based on historical movements in the indices over the period to date of grant which is also commensurate with the performance period of the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Monte Carlo model to estimate their future TSR performance relative to the Company's TSR performance. All options are assumed to be exercised immediately after vesting, as the excercise period is 6 months.

as at and for the year ended March 31, 2019

The assumptions used in the calculations of the charge in respect of the ESOS options granted during the year ended March 31, 2019 and March 31, 2018 are set out below:

	Year ended March 31, 2019	Year ended March 31, 2018
Particulars	ESOS November 2018	ESOS September, October and November 2017
Number of Options	10,76,120 (cash settled) / 1,37,93,980 (equity settled)	1,00,88,960
Exercise Price	₹1	₹1
Share Price at the date of grant	₹ 195.00	₹ 308.90
Contractual Life	3 years	3 years
Expected Volatility	44.3%	48%
Expected option life	3 years	3 years
Expected dividends	6.50%	3.70%
Risk free interest rate	7.70%	6.50%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted (Tenure & EBIDTA based/Performance based)	₹ 159.9/ ₹ 96.3	₹ 275.3/ ₹161.1

The Company recognized total expenses of ₹82 Crore (March 31, 2018: ₹47 Crore) related to equity settled share-based payment transactions in the year ended March 31, 2019. The total expense recognised on account of cash settled share based plan during the year ended March 31, 2019 is ₹ 1 Crore (March 31, 2018: Nil) and the carrying value of cash settled share based compensation liability as at March 31, 2019 is ₹ 1 Crore (March 31, 2018: Nil).

#### Employee stock option plans of erstwhile Cairn India Limited:

The Company has provided CIESOP share based payment scheme to its employees.

There are no specific vesting conditions under CIESOP plan other than completion of the minimum service period of 3 years from the date of grant. Phantom options are exercisable proportionate to the period of service rendered by the employee subject to completion of one year. The exercise period is 7 years from the vesting date.

Details of employees stock option plans is presented below:

	Year ended M	larch 31, 2019	Year ended Ma	Year ended March 31, 2018		
CIESOP Plan	Number of Weighted average options exercise price in ₹		Number of options	Weighted average exercise price in ₹		
Outstanding at the beginning of the year	71,30,625	275.5	89,62,666	264.3		
Granted during the year	Nil	NA	Nil	NA		
Expired during the year	90,896	187.0	Nil	NA		
Exercised during the year	2,35,169	189.0	15,92,759	213.8		
Forfeited / cancelled during the year	3,27,501	287.2	2,39,282	268.2		
Outstanding at the end of the year	64,77,059	279.2	71,30,625	275.5		
Exercisable at the end of the year	64,77,059	279.2	71,30,625	275.5		

Weighted average share price at the date of exercise of stock options is ₹232.7 (March 31, 2018: ₹324.6)

Scheme	Range of exercise price in ₹	Weighted average remaining contractual life of options (in years)	Weighted average exercise price in ₹
The details of exercise price for stock options outstanding as at March 31, 2019 are:			
CIESOP Plan	200.05-291.25	NA	279.2
The details of exercise price for stock options outstanding as at March 31, 2018 are:			
CIESOP Plan	187-291.25	NA	275.5

#### Employee share option plan of Vedanta Resources Limited (earlier known as Vedanta Resources Plc)

The value of shares that are awarded to members of the Group is calculated by reference to the individual fixed salary and share-based remuneration consistent with local market practice. ESOP scheme of Vedanta Resources Limited is both tenure and performance based share schemes. The options are indexed to and settled by Parent's shares (Vedanta Resources Limited shares as defined in the scheme). The options have a fixed exercise price denominated in Parent's functional currency (10 US cents per share), the performance period of each option is three years and is exercisable within a period of six months from the date of vesting beyond which the option lapses.

as at and for the year ended March 31, 2019

During the current year, through an open offer all the outstanding equity settled options were bought back by Vedanta Resources Limited's parent, Volcan Investments Limited. On account of delisting of Vedanta Resources Limited, the cash based options were also early settled. The accelerated charge on account of early settlement of both the equity settled and cash settled options was recognised in the Consolidated Statement of Profit and Loss.

Amount recovered by the Parent and recognized by the Group for the year ended March 31, 2019 is ₹ 15 Crore (March 31, 2018: ₹ 53 Crore). The Group considers these amounts as not material and accordingly has not provided further disclosures.

The Group has awarded certain cash settled share based options indexed to Parents' shares (Vedanta Resources Limited shares) and shares of any of its subsidiaries. The total expense recognised on account of cash settled share based plan during the year ended March 31, 2019 is ₹ 21 Crore (March 31, 2018: ₹ 22 Crore) and the carrying value of cash settled share based compensation liability as at March 31, 2019 is ₹ 34 Crore (March 31, 2018: ₹ 24 Crore).

Out of the total expense of ₹ 119 Crore (March 31,2018: ₹ 122 Crore) pertaining to equity settled and cash settled options for

the year ended March 31, 2019, the Group has capitalised ₹ 1 Crore (March 31, 2018 : ₹ 4 Crore) expense for the year ended March 31, 2019.

#### **30. EMPLOYEE BENEFIT PLANS**

The Group participates in defined contribution and benefit plans, the assets of which are held (where funded) in separately administered funds.

For defined contribution plans the amount charged to the consolidated statement of profit and loss is the total amount of contributions payable in the year.

For defined benefit plans, the cost of providing benefits under the plans is determined by actuarial valuation separately each year for each plan using the projected unit credit method by independent qualified actuaries as at the year end. Remeasurement gains and losses arising in the year are recognised in full in other comprehensive income for the year.

#### i) Defined contribution plans

The Group contributed a total of ₹72 Crore and ₹60 Crore for the year ended March 31, 2019 and March 31, 2018 respectively to the following defined contribution plans.

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Employer's contribution to recognised provident fund and family pension fund	55	46
Employer's contribution to superannuation	17	14_
	72	60

#### Indian pension plans

#### Central recognised provident fund

In accordance with the 'The Employees Provident and Miscellaneous Provisions Act, 1952', employees are entitled to receive benefits under the Provident Fund. Both the employee and the employer make monthly contributions to the plan at a predetermined rate (12% for 2019 and 2018) of an employee's basic salary. All employees have an option to make additional voluntary contributions. These contributions are made to the fund administered and managed by the Government of India (GOI) or to independently managed and approved funds. The Group has no further obligations under the fund managed by the GOI beyond its monthly contributions which are charged to the consolidated statement of profit and loss in the year they are incurred.

#### Family pension fund

The Pension Fund was established in 1995 and is managed by the Government of India. The employee makes no contribution to this fund but the employer makes a contribution of 8.33% of salary each month subject to a specified ceiling per employee. This is provided for every permanent employee on the payroll.

At the age of superannuation, contributions ceases and the individual receives a monthly payment based on the level of contributions through the years, and on their salary scale at the time they retire, subject to a maximum ceiling of salary level. The Government funds these payments, thus the Group has no additional liability beyond the contributions that it makes, regardless of whether the central fund is in surplus or deficit.

#### Superannuation

Superannuation, another pension scheme, is applicable only to executives above certain grade. However, in case of the oil & gas business (applicable from the second year of employment) and Iron Ore Segment, the benefit is applicable to all executives. Vedanta Limited and each relevant Indian subsidiary holds a policy with Life Insurance Corporation of India ("LIC"), to which each of these entities contributes a fixed amount relating to superannuation and the pension annuity is met by LIC as required, taking into consideration the contributions made. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated statement of profit and loss in the year they are incurred.

#### Australian pension scheme

The Group also participates in defined contribution superannuation schemes in Australia. The contribution of a proportion of an employee's salary in a superannuation fund is a compulsory legal requirement in Australia. The employer contributes, into the employee's fund of choice, 9.50% of an employee's gross remuneration where the employee is covered by an industrial agreement and 12.50% of the basic remuneration for all other employees. All employees have an option to make additional voluntary contributions. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated statement of profit and loss in the year they are incurred.

as at and for the year ended March 31, 2019

#### Skorpion Zinc Provident Fund, Namibia

The Skorpion Zinc Provident Fund is a defined contribution fund and is compulsory to all full time employees under the age of 60. The Group contribution to the fund is a fixed percentage of 9% per month of pensionable salary, whilst the employee contributes 7% with the option of making additional contributions, over and above the normal contribution, up to a maximum of 12%.

Normal retirement age is 60 years and benefit payable is the member's fund credit which is equal to all employer and employee contributions plus interest. The same applies when an employee resigns from Skorpion Zinc. The Fund provides disability cover which is equal to the member's fund credit and a death cover of two times annual salary in the event of death before retirement.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated statement of profit and loss in the year they are incurred.

#### Black Mountain (Pty) Limited, South Africa Pension and **Provident Funds**

Black Mountain Mining (Pty) Ltd has two retirement funds, both administered by Alexander Forbes, a registered financial service provider. The purpose of the funds is to provide retirement and death benefits to all eligible employees.

Group contributes at a fixed percentage of 10.5% for up to supervisor grade and 15% for others.

Membership of both funds is compulsory for all permanent employees under the age of 60.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated statement of profit and loss in the year they are incurred.

#### ii) Defined benefit plans

(a) Contribution to provident fund trust (the "trusts") of Iron ore division, Bharat Aluminium Company Limited (BALCO), Hindustan Zinc Limited (HZL), Sesa Resources Limited (SRL) and Sesa Mining Corporation Limited (SMCL)

The provident funds of Iron ore division, BALCO, HZL, SRL and SMCL are exempted under section 17 of The Employees Provident Fund and Miscellaneous Provisions Act, 1952. Conditions for grant of exemption stipulates that the employer shall make good deficiency, if any, between the return guaranteed by the statute and actual earning of the Fund. Based on actuarial valuation in accordance with Ind AS 19 and Guidance note issued by Institute of Actuaries of India for interest rate guarantee of exempted provident fund liability of employees, there is no interest shortfall that is required to be met by Iron ore division, BALCO, HZL, SRL and SMCL as of March 31, 2019 and March 31, 2018. Having regard to the assets of the fund and the return on the investments, the Group does not expect any deficiency in the foreseeable future.

The Group contributed a total of ₹ 68 Crore for the year ended March 31, 2019 and ₹ 63 Crore for the year ended March 31, 2018 in relation to the independently managed and approved funds. The present value of obligation and the fair value of plan assets of the trust are summarised below.

(₹ in Crore)

		( ,
	As at	As at
Particulars	March 31, 2019	March 31, 2018
Fair value of plan assets of trusts	2,195	1,514
Present value of defined benefit obligation	(2,116)	(1,469)
Net liability arising from defined benefit obligation	Nil	Nil

#### Percentage allocation of plan assets of the trust

Assets by category	As at March 31, 2019	As at March 31, 2018
Government Securities	65.66%	71.10%
Debentures / bonds	33.09%	28.04%
Equity	1.25%	0.62%
Fixed deposits	0.00%	0.24%

#### (b) Post-Retirement Medical Benefits:

The Group has a scheme of medical benefits for employees at BMM and BALCO subsequent to their retirement on completion of tenure including retirement on medical grounds and voluntary retirement on contributory basis. The scheme includes employee's spouses as well. Based on an actuarial valuation conducted as at year-end, a provision is recognised in full for the benefit obligation. The obligation relating to post-retirement medical benefits as at March 31, 2019 was ₹ 65 Crore (March 31, 2018: ₹ 66 Crore). The obligation under this plan is unfunded. The Group considers these amounts as not material and accordingly has not provided further disclosures as required by Ind AS 19 'Employee benefits'. The current service cost for the year ending March 31, 2019 of ₹1 Crore (March 31, 2018: ₹1 Crore) has been recognised in consolidated statement of profit and loss. The remeasurement losses / (gains) and net interest on the obligation of post-retirement medical benefits of ₹ 1 Crore loss (March 31, 2018: ₹ 4 Crore gains) and ₹ 5 Crore (March 31, 2018: ₹ 6 Crore) for the year ended March 31, 2019 have been recognised in other comprehensive income and finance cost respectively.

as at and for the year ended March 31, 2019

#### (c) Other Post-employment Benefits:

#### India - Gratuity plan

In accordance with the Payment of Gratuity Act of 1972, Vedanta Limited and its Indian subsidiaries contribute to a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. The Gratuity Plan provides a lump sum payment to vested employees at retirement, disability or termination of employment being an amount based on the respective employee's last drawn salary and the number of years of employment with the Group.

Based on actuarial valuations conducted as at year end using the projected unit credit method, a provision is recognised in full for the benefit obligation over and above the funds held in the Gratuity Plan. For entities where the plan is unfunded, full provision is recognised in the consolidated balance sheet.

The iron ore and oil & gas division of Vedanta Limited SRL, SMCL and HZL have constituted a trust recognized by Income Tax Authorities for gratuity to employees and contributions to the trust are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company Limited and HDFC Standard Life Insurance.

#### Principal actuarial assumptions

Principal actuarial assumptions used to determine the present value of the Other post-employment benefit Plan obligation are as follows:

	As at	As at
Particulars	March 31, 2019	March 31, 2018
Discount rate	7.80%	7.70%
Expected rate of increase in compensation level of covered employees	2%-15%	2%-15%
Mortality table	IALM (2006-08)	IALM (2006-08)

In India, the mortality tables used, assume that a person aged 60 at the end of the balance sheet date has a future life expectancy of 19 years.

Amount recognised in the consolidated balance sheet consists of:

(₹ in Crore)

	As at March 31, 2019	As at March 31, 2018
Fair value of plan assets	387	339
Present value of defined benefit obligations	(589)	(546)
Net liability arising from defined benefit obligation	(202)	(207)

Amounts recognised in consolidated statement of profit and loss in respect of Other post-employment benefit plan are as follows:

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Current service cost	39	33
Past service cost (Refer note 33)	-	82
Net interest cost	16	10
Components of defined benefit costs recognised in consolidated statement of profit and loss	55	125

Amounts recognised in other comprehensive income in respect of Other post-employment benefit plan are as follows:

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Re-measurement of the net defined benefit obligation:-		
Actuarial (gains) / losses arising from changes in financial assumptions	(6)	2
Actuarial losses / (gains) arising from experience adjustments	41	(6)
Actuarial losses arising from changes in demographic assumptions	2	-
Actuarial losses on plan assets (excluding amounts included in net interest cost)	2	1
Components of defined benefit costs recognised in Other comprehensive income	39	(3)

as at and for the year ended March 31, 2019

The movement of the present value of the Other post-employment benefit plan obligation is as follows:

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Opening balance	546	450
Acquired in business combination	15	-
Current service cost	39	33
Past service cost	-	82
Benefits paid	(90)	(49)
Interest cost	42	34
Actuarial losses / (gains) arising from changes in assumptions	37	(4)
Closing balance	589	546

The movement in the fair value of Other post-employment benefit plan assets is as follows:

(₹ in Crore)

		(
Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Opening balance	339	322
Acquired in business combination	16	-
Contributions received	82	32
Benefits paid	(74)	(38)
Re-measurement gain/(loss) arising from return on plan assets	(2)	(1)
Interest income	26	24
Closing balance	387	339

The above plan assets have been invested in the qualified insurance policies.

The actual return on plan assets was ₹ 24 Crore for the year ended March 31, 2019 and ₹ 23 Crore for the year ended March 31, 2018.

The weighted average duration of the defined benefit obligation is 14.7 years and 14.6 years as at March 31, 2019 and March 31, 2018 respectively.

The Group expects to contribute ₹ 57 Crore to the funded defined benefit plans during the year ending March 31, 2020.

#### Sensitivity analysis for Defined Benefit Plan

Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligation and based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period while holding all other assumptions constant.

(₹ in Crore)

	Increase / (Decrease) in defined benefit obligation	
Particulars	As at March 31, 2019	As at March 31, 2018
Discount rate		, , , , , , , , , , , , , , , , , , , ,
Increase by 0.50%	(18)	(17)
Decrease by 0.50%	20	17
Expected rate of increase in compensation level of covered employees		
Increase by 0.50%	20	15
Decrease by 0.50%	(17)	(14)

The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined obligation liability recognized in the consolidated balance sheet.

as at and for the year ended March 31, 2019

#### Risk analysis

Group is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefit plans and management estimation of the impact of these risks are as follows:

#### Investment risk

Most of the Indian defined benefit plans are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life (ICICI) and HDFC Standard Life. Group does not have any liberty to manage the fund provided to LIC, ICICI prudential and HDFC Standard Life. The present value of the defined benefit plan obligation is calculated using a discount rate determined by reference to Government of India bonds for Group's Indian operations. If the return on plan asset is below this rate, it will create a plan deficit.

#### Interest risk

A decrease in the interest rate on plan assets will increase the net plan obligation.

#### Longevity risk / Life expectancy

The present value of the defined benefit plan obligation is calculated by reference to the best estimate of the mortality of plan participants both during and at the end of the employment. An increase in the life expectancy of the plan participants will increase the plan obligation.

#### Salary growth risk

The present value of the defined benefit plan obligation is calculated by reference to the future salaries of plan participants. An increase in the salary of the plan participants will increase the plan obligation.

#### 31. FINANCE COST

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Interest expense on financial liabilities at amortised cost <sup>a</sup>	6,072	5,152
Other finance costs	334	177
Net interest on defined benefit arrangement	21	16
Unwinding of discount on provisions (Refer note 23)	93	84
Exchange difference regarded as an adjustment to borrowing cost	3	32
Less : Capitalisation of finance cost/borrowing cost <sup>b</sup> (Refer note 6)	(834)	(349)
Less: Cost allocated/directly booked in joint ventures	(0)	(0)
Total	5,689	5,112

- a) Includes ₹157 Crore (March 31, 2018 : ₹252 Crore) on redeemable preference shares (including dividend distribution tax).
- b) Interest rate of 7.3% was used to determine the amount of general borrowing costs eligible for capitalization in respect of qualifying asset for the year ended March 31, 2019.
- c) Interest expense on Income taxes is ₹ 17 Crore (March 31, 2018 : ₹ 5 Crore)

#### **32. OTHER EXPENSES**

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Cess on crude oil	2,971	2,155
Royalty	2,891	3,051
Consumption of stores and spare parts	2,456	2,393
Share of expenses in producing oil and gas blocks	2,299	1,875
Repairs to Plant and equipment	2,153	1,845
Repairs to building	203	128
Repairs others	168	173
Carriage	1,568	1,560
Mine Expenses	1,967	1,499
Net loss on foreign currency transactions and translation	809	302
Other Selling Expenses	25	97
Insurance	185	150
Loss on sale/ disposal of fixed asset (net)	68	15
Rent	93	81
Rates and taxes	55	50
Amortisation of prepaid lease charges	9	12
Exploration costs written off (Refer note 6)	50	-
Directors sitting fees and commission	7	5
Bad trade receivables & advances written off	33	4
Provision for doubtful advances/ expected credit loss	(33)	64
Miscellaneous expenses	4,039	3,048
Less: Cost allocated/directly booked in joint ventures	(388)	(277)
Total	21,628	18,230

as at and for the year ended March 31, 2019

#### 33. EXCEPTIONAL ITEMS

(₹ in Crore)

	Year ended March 31, 2019			Year e	Year ended March 31, 2018			
Particulars	Exceptional items	Tax effect of Exceptional items	Exceptional items after tax	Exceptional items	Tax effect of Exceptional items	Exceptional items after tax		
Net reversal of impairment charge relating to property, plant and equipment and exploration intangible assets under development – Oil and Gas <sup>a</sup>	261	(91)	170	6,907	(2,721)	4,186		
Impairment charge relating to iron ore assets <sup>b</sup>	-	-	-	(2,329)	603	(1,726)		
Foreign currency translation loss reclassified from equity to profit and loss relating to subsidiaries under liquidation °	-	-	-	(1,485)	-	(1,485)		
Loss on unusable capital work in progress <sup>d</sup>	-	-	-	(251)	87	(164)		
Reversal of provision for District mineral fund <sup>e</sup>	-	-	-	295	(100)	195		
Gratuity - change in limits <sup>f</sup>	-	-	-	(82)	18	(64)		
Reversal/ (charge) pursuant to Supreme Court order/ arbitration order <sup>9</sup>	59	(21)	38	(113)	40	(73)		
Acquisition expenses (Refer note 4(b)) h	-	-	-	(45)	-	(45)		
Total	320	(112)	208	2,897	(2,074)	823		

a) During the year, the Group has recognized net impairment reversal of ₹ 261 Crore in respect of Oil & Gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The impairment reversal has been recorded against Oil & Gas producing facilities. The recoverable amount of the Group's share in KG-ONN-2003/1 (CGU) was determined to be ₹ 208 Crore (\$30 million).

The recoverable amount of the KG-ONN-2003/1 CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US\$ 62 per barrel for the year ended March 31, 2019 and scales upto long-term nominal price of US\$ 65 per barrel by year ended March 31, 2022 derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 11.8% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

During the year ended March 31, 2018, the Group had recognized net impairment reversal of ₹ 6,907 Crore on its assets in the oil and gas segment comprising of:

i) reversal of previously recorded impairment charge of ₹ 7,016 Crore relating to Rajasthan oil and gas block ("CGU") mainly following the progress on key growth projects expected to result in the enhanced recovery of resources in a commercially

viable manner leading to a higher forecast of oil production and adoption of integrated development strategy for various projects leading to savings in cost. Of this reversal, ₹796 Crore reversal has been recorded against oil and gas assets and ₹ 6,220 Crore reversal has been recorded against exploration intangible assets under development.

The recoverable amount of Rajasthan oil and gas cash generating units (CGU), ₹ 16,352 Crore (US\$ 2,514 million) as at March 31, 2018, was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/ cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US\$ 62 per barrel for the next one year and scales upto long-term nominal price of US\$ 65 per barrel three years thereafter derived from a consensus of various analyst recommendations.

Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 10.1% derived from the post-tax weighted average cost of capital after factoring in the risks ascribed to PSC extension including successful implementation of key growth projects. Based on the sensitivities carried out by the Group, change in crude price assumptions by US\$ 1/bbl and changes to discount rate by 0.5% would lead to a change in recoverable value by ₹416 Crore (US\$ 64 million) and ₹345 Crore (US\$ 53 million) respectively.

ii) impairment charge of ₹ 109 Crore representing the carrying value of assets relating to exploratory wells in Block PR-OSN-2004/1 which was relinquished during the previous year.

as at and for the year ended March 31, 2019

b) During the year ended March 31, 2018, the Group had recognized an impairment charge of ₹ 2,329 Crore as against the net carrying value of ₹ 3,034 Crore on its iron ore assets in Goa in the iron ore segment. This impairment, ₹ 1702 Crore has been recorded against property, plant and equipment, ₹ 150 Crore has been recorded against intangible assets and ₹ 26 Crore has been recorded against capital work in progress. Pursuant to an order passed by the Hon'ble Supreme Court of India on February 7, 2018, the second renewal of the mining leases granted by the State of Goa to all miners including Vedanta were cancelled. Consequentially all mining operations stopped with effect from March 16, 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of the The Mines and Minerals (Development and Regulation) (MMDR) Act.

Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Group had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge. The recoverable value of the mining reserve (grouped under 'mining property') has been assessed as Nil, as there is no reasonable certainty towards re-award of these mining leases. Similarly, upon consideration of past precedence, the provision for restoration and rehabilitation with respect to these mines has been assessed as Nil, as the Group believes that the same would be carried out by the future successful bidder at the time of mine closure. The net recoverable value of other assets and liabilities has been assessed at ₹ 705 Crore, for each category individually, based on the fair value less cost of sales methodology, a level 3 valuation technique. The fair value was determined based on the estimated selling price of the individual assets using the depreciated replacement cost method.

- c) Three wholly owned subsidiaries of the Group, Twin Star Mauritius Holdings Limited, Twin Star Energy Holdings Limited and Sesa Sterlite Mauritius Holdings Limited are in the process of liquidation. All these entities had US dollar as their functional currency and their financial statements are translated into Indian Rupees for the purpose of consolidated financial statements. The cumulative exchange difference relating to these entities recognized in equity has now been recognised in the consolidated statement of profit and loss.
- d) During the year ended March 31, 2018, the Group has recognised a loss of ₹ 251 Crore relating to certain items of capital work-in-progress at the aluminium operations, which are no longer expected to be used.

- e) During the year ended March 31, 2018, the Group had recognised the reversal of provision of ₹ 295 Crore relating to contribution to the District Mineral Foundation. Effective January 12, 2015, the Mines and Minerals Development and Regulation Act, 1957 prescribed the establishment of the District Mineral Foundation (DMF) in any district affected by mining related operations. The provisions required contribution of an amount equivalent to a percentage of royalty not exceeding one-third thereof, as may be prescribed by the Central Government of India. The rates were prescribed on September 17, 2015 for minerals other than coal, lignite and sand and on October 20, 2015 for coal, lignite and sand as amended on August 31, 2016. The Supreme Court order dated October 13, 2017 has determined the prospective applicability of the contributions from the date of the notification fixing such rate of contribution and hence DMF would be effective:
- i) for minerals other than coal, lignite and sand, from the date when the rates were prescribed by the Central Government; and;
- ii) for coal, lignite and sand, DMF would be effective from the date when the rates were prescribed by the Central Government of India or from the date on which the DMF was established by the State Government by a notification, whichever is later.

Pursuant to the aforesaid order, the Group had recognised a reversal of DMF provision for the period for which DMF levy is no longer leviable.

- f) Certain subsidiaries of the Group participate in a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. In few of these companies, the maximum liability was capped at the statutory prescribed limit of ₹ 10 lakhs. Consequent to the increase in the statutory limit to ₹ 20 lakhs, the increase in provision representing past service cost has been recognized as an exceptional item.
- g) During the current year, the Company has partly reversed the provision for interest of ₹ 59 Crore for dues towards a vendor pursuant to the Honourable Supreme Court of India order. A charge of ₹ 113 Crore in this matter was recognised pursuant to an unfavourable arbitration order during the previous year.
- h) On December 28, 2017, the Group through its wholly owned subsidiary, acquired 51.6% equity stake in AvanStrate Inc. (ASI) (Refer note 4(b)). Acquisition expenses of ₹ 45 Crore incurred for the transaction has been recognised under exceptional items.

as at and for the year ended March 31, 2019

#### 34. TAX

#### (a) Tax charge/(credit) recognised in profit or loss (including on exceptional items)

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Current tax:		
Current tax on profit for the year	2,683	2,828
Charge/(credit) in respect of current tax for earlier years	(6)	39
Charge in respect of exceptional items	-	51
Total Current Tax (a)	2,677	2,918
Deferred tax:		
Origination and reversal of temporary differences	1,075	2,380
Charge in respect of deferred tax for earlier years	(2)	92
Charge in respect of exceptional items	112	2,023
Total Deferred Tax (b)	1,185	4,495
Distribution tax on dividend from subsidiaries (c)	-	(1,536)
Net tax expense (a+b+c)	3,862	5,877
Profit before tax	13,560	19,569
Effective income tax rate (%)	28%	30%

#### Tax expense

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Tax effect of exceptional items	112	2,074
Tax expense- others	3,750	3,803
Net tax expense	3,862	5,877

(b) A reconciliation of income tax expense/ (credit) applicable to profit/ (loss) before tax at the Indian statutory income tax rate to recognised income tax expense for the year indicated are as follows.

Given the majority of the Group's operations are located in India, the reconciliation has been carried out from the Indian statutory income tax rate.

Particulars	Year ended	Year ended
Profit before tax	March 31, 2019	March 31, 2018
	13,560	19,569
Indian statutory income tax rate	34.944%	34.608%
Tax at statutory income tax rate	4,739	6,772
Disallowable expenses	241	153
Non-taxable income	(192)	(241)
FCTR Recycled to P&L (Refer note 33)	-	514
Tax holidays and similar exemptions	(808)	(996)
Effect of tax rate differences of subsidiaries operating in other jurisdictions	(43)	370
Dividend distribution tax	-	(1,536)
Unrecognised tax assets (net)	(73)	271
Change in deferred tax balances due to change in income tax rate from 34.608% to 34.944%	-	89
Capital Gains subject to lower tax rate	(206)	(76)
Charge/(credit) in respect of earlier years	(8)	131
Other permanent differences	212	426
Total	3,862	5,877

as at and for the year ended March 31, 2019

Certain businesses of the Group within India are eligible for specified tax incentives which are included in the table above as tax holidays and similar exemptions. Most of such tax exemptions are relevant for the companies operating in India. These are briefly described as under:

#### The location based exemption

In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from a tax holiday. Such a tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, and 30% of profits for the subsequent five years. This deduction is available only for units established up to March 31, 2012. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Group has such types of undertakings at Haridwar and Pantnagar, which are part of Hindustan Zinc Limited (Zinc India). FY 2018 was the last year of eligibility for deduction for Haridwar unit. In the current year, Pantnagar is the only unit eligible for deduction at 30% of taxable profit.

#### The location based exemption: SEZ Operations

In order to boost industrial development and exports, provided certain conditions are met, profits of undertaking located in Special Economic Zone ('SEZ') may benefit from a tax holiday. Such a tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, 50% of profits for five years thereafter and 50% of the profits for further five years provided the amount allowable in respect of deduction is credited to Special Economic Zone Re-Investment Reserve account. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Group has setup SEZ Operations in its aluminium division of Vedanta Limited (where no benefit has been drawn).

#### **Sectoral Benefit - Power Plants and Port Operations**

To encourage the establishment of infrastructure certain power plants and ports have been offered income tax exemptions of upto 100% of profits and gains for any ten consecutive years within the 15 year period following commencement of operations subject to certain conditions. The Group currently has total operational capacity of 8.4 Giga Watts (GW) of thermal based power generation facilities and wind power capacity of 274 Mega Watts (MW) and port facilities. However, such undertakings would continue to be subject to MAT provisions.

The Group has power plants which benefit from such deductions, at various locations of Hindustan Zinc Limited (where such benefits has been drawn), Talwandi Sabo Power Limited, Vedanta Limited and Bharat Aluminium Company Limited (where no benefit has been drawn).

The Group operates a zinc refinery in Export Processing Zone, Namibia which has been granted tax exempt status by the Namibian government.

In addition, the subsidiaries incorporated in Mauritius are eligible for tax credit to the extent of 80% of the applicable tax rate on foreign source income.

The total effect of such tax holidays and exemptions was ₹808 Crore for the year ended March 31, 2019 (March 31, 2018: ₹996 Crore).

#### (c) Deferred tax assets/liabilities

The Group has accrued significant amounts of deferred tax. The majority of the deferred tax liability represents accelerated tax relief for the depreciation of property, plant and equipment, the depreciation of mining reserves and the fair value uplifts created on acquisitions, net of losses carried forward by Vedanta Limited (post the re-organisation) and unused tax credits in the form of MAT credits carried forward in Vedanta Limited, Cairn Energy Hydrocarbons Limited and Hindustan Zinc Limited. Significant components of Deferred tax (assets) and liabilities recognized in the consolidated balance sheet are as follows:

#### For the year ended 31 March 2019

Significant components of Deferred tax (assets) and liabilities	Opening balance as at April 01, 2018	Charged / (credited) to statement of profit or loss	Charged / (credited) to other comprehensive income	Charged / (credited) to equity	Deferred tax on Acquisition through business combination	Exchange difference transferred to translation of foreign operation	Closing balance as at March 31, 2019
Property, Plant and Equipment	14,032	1,712	-	-	-	214	15,958
Voluntary retirement scheme	(42)	2	-	-	-	-	(40)
Employee benefits	(97)	(2)	(25)	-	-	4	(120)
Fair valuation of derivative asset/liability	(78)	42	(9)	-	-	-	(45)
Fair valuation of other asset/liability	815	(126)	(17)	-	-	8	680
MAT credit entitlement	(11,084)	727	37	-	-	(1)	(10,321)
Unabsorbed depreciation and tax losses	(3,462)	(1,098)	-	-	-	-	(4,560)
Dividend distribution tax	(338)	-	-	338	-	-	-
Other temporary differences	(462)	(72)	(12)	-	-	3	(543)
Total	(716)	1,185	(26)	338	-	228	1,009

as at and for the year ended March 31, 2019

#### For the year ended March 31, 2018

(₹ in Crore)

Significant components of Deferred tax (assets) and liabilities	Opening balance as at April 01, 2017	Charged / (credited) to statement profit or loss	Charged / (credited) to other comprehensive income	Other Adjustments*	Deferred tax on Acquisition through business combination (Refer Note 4(b))	Exchange difference transferred to translation of foreign operation	Closing balance as at March 31, 2018
Property, Plant and Equipment	10,535	3,386	-	-	(21)	132	14,032
Voluntary retirement scheme	(48)	6	-	-	-	-	(42)
Employee benefits	(81)	(9)	(3)	-	-	(4)	(97)
Fair valuation of derivative asset/liability	(34)	(9)	(35)	-	-	-	(78)
Fair valuation of other asset/liability	1,120	(622)	(2)	-	295	24	815
MAT credit entitlement	(12,381)	1,295	(4)	-	-	6	(11,084)
Unabsorbed depreciation and tax losses	(3,899)	437	-	-	-	-	(3,462)
Dividend distribution tax*	-	-	-	(338)	-	-	(338)
Other temporary differences	(620)	11	7	-	129	11	(462)
Total	(5,408)	4,495	(37)	(338)	403	169	(716)

<sup>\*</sup> represents dividend distribution tax paid by a subsidiary for which credit has been availed.

Deferred tax assets and liabilities have been offset where they arise in the same taxing jurisdiction with a legal right to offset but not otherwise. Accordingly the net deferred tax (assets)/liability has been disclosed in the Balance Sheet as follows:

(₹ in Crore)

	Asat	As at
Particulars	March 31, 2019	March 31, 2018
Deferred tax assets	(3,475)	(4,934)
Deferred tax liabilities	4,484	4,218
Net Deferred tax (assets) / Liabilities	1,009	(716)

Recognition of deferred tax assets on MAT credit entitlement is based on the respective legal entity's present estimates and business plans as per which the same is expected to be utilized within the stipulated fifteen year period from the date of origination.

Deferred tax assets in the Group have been recognised to the extent there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity which are expected to reverse. For certain components of the Group, deferred tax assets on carry forward unused tax losses have been recognised to the extent of deferred tax liabilities on taxable temporary differences available. It is expected that any reversals of the deferred tax liability would be offset against the reversal of the deferred tax asset at respective entities.

Unused tax losses / unused tax credit for which no deferred tax asset has been recognized amount to ₹ 12,114 Crore and ₹ 3,500 Crore as at March 31, 2019 and March 31, 2018 respectively.

#### As at March 31, 2019

(₹ in Crore)

Unused tax losses/ unused tax credit*	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilised business losses	128	1,094	628	1,527	3,377
Unabsorbed depreciation	-	-	-	8,728	8,728
Unutilised R&D credit	-	-	-	9	9
Total	128	1.094	628	10.264	12.114

<sup>\*</sup>Includes ₹ 1,799 crore and ₹ 6,741 crore of business losses and unabsorbed depreciation respectively pursuant to acquisition of ESL (Refer Note 4(a))

#### As at March 31, 2018

Unutilised R&D Credit					
Unutilised R&D credit		_	_	9	a
Capital losses	128	142	-	-	270
Unabsorbed depreciation	-	-	-	2,020	2.020
Unutilised business losses	-	-	-	1,201	1,201
Unused tax losses/ unused tax credit	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total

No deferred tax assets has been recognised on these unused tax losses/ unused tax credit as there is no evidence that sufficient taxable profit will be available in future against which these can be utilised by the respective entities.

as at and for the year ended March 31, 2019

Additionally, the Group has not recognised MAT credit for one of its components, details of which are as under:

(₹ in Crore)

Year of Expiry	As at March 31, 2019	As at March 31, 2018
2022	104	104
2023	14	14
2024	52	52
2025	52	52
2026	103	103
2027	63	63
2028	8	8
2029	4	4
Total	400	400

The Group has not recognised any deferred tax liabilities for taxes that would be payable on the Group's share in unremitted earnings of certain of its subsidiaries because the Group controls when the liability will be incurred and it is probable that the liability will not be incurred in the foreseeable future. The amount of unremitted earnings are ₹ 32,485 crore and ₹ 31,488 crore as at March 31, 2019 and March 31, 2018 respectively.

#### (d) Non-current tax assets

Non-current tax assets of ₹ 3,484 crore (March 31, 2018: ₹ 3,389 crore) mainly represents income tax receivable from Indian tax authorities by Vedanta Limited relating to the refund arising consequent to the Scheme of Amalgamation & Arrangement made effective in August 2013 pursuant to approval by the jurisdiction High Court and receivables relating to matters in tax disputes in Group companies including tax holiday claim.

#### 35. EARNINGS PER EQUITY SHARE (EPS)

(₹ in Crore except otherwise stated)

Particulars		Year ended March 31, 2019	Year ended March 31, 2018
Profit after tax and exceptional items attributable to equity share holders for Basic and Diluted EPS	Α	7,065	10,342
Profit after tax but before exceptional items attributable to equity share holders for Basic and Diluted EPS	В	6,857	9,561
Computation of weighted average number of shares (in Crore)			
Weighted average number of ordinary shares outstanding during the year excluding shares acquired for ESOP for basic earnings per share	С	370.55	365.41
Effect of dilution:			
Potential ordinary shares relating to share option awards		1.59	0.77
Adjusted weighted average number of shares of the Company in issue	D	372.14	366.18
Basic earnings per equity share after exceptional items (₹)	A/C	19.07	28.30
Diluted earnings per equity share after exceptional items (₹)	A/D	18.98	28.24
Basic earnings per equity share before exceptional items (₹)	B/C	18.50	26.17
Diluted earnings per equity share before exceptional items (₹)	B/D	18.43	26.11
Nominal Value per Share (₹)		1/-	1/-

as at and for the year ended March 31, 2019

#### **36. DISTRIBUTIONS MADE AND PROPOSED**

(₹ in Crore)

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Amounts recognised as distributions to equity share holders:		
Equity dividend on ordinary shares:		
Interim dividend for the year : (March 31, 2019 : ₹ 17.00/- and ₹ 1.85/- per share, March 31, 2018 : 21.20/- per share) ab	7,005	7,881
Dividend distribution tax (DDT) on above	1,437	1,605
	8,442	9,486
Preference dividend on redeemable preference shares:		
Preference dividend for the year : 7.5% p.a. (March 31, 2018 : 7.5% p.a.) $^{\circ}$	130	209
Dividend distribution tax on preference dividend	27	43
	157	252

a) Two interim dividends of ₹ 17.00 and ₹ 1.85 per share were declared during the current year ended March 31, 2019. This includes interim dividend of ₹ 17.00 per share amounting to ₹ 26 Crore and dividend distribution tax of ₹ 5 Crore payable on 1,49,98,802 equity shares held by Vedanta Limited through ESOP trust for its stock options. (Refer note 16).

b) An interim dividend of ₹ 21.20 per share was declared during the previous year ended March 31, 2018. This includes dividend of ₹ 20 Crore and dividend distribution tax of ₹ 4 Crore payable on 92,33,871 equity shares held by Vedanta Limited through ESOP trust for its stock options. (Refer note 16)

c) Dividend @ 7.5% p.a. on the redeemable preference shares of face value of ₹ 10/- per preference share for the period from April 1, 2018 to October 27, 2018 and April 27, 2017 to March 31, 2018, as per their terms of issuance was declared during the year ended March 31, 2019 and March 31, 2018 respectively. The same has been accounted for as interest cost and has been recorded in the Consolidated Statement of Profit and Loss. These preference shares were redeemed, along with dividend on October 26, 2018. (Refer note 16)

#### 37. COMMITMENTS. CONTINGENCIES AND GUARANTEES

#### A) Commitments

The Group has a number of continuing operational and financial commitments in the normal course of business including:

- · Exploratory mining commitments;
- · Oil & gas commitments;
- · Mining commitments arising under production sharing agreements; and
- · Completion of the construction of certain assets.

### a) Estimated amount of contracts remaining to be executed on capital accounts and not provided for:

(₹ in Crore)

	As at	As at
Particulars	March 31, 2019	March 31, 2018
Oil & Gas sector		
Cairn India	5,510	4,304
Aluminium sector		
Lanjigarh Refinery (Phase II)	1,443	1,335
Jharsuguda 1.25 MTPA smelter	460	491
Zinc sector		
Zinc India (mines expansion and smelter)	1,964	1,984
Gamsberg mining & milling project	183	1,057
Copper sector		
Tuticorin Smelter 400 KTPA*	2,794	2,758
Others	1,333	1,056
Total	13,687	12,985

<sup>\*</sup>currently contracts are under suspension under the force majeure clause as per the contract

### b) Commitments related to the minimum work programme (Other than capital commitment):

		(( 111 01010)
	As at	As at
Particulars	March 31, 2019	March 31, 2018
Oil & Gas sector		
Cairn India (OALP - New Oil and Gas blocks)	3,811	-

as at and for the year ended March 31, 2019

#### c) Other Commitments

(i) Power Division of the Company has signed a long term power purchase agreement (PPA) with Gridco Limited for supply of 25% of power generated from the power station with additional right to purchase power at (5%/7%) at variable cost as per the conditions referred to in PPA. The PPA has a tenure of twenty five years.

(ii) TSPL has signed a long term power purchase agreement (PPA) with Punjab State Power Corporation Limited (PSPCL) [formerly known as Punjab State Electricity Board (PSEB)] for supply of power generated from the power plant. The PPA has tenure of twenty five years.

#### **B)** Guarantees

The aggregate amount of indemnities and other guarantees on which the Group does not expect any material losses, was 7,745 Crore (March 31, 2018: ₹ 2,703 Crore).

The Group has given guarantees in the normal course of business as stated below:

- a) Guarantees and bonds advanced to the customs authorities in India of ₹ 676 Crore relating to the export and payment of import duties on purchases of raw material and capital goods (March 31, 2018: ₹ 698 Crore).
- b) Guarantees issued for Group's share of minimum work programme commitments of ₹ 2,367 Crore (March 31, 2018: ₹ 170 Crore).
- c) Guarantee issued against liabilities for structured investment worth ₹ 1,916 Crore. Liability of ₹ 2,070 Crore pertaining to above mentioned structured investment has been shown under Other Financial Liabilities (refer note 21)
- d) Guarantees of ₹ 543 Crore issued under bid bond (March 31, 2018:₹ 12 Crore).
- e) Bank guarantees of ₹ 115 Crore (March 31, 2018: ₹ 115 Crore) has been provided by the Group on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes.
- f) Other guarantees worth ₹ 2,128 Crore (March 31, 2018: ₹ 1,708 Crore) issued for securing supplies of materials and services, in lieu of advances received from customers, litigation, for provisional valuation of custom duty and also to various agencies, suppliers and government authorities for various purposes. The Group does not anticipate any liability on these guarantees.

#### C) Export Obligations

The Indian entities of the Group have export obligations of ₹ 3,234 Crore (March 31, 2018: ₹ 12,385 Crore) on account of concessional rates of import duty paid on capital goods under the Export Promotion Capital Goods Scheme and under the Advance Licence Scheme for the import of raw material laid down by the Government of India.

In the event of the Group's inability to meet its obligations, the Group's liability would be ₹ 433 Crore (March 31, 2018: ₹ 1,101 Crore) reduced in proportion to actual exports, plus applicable interest.

The Group has given bonds of ₹ 1,492 Crore (March 31, 2018: ₹ 1,472 Crore) to custom authorities against these export obligations.

#### D) Contingent Liabilities

# a) Hindustan Zinc Limited: Department of Mines and

The Department of Mines and Geology of the State of Rajasthan issued several show cause notices in August, September and October 2006 to HZL, totalling ₹ 334 Crore as at March 31, 2019 (March 31, 2018: ₹ 334 Crore). These notices alleged unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes it is unlikely that the claim will lead to a future obligation and thus no provision has been made in the financial statements. HZL had filed appeals (writ petitions) in the High Court of Rajasthan in Jodhpur. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. Central Government has also been made a party to the case and the matter is likely to be listed now for hearing after completion of pleadings by the Central Government.

#### b) Vedanta Limited: Income tax

In March 2014, Vedanta Limited (notice was served on Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) received a show cause notice from the Indian Tax Authorities ('Tax Authorities') for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. The Tax Authorities have stated in the notice that a short-term capital gain has accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited, in the financial year 2006-2007, on which tax should have been withheld by the Company. Pursuant to this various replies were filed with the Tax Authorities. After several hearings, the Income Tax Authority, in March 2015, issued an order holding the Company as 'assessee in default' and raised a demand totalling ₹ 20,495 Crore (including interest of ₹ 10,247 Crore). The Company had filed an appeal before the First Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated July 03, 2017 confirmed the tax demand against the Company. The Company has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

The Company also filed a writ petition before the Delhi High Court wherein it has raised several points for assailing the aforementioned Income Tax Authority's order. The matter is pending for adjudication before the Honourable Delhi High Court.

Separately CUHL, on whom the primary liability of tax lies, had received an Order from the ITAT in the financial year 2016-17 holding that the transaction is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of ₹ 10,247 Crore excluding the interest portion that had previously been claimed. The tax department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, the Group considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated October 12, 2018 received from the Tax Recovery Officer (TRO) appointed for CUHL, tax demand of CUHL of approx. ₹ 4,996 Crore along with interest is outstanding. Further, in

as at and for the year ended March 31, 2019

the said notice, tax department had also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Accordingly, amount aggregating to ₹ 607 Crore has been paid to the TRO on October 26, 2018 thus reducing the liability to ₹ 4,389 Crore. Vedanta has also paid interim dividend for FY 2018-19 of ₹ 4 Crore to the TRO. Accordingly, the Group has revised the contingent liability to ₹ 4,385 Crore (March 31, 2018: ₹ 9,139 Crore).

In the event, the case is finally decided against the Company, the demand payable along with interest as per the above mentioned order would be ₹ 20,495 Crore, of which only ₹ 4,385 Crore is considered as possible. Separately, but in connection with this litigation, Vedanta Resources Limited has filed a Notice of Claim against the Government of India ('GOI') under the UK India Bilateral Investment Treaty (the BIT). The International Arbitration Tribunal passed a favourable order on jurisdiction and now the matter is being heard on merits- the hearing started on April 29, 2019 and is still continuing. The Government of India has challenged the jurisdiction order of Arbitration Tribunal before the High Court of Singapore.

#### c) Ravva Joint Operations arbitration proceedings **ONGC Carry**

The Ravva Production Sharing Contract (PSC) obliges the contractor parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to the construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the ONGC Carry) The question as to how the ONGC Carry is to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the contractor parties (including Vedanta Limited (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited)) whereas four other issues were decided in favour of Government of India (GOI) in October 2004 (Partial Award). The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. The Federal Court of Malaysia upheld the Partial Award. As the Partial Award did not quantify the sums, therefore, contractor parties approached the same Arbitration Tribunal to pass a Final Award in the subject matter since it had retained the jurisdiction to do so. The Arbitral Tribunal was reconstituted and the Final Award was passed in October 2016 in Vedanta Limited's favour. GOI's challenge of the Final Award has been dismissed by the Malaysian High Court and the next appellate court in Malaysia i.e. Malaysian Court of Appeal. GOI then filed an appeal at Federal Court of Malaysia. The matter was heard on February 28, 2019 and the Federal Court dismissed GOI's leave to appeal. The Company has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

#### **Base Development Cost**

Ravva joint operations had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from 2000-2005 for ₹892 Crore (US\$ 129 million) for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Government of India (GOI), out of which, Vedanta Limited's (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now

referred to as Vedanta Limited) share will be ₹ 201 Crore (US\$ 29 million) plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing claimants (including the Company) to recover the development costs spent to the tune of ₹ 1,923 Crore (US\$ 278 million) and disallowed over run o ₹ 154 Crore (US\$ 22 million) spent in respect of BDC along with 50% legal costs. The High Court of Kuala Lumpur as well as Court of Appeal dismissed GOI's application of setting aside the part of the Award. GOI challenge to the same before the Federal Court of Malasia was also dismissed by the Federal Court on May 17, 2016. The Company has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, the Company has received an order dated October 22, 2018 from the GOI directing oil marketing companies (OMCs) who are the offtakers for Ravva to divert the sale proceeds to Government's account. GOI alleges that the Ravva Joint Venture has short paid profit petroleum of ₹ 2,172 Crore (US\$ 314 million) (the Company share approximately - ₹ 643 Crore (US\$ 93 million)) on account of the two disputed issues of ONGC Carry and BDC matters. Against an interim application, filed by the Company and other joint venture partner, seeking stay of such action from GOI, before the Delhi High Court, where enforcement petitions for both matters are pending, the Court directed the OMCs to deposit above sums to the Court for both BDC and ONGC Carry matters. However, the Company (and other joint venture partner) has been given the liberty to seek withdrawal of the proportionate amounts (fallen due as of the date of Court order) from the Court upon furnishing a bank guarantee (BG) of commensurate value. The interim application is pending adjudication.

While the Company does not believe the GOI will be successful in its challenge, if the Arbitral Awards in above matters are reversed and such reversals are binding, the Company would be liable for approximately ₹ 643 Crore (US\$ 93 million) plus interest (March 31, 2018: ₹ 605 Crore (US\$ 93 million) plus interest).

#### d) Proceedings related to the imposition of entry tax

Vedanta Limited and other Group companies i.e. Bharat Aluminium Company Limited (BALCO) and Hindustan Zinc Limited (HZL) challenged the constitutional validity of the local statutes and related notifications in the states of Chhattisgarh, Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside.

Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Group filed writ petitions in respective High Courts.

as at and for the year ended March 31, 2019

On October 09, 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgment, imported goods will rank pari passu with domestic goods for the purpose of levy of Entry tax. Vedanta Limited and its subsidiaries have amended their appeals (writ petitions) in Odisha and Chhattisgarh to include imported goods as well. With respect to Rajasthan, the State Government has filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods.

The issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the Odisha High Court. The Group has challenged the levy of entry tax on any movement of goods into SEZ based on the definition of 'local area' under the Odisha Entry Tax Act which is very clear and does not include a SEZ. In addition, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated August 22, 2016, exempted the entry tax levy on SEZ operations.

The total claims against Vedanta Limited and its subsidiaries are ₹ 1,316 Crore (March 31, 2018: ₹ 1,255 Crore) net of provisions made.

#### e) BALCO: Challenge against imposition of Energy **Development Cess**

BALCO challenged the imposition of Energy Development Cess levied on generators and distributors of electrical energy @ 10 paise per unit on the electrical energy sold or supplied before the High Court on the grounds that the Cess is effectively on production and not on consumption or sale since the figures of consumption are not taken into account and the Cess is discriminatory since captive power plants are required to pay @ 10 paise while the State Electricity Board is required to pay @ 5 paise. The High Court of Chhattisgarh by order dated December 15, 2006 declared the provisions imposing ED Cess on CPPs as discriminatory and therefore ultra vires the Constitution. BALCO has sought refund of ED Cess paid till March 2006 amounting to ₹ 35 Crore.

The State of Chhattisgarh moved an SLP in the Supreme Court and whilst issuing notice has stayed the refund of the Cess already deposited and the Supreme Court has also directed the State of Chhattisgarh to raise the bills but no coercive action be taken for recovery for the same. Final argument in this matter started before the Supreme Court. In case the Supreme Court overturns the decision of the High Court, BALCO would be liable to pay an additional amount of ₹ 750 Crore (March 31, 2018: ₹ 655 Crore) and the Group may have to bear a charge of ₹ 785 Crore (March 31, 2018: ₹ 690 Crore).

#### f) South Africa Carry Cost

As part of the farm-in agreement for Block 1, the Group was required to carry its joint venture partner, Petro SA, up to a gross expenditure of ₹ 692 Crore (US\$ 100 million) for a work programme including 3D and 2D seismic studies and at least one exploration well. The Group has spent ₹ 264 Crore (US\$ 38 million) towards exploration expenditure and a minimum carry of ₹ 428 Crore (US\$ 62 million) (including drilling one well) was outstanding at the end of the initial exploration period. The Group had sought an extension for execution

of deed for entry into the second renewal phase of the exploration period with a request to maintain status quo of the prior approvals due to uncertainty in the proposed changes in fiscal terms impacting the Group financial interest in the block. The same was granted by the South African authority subject to risk of exploration right getting expired on account of recent High Court judgments. The Group had provided for the requisite damages as applicable under the South African Regulations.

During financial year 2018-19, Group has received letter from PASA (Petroleum Agency SA) that exploration right has lapsed through effluxion of time, in line with past judicial precedents and asked to submit a closure application. The Group along with Petro SA has filed the closure application on September 19, 2018, Pending disposal of Group's application the obligation for the aforesaid carry cost of ₹ 428 Crore (US\$ 62 million) (March 31, 2018: ₹ 404 Crore (US\$ 62 million)) has been assessed as possible and disclosed as a contingency.

#### g) Miscellaneous disputes- Income tax

The Group is involved in various tax disputes amounting to ₹ 7,390 Crore (March 31, 2018: ₹ 6,561 Crore) relating to income tax for the periods for which initial assessments have been completed. These mainly relate to the disallowance of tax holiday for 100% Export Oriented Undertaking under section 10B of the Income Tax Act, 1961, disallowance of tax holiday benefit on production of gas under section 80IB of the Income Tax Act, 1961, tax holiday for undertakings located in certain notified areas under section 80IC of the Income Tax Act, 1961, disallowance of tax holiday benefit for power plants under section 80IA of the Income Tax Act, 1961, on account of depreciation disallowances of the Income Tax Act and interest thereon which are pending at various appellate levels. There are similar matters pending initial assessment by the tax authorities for subsequent years and additional demands, if any, can be determined only once such assessments are completed.

The Group believes that these disallowances are not tenable and accordingly no provision is considered necessary.

#### h) Miscellaneous disputes- Others

The Group is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the excise, indirect tax authorities and others. These claims and exposures mostly relate to the assessable values of sales and purchases or to incomplete documentation supporting the companies' returns or other claims.

The approximate value of claims (excluding the items as set out separately above) against the Group companies total ₹ 3,691 Crore (March 31, 2018: ₹ 3,496 Crore)

The Group considers that it can take steps such that the risks can be mitigated and that there are no significant unprovided liabilities arising.

Except as described above, there are no pending litigations which the Group believes could reasonably be expected to have a material adverse effect on the results of operations, cash flows or the financial position of the Group.

as at and for the year ended March 31, 2019

#### c) Operating lease

#### As lessee

Operating leases are in relation to the office premises, office equipment and other assets, some of which are cancellable and some are non-cancellable. There is an escalation clause in the lease agreements during the primary lease period. There are no restrictions imposed by lease arrangements and there are no sub-leases. There are no contingent rents. The total of the future minimum lease payments under non-cancellable leases are as under:

Particulars	Year ended March 31, 2019	Year ended March 31, 2018
Within one year of the balance sheet date	14	9
Due in a period between one year and five years	20	5
Later than five years	0	1
Total	34	15

Lease payments recognized as expenses on non-cancellable lease during the year is ₹ 16 Crore (March 31, 2018: ₹ 4 Crore)

#### As lessor

TSPL has ascertained that the Power Purchase Agreement (PPA) entered with Punjab State Power Corporation Limited (PSPCL) qualifies to be an operating lease under Ind AS 17 'Leases'. Based on the assessment that the lease payments are subject to variations on account of various factors like availability of coal, water, etc., the management has determined the entire consideration receivable under the PPA relating to recovery of capacity charges towards capital cost as contingent rent under Ind AS 17 and has included the same under revenue from operations. Refer Note 25 (A).

#### **38. RELATED PARTY DISCLOSURES**

List of related parties and relationships

#### A) Entities controlling the Company (Holding Companies)

Volcan Investments Limited (Volcan) Volcan Investments Cyprus Limited

#### **Intermediate Holding Companies**

Finsider International Company Limited

Richter Holdings Limited

Twin Star Holdings Limited

Vedanta Resources Cyprus Limited

Vedanta Resources Finance Limited

Vedanta Resources Holdings Limited

Vedanta Resources Limited (formerly Vedanta Resources Plc)

Welter Trading Limited

Westglobe Limited

#### B) Fellow subsidiaries (with whom transactions have taken place)

Konkola Copper Mines Plc

Sterlite Iron and Steel Company Limited

Sterlite Power Transmission limited

Sterlite Technologies Limited

Sterlite Power Grid Ventures Limited

#### C) Post retirement benefit plan

BALCO Employees Provident Fund Trust

HZL Employee Group Gratuity Trust

**HZL Superannuation Trust** 

Hindustan Zinc Ltd Employees Contributory Provident

Fund Trust

Sesa Group Employees Gratuity Fund and Sesa Group

**Executives Gratuity Fund** 

Sesa Group Employees Provident Fund

Sesa Group Executives Superannuation Scheme Fund

Sesa Mining Corporation Limited Employees Gratuity Fund

Sesa Mining Corporation Limited Employees Provident

Sesa Resources Limited Employees Gratuity Fund

Sesa Resources Limited and Sesa Mining Corporation

Limited Employees Superannuation Fund

Sesa Resources Limited Employees Provident Fund Trust

### D) Associates and Joint Ventures (Refer note: 40)

#### E) Others (with whom transactions have taken place)

Cairn Foundation

India Grid trust

Janhit Electoral Trust

Sesa Community Development Foundation

Runaya Refinery LLP

Vedanta Foundation

Vedanta Medical Research Foundation

#### **Ultimate Controlling party**

As at March 31, 2019, the Group is majorly owned by Twin Star Holdings Limited, Finsider International Company Limited, Westglobe Limited and Welter Trading Limited which are in turn wholly-owned subsidiaries of Vedanta Resources Limited (formerly Vedanta Resources Plc) (Intermediate Holding Company). The ultimate controlling party of the Group is Volcan (Volcan Investments Limited and its wholly owned subsidiary Volcan Investments Cyprus Limited), which is controlled by the Chairman Emeritus, Mr. Anil Agarwal and persons related to him. Volcan Investments Limited, Volcan Investments Cyprus Limited, Twin Star Holdings Limited, Finsider International Company Limited, Westglobe Limited and Welter Trading Limited do not produce Group financial statements.

as at and for the year ended March 31, 2019

F) The Group enters into transactions in the normal course of business with its related parties, including its parent Vedanta Resources Limited (formerly Vedanta Resources Plc), and the companies over which it has significant influence. A summary of significant related party transactions for the year ended March 31, 2019 and 2018 are noted below.

			(₹ in Crore)
Parti	culars	Year ended March 31, 2019	Year ended March 31, 2018
Inc	ome:		
(i)	Revenue from operations		
	Konkola Copper Mines Plc	-	2
	Sterlite Technologies Limited	0	69
	Sterlite Power Transmission Limited	918	1,129
		918	1,200
(ii)	Other income		
a)	Interest and guarantee commission		
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	27	28
	Konkola Copper Mines Plc	6	4
	Twin Star Holdings Limited	2	1
	Sterlite Iron and Steel Company Limited	0	1
	Sterlite Power Transmission Limited	4	1_
		39	35
b)	Outsourcing service fees		
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	3	3
		3	3
c)	Dividend income		
	Sterlite Technologies Limited	1	0
	India Grid Trust	15	8
		16	8
d)	Other non-operating income		
	Sterlite Power Transmission Limited	-	0
		-	0
Exp	enditure and Other Transactions:		
i)	Purchases of goods/services:		
	Konkola Copper Mines Plc	402	657
	Runaya Refinery LLP	1	-
	Sterlite Technologies Limited	-	1
	Sterlite Power Transmission Limited	2	13
		405	671
ii)	Stock option expenses/ (recovery)		
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	15	53
	Konkola Copper Mines Plc	(0)	(0)
		15	53
iii)	Management fees and Brand Fees charged		
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	325	345
	Sterlite Technologies Limited.	13	
		338	345
iv)	(Recovery of)/Reimbursement to / for other expenses		
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	1	17
	Sterlite Power Grid Ventures Limited	0	0
	Sterlite Power Transmission Limited	0	-
	Sterlite Technologies Limited	0	-
	Konkola Copper Mines Plc	(3)	(5)
	Volcan Investments Limited	(1)	(2)
		(3)	10

as at and for the year ended March 31, 2019

(₹ in Crore)

Partio	pulars	Year ended March 31, 2019	Year ended March 31, 2018
v)	Corporate social responsibility expenditure/donation		
	Vedanta Foundation	5	0
	Vedanta Medical Research Foundation	100	84
	Sesa Community Development Foundation	7	5
	Cairn Foundation	19	16
	Janhit Electoral Trust	3	-
		134	105
vi)	Dividend paid		
	Twin Star Holdings Limited	2,600	2,924
	Finsider International Company Limited	757	851
	Westglobe Limited	84	94
	Welter Trading Limited	72	81
		3,513	3,950

			(₹ in Crore)
Parti	culars	As at March 31, 2019	As at March 31, 2018
Bala	ances as at year end		
i)	Trade receivables		
	Sterlite Technologies Limited	-	4
	Sterlite Power Transmission Limited	3	5
	Konkola Copper Mines Plc	0	1
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	7	7
		10	17
ii)	Loans		
	Roshskor Township (Proprietary) Limited	5	7
	Sterlite Iron And Steel Company Limited	5	5
	Twin Star Holdings Limited	69	65
		79	77
iii)	Other receivables and advances		
	Konkola Copper Mines Plc	550	323
	Sterlite Iron And Steel Company Limited	13	13
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	35	63
	Sterlite Power Grid Ventures Limited	0	0
	Sterlite Power Transmission limited	0	0
	Goa Maritime Private Limited	1	1
	Twin Star Holdings Limited	5	3
	Volcan Investments Limited	1	4
	Vedanta Foundation	-	5
		605	412
iv)	Trade payables		
	Konkola Copper Mines Plc	10	38
	Sterlite Power Transmission Limited	2	3
	Sterlite Technologies Limited	13	
		25	41
v)	Other payables		
	Volcan Investments Limited (refer note 38(f))	2,070	-
	Vedanta Resources Limited (formerly Vedanta Resources Plc)	86	21
	Cairn Foundation	8	11
	Hindustan Zinc Ltd Employees Contributory Provident Fund Trust	10	9
	HZL Employee group Gratuity Trust	54	62
	Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	5	4

as at and for the year ended March 31, 2019

(₹ in Crore)

Partic	ulars	As at March 31, 2019	As at March 31, 2018
	Sesa Resources Limited Employees Gratuity Fund	0	1
	Sesa Mining Corporation Limited Employees Gratuity	1	1
	Sesa Group Employees Provident Fund Trust	2	2
	Balco Employees Provident Fund Trust	5	5
	Sesa Resources Limited Employees Provident Fund Trust	0	0
	Sesa Mining Corporation Limited Employees Provident Fund Trust	0	0
	HZL Superannuation Trust	0	0
	Sesa Group Executives Superannuation Scheme	0	0
	Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0
	Sterlite Power Transmission limited	4	
		2,245	116
vi)	Investments		
	Vedanta Resources Limited (Investment in bonds included interest accrued)	223	412
	India Grid Trust (Investment in units)	106	122
	Fair value of structured investments (refer note 38(f))	4,772	
		5,101	534
vii)	Financial guarantees given		
	Vedanta Medical Research Foundation	51	34
		51	34
viii)	Banking Limits assigned/utilised/renewed to/for group companies		
	Volcan Investments Limited*	115	115

<sup>\*</sup> Bank guarantee given by Company on behalf of Volcan Investments Limited in favour of Income Tax department, India as collateral in respect of certain tax disputes of Volcan Investments Limited

### ix) Commission and consultancy fees payable to KMP and their relatives 5

			(₹ in Crore)
Parti	culars	Year ended March 31, 2019	Year ended March 31, 2018
Trai	nsactions during the year		
i)	Loans given / (repayment thereof)		
	Roshskor Township (Proprietary) Limited	(1)	-
	Sterlite Iron And Steel Company Limited	0	0
		(1)	0
ii)	Financial Guarantees (taken)/given during the year	(-)	
,	Vedanta Resources Limited (formerly Vedanta Resources Plc)	(874)	_
	Vedanta Medical Research Foundation	69	34
	vodanta modical noscarom canadatom	(805)	34
iii)	Financial Guarantees relinquished during the year	(000)	04
111)	Vedanta Resources Limited (formerly Vedanta Resources Plc)	874	35,015
	Vedanta Medical Research Foundation	52	00,010
	vedanta Medical Neseal Chri Odi Idation	926	35,015
iv)	Investments	920	35,015
•			
a)	Investment made/(redeemed) during the year		0
	Gaurav Overseas Private Limited	-	0
	Madanpur South Coal Company Limited	- (400)	(0)
	Vedanta Resources Limited (Investment in bonds)*	(199)	(112)
	India Grid Trust (Investment in units)	- (400)	(0)
		(199)	(112)
*incl	udes premium on redemption of bonds of ₹ NIL and ₹ 5 Crore for March 31, 2019 and March 31,2018 respectively	<b>'</b> .	
b)	Purchased from		
	Volcan Investments Limited (refer note 38(f))	3,812	-
		3,613	(112)

Year ended

## Notes forming part of the consolidated financial statements

as at and for the year ended March 31, 2019

(₹ in Crore) Year ended

Particul	ars	March 31, 2019	March 31, 2018
v)	Remuneration of Key management personnel (KMP)		
	Short Term employee benefits	41	33
	Post employment benefits*	1	2
	Share based payments	5	6
		47	41
* Does	not include the provision made for gratuity and leave benefits, as they are determined on an actuarial basis for all the en	mployees together	
vi)	Dividend to Key management personnel	0	0
vii)	Commission/Sitting Fees		
	To independent directors	4	4
	To other KMP	1	0
	TO OUTGO NAME	5	4
viii)	Details of transactions with relatives of Key management personnel	3	4
-	Commission to relatives of KMP	0	0
	Remuneration to relatives of KMP	15	7
	Dividend to relatives of KMP	0	0
	Dividend to relatives of Rivil	15	7
ix)	Details of transactions with post retirement employee benefit trust/fund	10	,
	Balco Employees Provident Fund Trust	14	13
	Hindustan Zinc Ltd Employees Contributory Provident Fund Trust	35	30
	Sesa Resources Limited Employees Provident Fund	0	1
	Sesa Mining Corporation Limited Employees Provident Fund	1	1
	Sesa Group Employees Provident Fund	5	5
	HZL Employee group Gratuity Trust	12	16
	Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	0	1
	Sesa Resources Limited Employees Gratuity Fund	0	0
	Sesa Mining Corporation Limited Employees Gratuity Fund	0	0
	HZL Superannuation Trust	3	2
	Sesa Group Executives Superannuation scheme	2	2
	Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0
		72	71

#### a) Cairn PSC guarantee to Government

Vedanta Resources Limited (formerly Vedanta Resources Plc) as a parent company has provided financial and performance guarantee to Government of India for erstwhile Cairn India Group's obligation under the Production Sharing Contract ('PSC'). The guarantee provides for making available financial resources equivalent to Cairn India's share for its obligation under PSC, personnel and technical services in accordance with industry practices and any other resources in case Cairn India is unable to fulfill its obligations under PSC.

#### b) Cairn Investment in Vedanta Resources Limited (formerly Vedanta Resources Plc) Bonds

Cairn India Holdings Limited had invested ₹ 211 Crore (US\$ 30.5 million) and ₹ 384 Crore (US\$ 59 million) as at March 31, 2019 and March 31, 2018 in bonds issued by Vedanta Resources Limited (formerly Vedanta Resources Plc), which have maturities ranging from June 2021 to May 2023 at coupon ranging from 7.13% to 8.25% p.a. The carrying value of these bonds including interest accrued are ₹ 223 Crore and ₹ 412 Crore as at March 31, 2019 and March 31, 2018 respectively.

#### c) Loans to holding companies

During the year ended March 31, 2016, Lisheen Milling Limited entered into a loan agreement with Twin Star Holding Limited for ₹ 67 Crore (US\$10 million) at an interest rate of 2.1%. The loan is unsecured and the outstanding balance under the facility including interest accrued at March 31, 2019 and March 31, 2018 is ₹ 74 Crore and ₹ 68 Crore respectively.

#### d) Loans from holding companies

During the year, the Group received a fresh loan from Twinstar Holdings Limited for a facility amount of ₹ 140 Crore (US\$ 20 million) at an interest rate of 2.25% p.a. repayable in February 2019. An amount of ₹ 70 Crore (US\$ 10 million) has been drawn under this facility during the year and an amount of ₹ 70 Crore (US\$ 10 million) has been repaid. Further, the maturity of this loan has been further extended to February 2020. As at 31 March 2019, the amount outstanding under this facility was ₹ 0 Crore (US\$ 40,000) (2018: ₹ Nil) and accrued interest of ₹ 0 Crore (US\$ 5,033) (2018: ₹ Nil)

as at and for the year ended March 31, 2019

#### e) Loans to fellow subsidiaries

During the year ended March 31, 2019, the Group had renewed loan provided to Sterlite Iron and Steel Company Limited to finance project in earlier years. The loan balance as at March 31, 2019 was ₹ 5 Crore. The loan is unsecured in nature and carries an interest rate of 8.50% per annum. The loan was due in March 2019. The loan has been renewed for a further period of 12 months in March 2019 and is due in March 2020.

#### f) Structured investments purchased from Volcan **Investments Limited**

In December 2018, as part of its cash management activities, Cairn India Holdings Limited (CIHL), a step-down subsidiary of the Company, entered into a tripartite agreement with Volcan and one of its subsidiaries. Under the agreement, CIHL purchased an economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, from Volcan for a total consideration of ₹ 3,812 Crore (GBP 428 million) (of which ₹ 1,816 Crore (GBP 200 million) has been paid up to March 31, 2019), determined based on an independent third-party valuation. The ownership of the underlying shares, and the associated voting interests, remained with Volcan and the investment would mature in two tranches in April 2020 and October 2020. As part of the agreement, CIHL also received a put option (embedded derivative) from the aforementioned subsidiary, the value of which was not material at initial recognition. Later during the year, certain terms of the aforesaid agreement were modified, and it was converted into

a biparty agreement between CIHL and Volcan. The revision in the terms did not have any material effect on the fair value of the instrument on that date.

As per the revised agreement, if the share price of AA Plc remain above the Put exercise price, CIHL would be entitled to an amount determined based on the share price of AA Plc multiplied by 15 million and 11 million shares respectively on the aforementioned two maturity dates. Alternatively, CIHL also has an option to realise the instrument for ₹ 2,475 Crore (GBP 274 million) and ₹ 1,712 Crore (GBP 189 million) on the respective maturity dates.

#### Terms and conditions of transactions with related parties

All transactions with related parties are done in the ordinary course of business. For the year ended March 31, 2019, the Group has not recorded any impairment of receivables relating to amounts owed by related parties. This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates.

There are no outstanding debts or loans due from directors or other officers (as defined under Section 2(59) of the Companies Act, 2013) of the Company.

#### **39. SUBSEQUENT EVENTS**

There are no material adjusting or non-adjusting subsequent events, except as already disclosed.

as at and for the year ended March 31, 2019

#### **40. INTEREST IN OTHER ENTITIES**

#### a) Subsidiaries

The Group consists of a parent company, Vedanta Limited, incorporated in India and a number of subsidiaries held directly and indirectly by the Group which operate and are incorporated around the world. Following are the details of shareholdings in

					The Company's / Ir Company's percent	
S. No	Subsidiaries	Principal activities	Country of Incorporation	Immediate holding company	As at March 31, 2019	As at March 31, 2018
1	Cairn Energy India Pty Limited	Oil and gas exploration, development and production	Australia	Cairn India Holdings Limited	100.00	100.00
2	Copper Mines of Tasmania Pty Limited ("CMT")	Copper mining	Australia	Monte Cello BV	100.00	100.00
3	Thalanga Copper Mines Pty Limited ("TCM")	Copper mining	Australia	Monte Cello BV	100.00	100.00
4	Bharat Aluminium Company Limited ("BALCO")	Aluminium mining and smelting	India	Vedanta Limited	51.00	51.00
5	Electrosteel Steels Limited <sup>3</sup>	Manufacturing of Steel & DI Pipe	India	Vedanta Star Limited	90.00	-
6	Goa Sea Port Private Limited	Infrastructure	India	Sterlite Ports Limited	100.00	100.00
7	Hindustan Zinc Limited ("HZL")	Zinc mining and smelting		Vedanta Limited	64.92	64.92
8	MALCO Energy Limited ("MEL")	Power generation	India	Vedanta Limited	100.00	100.00
9	Maritime Ventures Private Limited	Infrastructure	India	Sterlite Ports Limited	100.00	100.00
10	Paradip Multi Cargo Berth Private Limited	Infrastructure	India	Vedanta Limited	100.00	100.00
11	Sesa Mining Corporation Limited	Iron ore mining	India	Sesa Resources Limited	100.00	100.00
12	Sesa Resources Limited ("SRL")	Iron ore mining	India	Vedanta Limited	100.00	100.00
13	Sterlite Ports Limited	Infrastructure	India	Vedanta Limited	100.00	100.00
14	Talwandi Sabo Power Limited ("TSPL")	Power generation	India	Vedanta Limited	100.00	100.00
15	Vedanta Star Limited***	Operating and holding Company	India	Vedanta Limited	100.00	-
16	Vizag General Cargo Berth Private Limited	Infrastructure	India	Vedanta Limited	100.00	100.00
17	Killoran Lisheen Finance Limited	Investment company	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
18	Killoran Lisheen Mining Limited	Zinc and lead mining	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
19	Lisheen Milling Limited	Manufacturing	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
20	Lisheen Mine Partnership	Mining Partnership Firm	Ireland	50% each held by Killoran Lisheen Mining Limited & Vedanta Lisheen Mining Limited	100.00	100.00
21	Vedanta Exploration Ireland Limited	Exploration company	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
22	Vedanta Lisheen Holdings Limited	Investment company	Ireland	THL Zinc Holing BV	100.00	100.00
23	Vedanta Lisheen Mining Limited	Zinc and lead mining	Ireland	Vedanta Lisheen Holdings Limited	100.00	100.00
24	AvanStrate Inc. ('ASI') <sup>1</sup>	Operating and holding Company	Japan	Cairn India Holdings Limited	51.63	51.63
25	Cairn India Holdings Limited	Investment company	Jersey	Vedanta Limited	100.00	100.00
26	Western Cluster Limited	Iron ore mining	Liberia	Bloom Fountain Limited	100.00	100.00
27	Bloom Fountain Limited	Operating (Iron ore) and Investment Company	Mauritius	Vedanta Limited	100.00	100.00
28	CIG Mauritius Holdings Private Limited	Investment Company	Mauritius	Cairn Energy Hydrocarbons Limited	100.00	100.00
29	CIG Mauritius Private Limited	Investment Company	Mauritius	CIG Mauritius Holdings Private Limited	100.00	100.00
30	Sesa Sterlite Mauritius Holdings Limited*	Investment Company	Mauritius	Bloom Fountain Limited	100.00	100.00
31	THL Zinc Ltd	Investment company	Mauritius	THL Zinc Ventures Ltd	100.00	100.00
32	THL Zinc Ventures Ltd	Investment company	Mauritius	Vedanta Limited	100.00	100.00
33	Twin Star Energy Holdings Limited ("TEHL")*	Investment company	Mauritius	Bloom Fountain Limited	100.00	100.00
34	Twin Star Mauritius Holdings Limited ("TMHL")*	Investment company	Mauritius	Twin Star Energy Holdings Limited	100.00	100.00
35	Amica Guesthouse (Proprietary) Limited	Accommodation and catering services	Namibia	Skorpion Zinc (Proprietary) Limited	100.00	100.00
36	Namzinc (Proprietary) Limited	Owns and operates zinc refinery	Namibia	Skorpion Zinc (Proprietary) Limited	100.00	100.00
37	Rosh Pinah Health Care (Proprietary) Limited	Leasing out of medical equipment and building and conducting services related thereto	Namibia	Skorpion Zinc (Proprietary) Limited	69.00	69.00
38	Skorpion Mining Company (Proprietary) Limited ('NZ')	Exploration, development, production and sale of zinc ore	Namibia	Skorpion Zinc (Proprietary) Limited	100.00	100.00
39	Skorpion Zinc (Proprietary) Limited ('SZPL')	Operating (Zinc) and Investment Company	Namibia	THL Zinc Namibia Holdings (Proprietary) Limited	100.00	100.00

as at and for the year ended March 31, 2019

					The Company's / In Company's percent	
		Principal	Country of	Immediate	As at	As at
S. No	Subsidiaries	activities		holding company	March 31, 2019	March 31, 2018
40	THL Zinc Namibia Holdings (Proprietary) Limited ("VNHL")	Mining and Exploration and Investment company	Namibia	THL Zinc Ltd	100.00	100.00
41	Lakomasko BV	Investment company	Netherlands	THL Zinc Holding BV	100.00	100.00
42	Monte Cello BV ("MCBV")	Investment company	Netherlands	Vedanta Limited	100.00	100.00
43	THL Zinc Holding BV	Investment company	Netherlands	Vedanta Limited	100.00	100.00
44	Cairn Energy Discovery Limited	Oil and gas exploration, development and production	Scotland	Cairn India Holdings Limited	100.00	100.00
45	Cairn Energy Gujarat Block 1 Limited	Oil and gas exploration, development and production	Scotland	Cairn India Holdings Limited	100.00	100.00
46	Cairn Energy Hydrocarbons Limited	Oil and gas exploration, development and production	Scotland**	Cairn India Holdings Limited	100.00	100.00
47	Cairn Exploration (No. 2) Limited	Oil and gas exploration, development and production	Scotland	Cairn India Holdings Limited	100.00	100.00
48	Black Mountain Mining (Proprietary) Limited	Exploration, development, production and sale of zinc, lead, copper and associated mineral concentrates		THL Zinc Ltd	74.00	74.00
49	Cairn South Africa Pty Limited	Oil and gas exploration, development and production	South Africa	Cairn Energy Hydrocarbons Limited	100.00	100.00
50	AvanStrate Korea Inc¹	Manufacturer of LCD glass substrate	South Korea	Avanstrate (Japan) Inc.	51.63	51.63
51	Cairn Lanka Private Limited	Oil and gas exploration, development and production	Sri Lanka	CIG Mauritius Private Limited	100.00	100.00
52	AvanStrate Taiwan Inc¹	Manufacturer of LCD glass substrate	Taiwan	Avanstrate (Japan) Inc.	51.63	51.63
53	Fujairah Gold FZC	Gold & silver processing	United Arab Emirates	Malco Energy Limited	100.00	100.00
54	Sterlite (USA) Inc.*	Investment company	United States of America	Vedanta Limited	100.00	100.00

<sup>\*</sup>Under liquidation \*\*Principal place of business is in India \*\*\*Incorporated during the current year

## b) Joint operations

The Group participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities which are as follows:

		(%) Participat	ing Interest
Oil 0 march lands / Falds	A	As at	As at
Oil & gas blocks/ fields	Area	March 31, 2019	March 31, 2018
Operating Blocks			
Ravva block-Exploration, Development and Production	Krishna Godavari	22.50	22.50
CB-OS/2 – Exploration	Cambay Offshore	60.00	60.00
CB-OS/2 - Development & production	Cambay Offshore	40.00	40.00
RJ-ON-90/1 – Exploration	Rajasthan Onshore	100.00	100.00
RJ-ON-90/1 - Development & production	Rajasthan Onshore	70.00	70.00
South Africa Block1-Exploration <sup>1</sup>	Orange Basin South Africa Offshore	60.00	60.00
Non-Operating Blocks			
KG-ONN-2003/1 <sup>2</sup>	Krishna Godavari Onshore	49.00	49.00

- (1) Application for closure has been filed with relevant authorities in September, 2018
- (2) Operatorship has been transferred to Oil and Natural Gas Corporation (ONGC) w.e.f. July 7, 2014
- (3) PR OSN 2004/1 block was relinquished on June 30, 2017.

<sup>1</sup> On December 28, 2017, the Group through its wholly owned subsidiary, acquired 51.6% equity stake in AvanStrate Inc. (ASI) (refer note 4(b)).

<sup>2</sup> The Group also has interest in certain trusts which are neither significant nor material to the Group.

<sup>3</sup> On June 4, 2018, the Group through its wholly owned subsidiary, acquired 90.0% equity stake in Electrosteel Steels Limited (ESL) (refer note 4(a)).

as at and for the year ended March 31, 2019

### c) Interest in associates and joint ventures

Set out below are the associates and joint ventures of the group as at March 31, 2019 which, in the opinion of the management, are not material to the group. The country of incorporation or registration is also their principal place of business, and the proportion of ownership interest is the same as the proportion of voting rights held.

			% Ownershi	ip interest
S. No.	Associates	Country of incorporation	As at March 31, 2019	As at March 31, 2018
1	RoshSkor Township (Pty) Limited	Namibia	50.00	50.00
2	Gaurav Overseas Private Limited	India	50.00	50.00

			% Ownersh	ip interest
S. No.	Jointly controlled entities	Country of incorporation	As at March 31, 2019	As at March 31, 2018
1	Rampia Coal Mines and Energy Private Limited	India	17.39	17.39
2	Madanpur South Coal Company Limited	India	18.05	18.05
3	Goa Maritime Private Limited	India	50.00	50.00

#### **41. OTHER NOTES**

a) The Scheme of Amalgamation and Arrangement amongst Sterlite Energy Limited ('SEL'), Sterlite Industries (India) Limited ('Sterlite'), Vedanta Aluminium Limited ('VAL'), Ekaterina Limited ('Ekaterina'), Madras Aluminium Company Limited ('Malco') and the Company (the "Scheme") had been sanctioned by the Honourable High Court of Madras and the Honourable High Court of Judicature of Bombay at Goa and was given effect to in the year ended March 31, 2014.

Subsequently the above orders of the honourable High Court of Bombay and Madras have been challenged by Commissioner of Income Tax, Goa and Ministry of Corporate Affairs through a Special Leave Petition before the honourable Supreme Court and also by a creditor and a shareholder of the Company. The said petitions are currently pending for hearing.

b) (i) Pursuant to the Government of India's policy of disinvestment, the Company in April 2002 acquired 26% equity interest in Hindustan Zinc Limited (HZL) from the Government of India. Under the terms of the Shareholder's Agreement ('SHA'),the Company had two call options to purchase all of the Government of India's shares in HZL at fair market value. The Company exercised the first call option on August 29, 2003 and acquired an additional 18.9% of HZL's issued share capital. The Company also acquired an additional 20% of the equity capital in HZL through an open offer, increasing its shareholding to 64.9%. The second call option provides the Company the right to acquire the Government of India's remaining 29.5% share in HZL. This call option was subject to the right of the Government of India to sell 3.5% of HZL shares to HZL employees. The Company exercised the second call option on July 21, 2009. The Government of India disputed the validity of the call option and refused to act upon the second call option. Consequently the Company invoked arbitration which is in the early stages. The next date of hearing is to be notified. The Government of India without prejudice to the position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route. Meanwhile, the Supreme Court has, in January 2016, directed status quo pertaining to disinvestment of Government of India's residual shareholding in a public interest petition filed which is currently pending and sub-judice.

(ii) Pursuant to the Government of India's policy of divestment, the Company in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Company had a call option to purchase the Government of India's remaining ownership interest in BALCO at any point from March 2, 2004. The Company exercised this option on March 19, 2004. However, the Government of India contested the valuation and validity of the option and contended that the clauses of the SHA violate the erstwhile Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Company, the arbitral tribunal by a majority award rejected the claims of the Company on the ground that the clauses relating to the call option, the right of first refusal, the "tag along" rights and the restriction on the transfer of shares violate the erstwhile Companies Act, 1956 and are not enforceable.

The Company has challenged the validity of the majority award before the Hon'ble High Court at Delhi and sought for setting aside the arbitration award to the extent that it holds these clauses ineffective and inoperative. The Government of India also filed an application before the High Court to partially set aside the arbitral award in respect of certain matters involving valuation. The matter is currently scheduled for hearing by the Delhi High Court on August 02, 2019. Meanwhile, the Government of India without prejudice to its position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route.

On January 9, 2012, the Company offered to acquire the Government of India's interests in HZL and BALCO for ₹ 15,492 Crore and ₹ 1,782 Crore respectively. This offer was separate from the contested exercise of the call options, and Company proposed to withdraw the ongoing litigations in relation to the contested exercise of the options should the offer be accepted. To date, the offer has not been accepted by the Government of India and therefore, there is no certainty that the acquisition will proceed.

In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration

as at and for the year ended March 31, 2019

payable, the Company considers the strike price of the options to be at the fair value, which is effectively nil, and hence the call options have not been recognised in the financial statements.

c) Electrosteel Steels Limited had filed application for renewal of Consent to Operate ('CTO') on August 24, 2017 for the period of five years which was denied by Jharkhand State Pollution Control Board ('JSPCB') on August 23, 2018. Hon'ble High Court of Jharkhand has extended a stay on the order of denial of CTO by JSPCB and continued their interim order to allow the operations till next hearing. Hon'ble High Court has also extended stay against order of Ministry of Environment, Forests and Climate Change (MOEF) dated September 20, 2018 in respect of environment clearance. Presently the stay has been extended till May 16, 2019.

d) Pursuant to Management Committee recommendation and minutes of Empowered Committee of Secretaries (ECS) filed by GoI, Vedanta Limited had considered cost recovery of ₹ 1,618 Crore (US\$ 251 million) in FY 2017-18, being the cost

incurred over the initially approved FDP of Pipeline Project. Vedanta Limited's claim for the resultant profit petroleum of ₹ 297 Crore (US\$ 43 million) (refer note 10), which had been previously paid, has been disputed by the Gol. The Group believes that it has a good case on merits to recover the amount and has therefore treated it as a non-current recoverable amount.

#### **42. OIL & GAS RESERVES AND RESOURCES**

The Company's gross reserve estimates are updated atleast annually based on the forecast of production profiles, determined on an asset-by-asset basis, using appropriate petroleum engineering techniques. The estimates of reserves and resources have been derived in accordance with the Society for Petroleum Engineers "Petroleum Resources Management System (2018)". The changes to the reserves are generally on account of future development projects, application of technologies such as enhanced oil recovery techniques and true up of the estimates. The management's internal estimates of hydrocarbon reserves and resources at the period end are as follows:

		hydrocarbons	and probable initially in place	Gross proved reserves and (mm	d resources	Net working inte probable reserve (mml	es and resources
Particulars	Country	As at March 31, 2019	As at March 31, 2018	As at March 31, 2019	As at March 31, 2018	As at March 31, 2019	As at March 31, 2018
Rajasthan MBA Fields	s India	2,288	2,288	362	371	253	260
Rajasthan MBA EOR	India	-	-	293	335	205	235
Rajasthan Block Other Fields	India	3,405	3,460	428	430	299	301
Ravva Fields	India	724	733	39	45	9	10
CBOS/2 Fields	India	254	251	33	34	13	13
Other fields	India	335	335	40	48	22	24
Total		7,006	7,067	1,195	1,263	801	843

The Company's net working interest proved and probable reserves is as follows:

	Proved and p		Proved and preserves (dev	
	Oil	Gas	Oil	Gas
Particulars	(mmstb)	(bscf)	(mmstb)	(bscf)
Reserves as of April 01, 2017*	112	48	100	15
Additions / revision during the year	28	12	13	21
Production during the year	(42)	(8)	(42)	(8)
Reserves as of March 31, 2018**	98	52	71	28
Additions / revision during the year*	259	224	149	113
Production during the year	(42)	(12)	(42)	(12)
Reserves as of March 31, 2019***	315	264	178	129

<sup>\*</sup> Includes probable oil reserves of 32.37 mmstb (of which 20.62 mmstb is developed) and probable gas reserves of 37.84 bscf (of which 4.92 bscf is developed)

mmboe = million barrels of oil equivalent

mmstb = million stock tank barrels

bscf = billion standard cubic feet

1 million metric tonnes = 7.4 mmstb

1 standard cubic meter =35.315 standard cubic feet

MBA = Mangala, Bhagyam & Aishwarya

EOR = Enhanced Oil Recovery

<sup>\*\*</sup> Includes probable oil reserves of 26.77 mmstb (of which 5.00 mmstb is developed) and probable gas reserves of 25.12 bscf (of which 4.17 bscf is developed)

<sup>\*\*\*</sup> Includes probable oil reserves of 116.21 mmstb (of which 16.03 mmstb is developed) and probable gas reserves of 89.00 bscf (of which 24.19 bscf is developed)

<sup>#</sup> The increase in reserve is on account of PSC extentsion for the Rajasthan and Ravva block. For more details, refer note 3(C)xi

	-+-T/ -+ 0 +- 0				::			
	net Assets (Total assets less total liabilities)	assets ties)	Share in profit and loss	d loss	snare in otner comprehensive income (OCI)	er ime (OCI)	snare in total comprehensive income (TCI)	orenensive CI)
	As at March 31, 2019	2019	Year ended March 31, 2019	31, 2019	Year ended March 31, 2019	31, 2019	Year ended March 31, 2019	131, 2019
S. No Name of the entity	As % of consolidated net assets	Amount (₹ in Crore)	As % of consolidated profit	Amount (₹ in Crore)	As % of consolidated OCI	Amount (₹ in Crore)	As % of consolidated	Amount (₹ in Crore)
Vedanta Limited	125.01%	77,880	71.83%	5,075	71.28%	417	71.79%	5,492
1 Hindustan Zinc Limited	53.94%	33,605	112.61%	7,956	(16.07%)	(94)	102.77%	7,862
2 Bharat Aluminium Company Limited	6.52%	4,062	8.11%	573	(80.9%)	(36)	7.02%	537
3 MALCO Energy Limited	0.74%	461	0.01%	_	0.05%	0	0.02%	_
4 Talwandi Sabo Power Limited	4.10%	2,556	(0.78%)	(22)	(0.05%)	(0)	(0.72%)	(55)
5 Sesa Resources Limited	0.09%	29	(0.50%)	(32)	0.00%	0	(0.46%)	(32)
6 Sesa Mining Corporation Limited	(0.30%)	(190)	(0.48%)	(34)	0.00%	0	(0.44%)	(34)
7 Sterlite Ports Limited	(0.01%)	(4)	(0.01%)	(0)	0.00%	0	(0.00%)	(0)
8 Vizag General Cargo Berth Private Limited	(0.02%)	(11)	(0.47%)	(33)	(0.00%)	(0)	(0.43%)	(33)
9 Paradip Multi Cargo Berth Private Limited	(0.00%)	(1)	(0.00%)	(0)	0.00%	•	(0.00%)	(0)
10 Maritime Ventures Private Limited	(0.00%)	(3)	%90.0	4	0.00%	•	0.05%	4
11 Goa Sea Port Private Limited	(0.00%)	(1)	(0.00%)	(0)	0.00%		(0.00%)	(0)
12 Vedanta Limited ESOS Trust	0.08%	47	0.31%	22	0.00%	•	0.29%	22
13 Vedanta Star Limited*	2.83%	1,761	(0.13%)	(6)	0.00%		(0.12%)	(6)
14 Electrosteel Steels Limited**	2.85%	3,646	16.82%	1,188	0.14%	_	15.54%	1,189
Foreign Subsidiaries								
	(%09:0)	(376)	(1.23%)	(87)	%00.0		(1.14%)	(87)
	(0.02%)	(11)	0.11%	ω	%00.0		0.10%	ω
3 Monte Cello BV	0.28%	172	0.03%	2	%00.0		0.03%	2
	(13.58%)	(8,463)	(2.73%)	(193)	%00.0	•	(2.52%)	(193)
	(1.28%)	(797)	(0.31%)	(22)	%00.0	•	(0.29%)	(22)
6 Sterlite (USA) Inc. ***	0.00%		0.00%		%00.0		0.00%	•
	0.08%	52	(0.03%)	(2)	(2.22%)	(13)	(0.20%)	(15)
	(2.50%)	(3,425)	(0.00%)	(0)	%00.0		(0.00%)	(0)
9 THL Zinc Ltd	(4.53%)	(2,821)	(0.07%)	(2)	%00.0		(0.01%)	(2)
	(3.56%)	(2,218)	(0.01%)	(1)	%00.0		(0.01%)	(3)
	0.95%	594	%00.0	•	%00.0		0.00%	1
	(0.00%)	(2)	%00.0	0	%00.0		0.00%	0
13 Skorpion Mining Company (Proprietary) Limited	(1.79%)	(1,115)	(4.69%)	(331)	0.00%	•	(4.33%)	(331)
14 Namzinc (Proprietary) Limited	2.09%	1,302	1.08%	9/	%00.0	•	%66.0	9/
15 Amica Guesthouse (Proprietary) Limited	(0.00%)	(0)	0.01%	_	0.00%	•	0.01%	_
16 Rosh Pinah Health Care (Proprietary) Limited	0.00%	_	0.00%	0	%00.0	•	0.00%	0
17 Black Mountain Mining Proprietary Limited	2.52%	1,569	2.49%	176	0.34%	2	2.33%	178
18 Vedanta Lisheen Holdings Limited	0.01%	7	0.00%	1	%00.0	•	0.00%	•
	%90.0	40	(0.17%)	(12)	%00.0		(0.16%)	(12)
20 Killoran Lisheen Mining Limited	0.02%	14	0.20%	14	0.00%		0.18%	14

as at and for the year ended March 31, 2019

	Net Assets (Total assets	assets			Share in other	her	Share in total comprehensive	orehensive
	less total liabilities)	ities)	Share in profit and loss	nd loss	comprehensive income (OCI)	come (OCI)	income (TCI)	(1)
	As at March 31, 2019	, 2019	Year ended March 31, 2019	131, 2019	Year ended March 31, 2019	h 31, 2019	Year ended March 31, 2019	h 31, 2019
ú	As % of consolidated	Amount	As % of consolidated	Amount	As % of consolidated	Amount	As % of consolidated	Amount
No Name of the entity	net assets	(₹ in Crore)	profit	(₹ in Crore)	OCI	(₹ in Crore)	TCI	(₹ in Crore)
21 Killoran Lisheen Finance Limited	0.00%	2	0.00%	1	0.00%		0.00%	1
22 Lisheen Milling Limited	0.25%	157	0.01%	_	0.00%		0.01%	_
23 Lisheen Mine Partnership	0.00%		(0.33%)	(23)	0.00%	٠	(0.30%)	(23)
24 Lakomasko BV	0.00%	0	(0.00%)	(0)	0.00%		(0.00%)	(0)
25 Vedanta Exploration Ireland Limited	0.00%	0	0.00%		0.00%	٠	0.00%	ī
26 Cairn India Holdings Limited	16.80%	10,469	28.32%	2,001	0.00%	٠	26.16%	2,001
27 Cairn Energy Hydrocarbons Limited	9.88%	6,154	14.55%	1,028	0.00%		13.44%	1,028
28 Cairn Lanka (Private) Limited	(0.73%)	(455)	(0.01%)	(1)	0.00%		(0.01%)	(1)
29 Cairn South Africa (Pty) Limited	(0.03%)	(19)	(0.03%)	(2)	0.00%	•	(0.03%)	(2)
30 CIG Mauritius Holding Private Limited	(0.00%)	(0)	(0.00%)	(0)	0.00%	•	(0.00%)	(0)
31 CIG Mauritius Private Limited	(0.00%)	(0)	(0.00%)	(0)	0.00%		(0.00%)	(0)
32 Cairn Energy Discovery Limited	(0.00%)	(0)	(0.00%)	(0)	0.00%	•	(0.00%)	(0)
33 Cairn Exploration (No. 2) Limited	0.00%	•	0.00%		0.00%	•	0.00%	T
34 Cairn Energy Gujarat Block 1 Limited	0.00%	2	0.00%	0	0.00%		0.00%	0
35 Cairn Energy India Pty Limited	0.00%		0.00%	1	0.00%		0.00%	1
36 AvanStrate Inc.	(3.13%)	(1,952)	(0.13%)	(6)	0.00%	•	(0.12%)	(6)
37 AvanStrate Korea Inc.	(2.34%)	(1,457)	(0.68%)	(48)	0.00%		(0.63%)	(48)
38 AvanStrate Taiwan Inc.	4.88%	3,043	(1.15%)	(81)	0.00%	•	(1.06%)	(81)
Non-controlling interests in all subsidiaries	(24.44%)	(15,227)	(37.27%)	(2,633)	21.88%	128	(32.75%)	(2,505)
Associates (per Equity method)								
Indian								
1 Gaurav Overseas Private Limited	0.00%	0	(0.00%)	(0)	0.00%	•	(0.00%)	(0)
Foreign								
1 RoshSkor Township (Pty) Ltd	0.01%	4	0.00%	0	0.00%	•	0.00%	0
Joint ventures (per Equity method)								
Indian								
1 Madanpur South Coal Company Limited	0.00%	_	(%00.0)	(0)	0.01%	0	0.00%	0
2 Goa Maritime Private Limited	(0.00%)	0)	0.00%	0	0.00%	•	0.00%	0
3 Rampia Coal Mines & Energy Private Limited	0.00%	0	0.00%	0	0.00%	ı	0.00%	0
Consolidation Adjustments/ Eliminations <sup>a</sup>	(75.15%)	(46,815)	(105.37%)	(7,445)	30.77%	180	(94.97%)	(7,265)
Total	100.00%	62,297	100.00%	7,065	100.00%	585	100.00%	7,650

Incorporated during the current year \*\*Purchased during the year. Items of profit and loss, OCI and TCI are for the full financial year. \*\*\*Under liquidation

a Consolidation adjustments/eliminations include intercompany eliminations , consolidation adjustments and GAAP differences.

Exchange Rates as at March 31, 2019: 1 AUD= ₹ 49.0217, 1 USD = ₹ 69.1713, 1 AED = ₹ 18.8298, 1 NAD = ₹ 4.7774, 1 ZAR = ₹ 4.7774, 1 JPY = ₹ 62.5200

Average Exchange Rates for the year ended March 31, 2019: 1 AUD= ₹ 50.7580, 1 USD = ₹ 69.8889, 1 AED = ₹ 19.0228, 1 NAD = ₹ 5.0802, 1 ZAR = ₹ 5.0802, 1 JPY = ₹ 63.0396 in addition to the above, liquidation of three other subsidiaries of the Company namely, Twin Star Mauritius Holdings Limited, Twin Star Energy Holdings Limited and Sesa Sterlite Mauritius Holdings Limited was accepted by the Director of Insolvency Service, Mauritius during the year ended March 31, 2019.

## as at and for the year ended March 31, 2019

	Net Assets (Total assets	ssets		<u> </u>	Share in other	her	Share in total comprehensive	rehensive
	As at March 31, 2018	018	Year ended March 31, 2018	31, 2018	Year ended March 31, 2018	31, 2018	Year ended March 31, 2018	31, 2018
S. No Name of the entity	As % of consolidated net assets	Amount (₹ in Crore)	As % of consolidated profit	Amount (₹ in Crore)	As % of consolidated OCI	Amount (₹ in Crore)	As % of consolidated TCI	Amount (₹ in Crore)
Vedanta Limited	125.27%	79,313	70.16%	7,256	6.40%	135	59.37%	7,391
Indian Subsidiaries								
		35,932	89.69%	9,276	(3.80%)	(80)	73.86%	9,196
2 Bharat Aluminium Company Limited	5.57%	3,525	1.66%	172	2.56%	54	1.82%	226
3 MALCO Energy Limited	0.73%	460	(0.20%)	(21)	(0.00%)	(0)	(0.17%)	(21)
4 Talwandi Sabo Power Limited	4.12%	2,611	(0.91%)	(94)	0.00%	0	(0.75%)	(94)
5 Sesa Resources Limited	0.15%	94	(4.70%)	(486)	(0.00%)	(0)	(3.90%)	(486)
6 Sesa Mining Corporation Limited	(0.25%)	(156)	(1.80%)	(186)	(0.05%)	(1)	(1.50%)	(187)
7 Sterlite Ports Limited	(0.01%)	(4)	(0.00%)	(0)	0.00%	1	(0.00%)	(0)
8 Vizag General Cargo Berth Private Limited	0.03%	22	(0.52%)	(54)	0.00%	0	(0.43%)	(54)
9 Paradip Multi Cargo Berth Private Limited	(0.00%)	(1)	(0.00%)	(0)	0.00%	,	(0.00%)	(0)
10 Maritime Ventures Private Limited	(0.01%)	(/)	(0.00%)	(0)	0.00%	•	(0.00%)	(0)
11 Goa Sea Port Private Limited	(0.00%)	(1)	(0.00%)	(0)	0.00%	,	(0.00%)	(0)
12 Vedanta Limited ESOS Trust	0.04%	24	0.17%	18	0.00%		0.14%	18
Foreign Subsidiaries								
1 Copper Mines of Tasmania Pty Limited	(0.47%)	(298)	(0.66%)	(89)	%00.0	1	(0.55%)	(89)
2 Thalanga Copper Mines Pty Limited	(0.03%)	(20)	(0.17%)	(18)	%00.0	1	(0.14%)	(18)
3 Monte Cello BV	0.25%	160	(0.08%)	(8)	%00.0	ı	(0.06%)	(8)
4 Bloom Fountain Limited	(12.29%)	(7,779)	(0.07%)	(7)	%00.0	1	(0.06%)	(/)
	%00.0	•	(0.00%)	(0)	%00.0	•	(0.00%)	(0)
6 Twin Star Mauritius Holdings Limited**		1	(10.10%)	(1,045)	0.00%	1	(8.39%)	(1,045)
		(729)	(0.20%)	(21)	0.00%	1	(0.17%)	(21)
		1	0.00%	1	0.00%	1	0.00%	1
9 Fujairah Gold FZC		63	0.04%	4	%60.0	2	0.05%	9
10 THL Zinc Ventures Limited	(2.09%)	(3,221)	(0.00%)	(0)	%00.0	•	(0.00%)	(0)
11 THL Zinc Ltd		(2,647)	(4.71%)	(487)	0.00%	•	(3.91%)	(487)
12 THL Zinc Holding BV		(2,085)	1.79%	185	%00.0	1	1.49%	185
13 THL Zinc Namibia Holdings (Proprietary) Limited	1.08%	684	%00.0	0	%00.0	•	0.00%	0
14 Skorpion Zinc (Proprietary) Limited	(0.00%)	(3)	(0.05%)	(2)	%00.0	1	(0.04%)	(2)
15 Skorpion Mining Company (Proprietary) Limited	(1.46%)	(922)	(0.30%)	(31)	%00.0	1	(0.25%)	(31)
16 Namzinc (Proprietary) Limited	2.24%	1,416	5.62%	581	%00.0	1	4.67%	581
17 Amica Guesthouse (Proprietary) Limited	%00.0	1	0.01%	$\overline{}$	%00.0	ı	0.01%	<u></u>
18 Rosh Pinah Health Care (Proprietary) Limited	%00.0	_	(0.01%)	(1)	%00.0	1	(0.01%)	(1)
19 Black Mountain Mining Proprietary Limited	2.55%	1,613	4.63%	479	0.19%	4	3.88%	483
20 Vedanta Lisheen Holdings Limited	0.01%	9	1.96%	203	%00.0	1	1.63%	203
		20	0.21%	22	%00.0	•	0.18%	22
22 Killoran Lisheen Mining Limited	0.00%	0	(0.15%)	(16)	0.00%		(0.13%)	(16)

# Notes forming part of the consolidated financial statements as at and for the year ended March 31, 2019

	Net Assets (Total assets less total liabilities)	assets ties)	Share in profit and loss	ssol pu	Share in other comprehensive income (OCI)	her some (OCI)	Share in total comprehensive income (TCI)	rehensive
	As at March 31,	2018	Year ended March 31, 2018	31, 2018	Year ended March 31, 2018	31, 2018	Year ended March 31,	31, 2018
	As % of				As %		As % of	
S. No Name of the entity	consolidated net assets	Amount (₹ in Crore)	As % of consolidated profit	Amount (₹ in Crore)	of consolidated OCI	Amount (₹ in Crore)	consolidated TCI	Amount (₹ in Crore)
23 Killoran Lisheen Finance Limited	0.00%	2	0.00%		0.00%		0.00%	
24 Lisheen Milling Limited	0.23%	146	0.23%	24	%00.0	,	0.19%	24
25 Lakomasko BV	0.00%	0	(0.00%)	(0)	0.00%	1	(0.00%)	(0)
26 Vedanta Exploration Ireland Limited	0.00%	ı	0.00%	1	%00:0	1	0.00%	1
27 Cairn India Holdings Limited	12.50%	7,914	30.37%	3,141	0.00%	1	25.23%	3,141
28 Cairn Energy Hydrocarbons Limited	9.36%	5,923	5.45%	564	%00.0	1	4.53%	564
29 Cairn Lanka (Private) Limited	(0.67%)	(427)	(0.01%)	(1)	0.00%	1	(0.01%)	(1)
30 Cairn South Africa (Pty) Limited	(0.03%)	(18)	(0.01%)	(1)	0.00%	1	(0.01%)	(1)
31 CIG Mauritius Holding Private Limited	(0.00%)	(0)	(0.01%)	(1)	%00.0	1	(0.01%)	(1)
32 CIG Mauritius Private Limited	0.00%	0	(0.00%)	(0)	%00.0	1	(0.00%)	(0)
33 Cairn Energy Discovery Limited	0.00%	1	0.00%	0	%00.0	1	0.00%	0
34 Cairn Exploration (No. 2) Limited	0.00%	ı	0.00%	0	%00:0	1	0.00%	0
35 Cairn Energy Gujarat Block 1 Limited	0.00%	2	0.00%	0	%00:0	1	0.00%	0
36 Cairn Energy India Pty Limited	0.00%	1	0.00%		%00.0	1	0.00%	1
37 Sesa Sterlite Mauritius Holdings Limited**	0.00%	1	(0.00%)	(0)	%00.0	1	(0.00%)	(0)
38 AvanStrate Inc.	(3.02%)	(1,913)	(0.38%)	(38)	(0.00%)	(0)	(0.31%)	(38)
39 AvanStrate Korea Inc.	(2.19%)	(1,388)	(0.03%)	(3)	%00.0	1	(0.02%)	(3)
40 AvanStrate Taiwan Inc.	4.86%	3,074	(0.59%)	(61)	%00.0	1	(0.49%)	(61)
Non-controlling interests in all subsidiaries	(25.21%)	(15,961)	(32.39%)	(3,350)	(3.23%)	(89)	(27.45%)	(3,418)

as at and for the year ended March 31, 2019

		Net Assets (Total assets less total liabilities)	l assets ities)	Share in profit and loss	sol pu	Share in other comprehensive income (OCI)	er ome (OCI)	Share in total comprehensive income (TCI)	rehensive I)
		As at March 31, 2018	2018	Year ended March 31, 2018	31, 2018	Year ended March 31, 2018	31, 2018	Year ended March 31, 2018	31, 2018
S. S.	S. No Name of the entity	As % of consolidated net assets	Amount (₹ in Crore)	Amount As % of (₹ in Crore) consolidated profit	Amount (₹ in Crore)	As % of consolidated OCI	Amount (₹ in Crore)	As % of consolidated TCI	Amount (₹ in Crore)
٨	Associates (per Equity method)								
-	Indian								
_ O	Gaurav Overseas Private Limited	0.00%	0	(0.00%)	(0)	0.00%	1	(0.00%)	(0)
ш.	Foreign								
∠	RoshSkor Township (Pty) Ltd	0.01%	4	(0.00%)	(0)	0.00%	1	(0.00%)	(0)
Ť	Joint ventures (per Equity method)								
-	Indian								
~	Madanpur South Coal Company Limited	0.00%	2	(0.00%)	(0)	0.00%	1	(0.00%)	(0)
2	Goa Maritime Private Limited	0.00%	1	0.00%	0	0.00%	ı	0.00%	0
8	Rampia Coal Mines & Energy Private Limited	0.00%	1	(0.00%)	(0)	0.00%	1	(0.00%)	(0)
U	Consolidation Adjustments/ Eliminations a	(86.57%)	(42,149)	(53.95%)	(5,580)	97.82%	2,062	(28.25%)	(3,518)
T	Total	100.00%	63,312	100.00%	10,342	100.00%	2,108	100.00%	12,450

\* Purchased during the year. Items of profit and loss, OCI and TCI are for the full financial year. \*\* Under liquidation

a Consolidation adjustments/eliminations include intercompany eliminations , consolidation adjustments and GAAP differences.

Exchange Rates as on March 31, 2018: 1 AUD= ₹ 50.0449, 1 USD = ₹ 65.0441, 1 AED = ₹ 17.6838, 1 NAD = ₹ 5.5003, 1 ZAR = ₹ 5.5003

Average Exchange Rates for the year ended March 31, 2018: 1 AUD= ₹ 49.8812, 1 USD = ₹ 64.44741, 1 AED = ₹ 17.5518, 1 NAD = ₹ 4.9588, 1 ZAR = ₹ 4.9588

**Prerna Halwasiya** Company Secretary ICSI Membership No. A20856 Srinivasan Venkatakrishnan Whole-Time Director and Chief Executive Officer DIN 08364908 For and on behalf of Board of Directors **GR Arun Kumar** Whole-Time Director and Chief Financial Officer Executive Chairman DIN 00006303 Navin Agarwal DIN 01874769

> Membership No.: 82028 Place: Mumbai Date: May 07, 2019 per Raj Agrawal

Chartered Accountants ICAI Firm Registration No. 301003E/E300005

As per our report of even date For S.R. Batliboi & Co. LLP

# Notes forming part of the consolidated financial statements as at and for the year ended March 31, 2019

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ಪ ಲೆ EDANTA	. Name of the Subsidiary	Reporting Period	Reporting	Share	Reserves & Surplus 1	Total Assets	Total Liabilities in	Investments (excluding Investment in Subsidiary)	Turnover	Profit/(Loss) Before Taxation	Provision for Taxation expense/ (credit)	Profit/ (Loss) After Taxation	Proposed Dividend sl	% of shareholding
		April to March	N. N.	221	3,841	14,387	10,325	100	10,049	204	(369)	573		21
C		April to March	AUD	0	(376)	61	437		ı	(87)	•	(87)	•	100
η NITECE	. –	April to March	AUD	m	(14)	1	25	1	ı	∞	1	00	1	100
οντ 4	Monte Cello BV	April to March	USD	0	172	188	16	,	1	m	$\leftarrow$	2	1	100
EU N	Hindustan Zinc Limited	April to March	IN N	845	32,760	42,458	8,853	19,488	20,834	10,456	2,500	7,956	,	64.92
O DEE	MALCO Energy Limited	April to March	IN N	Ŋ	456	518	27	143	,	_	,	_	,	100
	Fujairah Gold FZC	April to March	AED	6,325	(6,273)	1,169	1,117	1	3,947	(2)	,	(2)	,	100
ω • Τ Λ	Talwandi Sabo Power Limited	April to March	INR	3,207	(651)	13,362	10,806	•	5,236	(1)	54	(22)	,	100
NID O	Sterlite (USA) Inc.*	April to March	USD	1	•	•	•	•	•	•	1	•	•	100
10	0 THL Zinc Ventures Ltd.	April to March	USD	69	(3,494)	1,418	4,843	1	1	(0)	1	(0)	1	100
	1 THL Zinc Ltd.	April to March	USD	62	(2,883)	3,720	6,541	•	1	(2)	1	(2)	•	100
12	2 THL Zinc Holding BV	April to March	USD	35	(2,253)	2,160	4,378	ı	1	(1)	(0)	(1)	1	100
VCCC	<ol> <li>THL Zinc Namibia Holdings (Proprietary) Ltd.</li> </ol>	April to March	NAD	0	594	601	_	1	ı	0)	ı	(0)	1	100
71 IVIT 6	4 Skorpion Zinc (Proprietary) Limited	April to March	NAD	0	(2)	467	469	4	1	0	(0)	0	1	100
<u>Ω</u>	5 Skorpion Mining Company (Proprietary) Limited	April to March	NAD	0	(1,115)	1,512	2,627	•	213	(331)	1	(331)	•	100
	16 Namzinc (Proprietary) Limited	April to March	NAD	0	1,302	2,973	1,671	1	1,321	9/	1	76	1	100
17	7 Amica Guesthouse (Proprietary) April to March Limited	April to March	NAD	0	(0)	<del></del>	<del></del>	1	7	<u></u>	0	<b>—</b>	ı	100
700	8 Rosh Pinah Health Care (Proprietary) Limited	January to December	NAD	_	(9)	_	0	1	$\leftarrow$	0	1	0	1	69
19	<ul><li>9 Black Mountain Mining (Proprietary) Limited</li></ul>	April to March	ZAR	0	1,569	4,041	2,472	•	1,416	246	70	176	ı	74
20	O Vedanta Lisheen Holdings Limited	April to March	OSD	0	_	28	21	•	1	1	•	1	1	100
21	1 Vedanta Lisheen Mining Limited April to March	April to March	USD	0	40	181	141		1	(12)	0	(12)	1	100
22	2 Killoran Lisheen Mining Limited April to March	April to March	USD	0	14	71	24			14	0	14		100
23	3 Killoran Lisheen Finance Limited April to March	April to March	USD	0	2	86	96		1		1	,	1	100
24	4 Lisheen Milling Limited	April to March	USD	0	157	191	34	1	1	2	<u></u>	<u></u>	1	100
25	5 Lisheen Mine Partnership	April to March	USD	1	•	145	145	1	•	(23)	'	(23)	•	100
26	6 Sterlite Ports Limited	April to March	INR	0	(4)	0	4	1	•	0)	'	(0)	1	100
27	7 Vizag General Cargo Berth Private Limited	April to March	N N	32	(43)	620	631	34	141	(27)	9	(33)	ı	100
1														

as at and for the year ended March 31, 2019

													(₹ in Crore)
ග්		Reporting	Share	Reserves &		Total	Investments (excluding Investment		Profit/(Loss) Before	Provision for Taxation expense/	Profit/ (Loss) After	Proposed	% of
No. Name of the Subsidiary	Reporting Period	currency	Capital		Total Assets		in Subsidiary)	Turnover	Taxation	(credit)	Taxation	Dividend	shareholding
28 Cairn India Holdings Limited	April to March	OSD	5,226	5,243	15,320	4,851	2,705	,	2,006	Ŋ	2,001	,	100
29 Cairn Energy Hydrocarbons Limited	April to March	USD	4,503	1,651	10,260	4,106	1	6,125	2,017	686	1,028	1	100
30 Cairn Lanka (Private) Limited	April to March	OSD	1,179	(1,634)	00	463	•	1	(1)	1	(1)	1	100
31 Cairn South Africa (Pty) Limited	April to March	NSD	248	(267)	0	19	ı	1	(2)	1	(2)	1	100
32 CIG Mauritius Holding Private Limited	April to March	USD	1,623	(1,623)	0	0	1	1	(0)	1	(0)	1	100
33 CIG Mauritius Private Limited	April to March	USD	1,620	(1,620)	0	0		1	0	1	(0)	1	100
34 Cairn Energy Discovery Limited		OSD	0	0	1	0	•	•	0	1	0	1	100
35 Cairn Exploration (No. 2) Limited	April to March	OSD	4	(4)	1	ı	1	ı	1	1	1	1	100
36 Cairn Energy Gujarat Block 1 Limited	April to March	USD	0	0	7	0	ı	ı	0	ı	0	1	100
37 Cairn Energy India Pty Limited	January to December	OSD	ı	1	1	ı	ı	ı	ı	ı	1	ı	100
38 Paradip Multi Cargo Berth Private Limited	April to March	N R	0	(1)	4	Ŋ	1	ı	(0)	1	(0)	1	100
39 Bloom Fountain Limited	April to March	OSD	15,225	(23,688)	13	8,476	•	1	(193)	,	(193)	,	100
40 Western Cluster Limited	April to March	USD	,	(797)	$\overline{}$	798	•	•	(22)	1	(22)	,	100
41 Sesa Resources Limited	April to March	INR	_	28	161	102		13	(32)	1	(32)	1	100
42 Sesa Mining Corporation Limited	April to March	IN N	12	(202)	134	324	i	9	(34)	1	(34)	1	100
43 Vedanta Exploration Ireland Limited	April to March	OSD	0	1		<u></u>	ı	ı	1	ı	1	1	100
44 Maritime Ventures Private Limited	April to March	N R	0	(3)	_	4	_	33	4	ı	4	ı	100
45 Lakomasko BV	April to March	OSD	0	0	0	0	•	•	(0)	1	(0)	•	100
46 Goa Sea Port Private Limited	April to March	N N	0	0	2	က	ı	•	(0)	•	(0)	1	100
47 Vedanta Limited ESOS Trust	April to March	N N	0	47	401	354	1	•	25	က	22	1	100
48 AvanStrate Inc.	April to March	JРY	9	(1,958)	2,489	4,441	•	1	(6)	•	(6)	•	51.63
49 AvanStrate Korea Inc.	April to March	JPY	801	(2,258)	523	1,980	•	205	(48)	•	(48)	•	51.63
50 AvanStrate Taiwan Inc.	April to March	JPY	327	2,716	3,664	621		654	(99)	15	(81)	1	51.63
51 Electrosteel Steels Limited**	April to March	INR	1,962	1,684	8,421	4,775	627	4,871	1,188	1	1,188	1	06
52 Vedanta Star Limited***	April to March	INR	20	1,741	5,387	3,626		•	(6)		(6)	'	100
a. Exchange Rates as at March 31, 2019: 1 AUD=₹49.0217,	, 2019: 1 AUD= ह	. 49.0217, 1	USD = ₹	69.1713, 1	AED = ₹	18.8298, 1	NAD = ₹	4.7774, 1 ZAR	.R = ₹ 4.7774,	74, 1 JPY =	:₹62.5200	0	

b. Average Exchange Rates for the year ended March 31, 2019: 1 AUD=₹50.7580, 1 USD =₹69.8889, 1 AED =₹19.0228, 1 NAD =₹5.0802, 1 ZAR =₹5.0802, \*\* Purchased during the year. Items of Profit and Loss are for the full financial year. JPY = ₹ 63.0396

\*Under liquidation \*\*\*Incorporated during the current year

as at and for the year ended March 31, 2019

### Form AOC-I

Salient features of Associate companies and Joint Ventures pursuant to first proviso to sub section (3) of section 129 read with rule 5 of Companies (Accounts) Rules, 2014

S. No	Name of Associates/Joint Ventures	RoshSkor Township (Pty) Ltd	Gaurav Overseas Private Limited	Madanpur South Coal Company Limited	Goa Maritime Private Limited	Rampia Coal Mines & Energy Private Limited
1	Latest audited Balance sheet date	June 30, 2018	March 31, 2019	March 31, 2019	March 31, 2019	March 31, 2019
2	Shares of Associate/Joint Ventures held by the Company at the year end					
	- Number	50	3,23,000	1,52,266	5,000	2,72,29,539
	- Amount of investment (₹ in Crore)	4	0	2	0	3
	- % of holding	50.00%	50.00%	18.05%	50.00%	17.39%
3	Description of how there is significant influence	By way of ownership	By way of ownership	N.A.	N.A.	N.A.
4	Networth attributable to shareholding as per latest audited Balance sheet (₹ in Crore)	4	0	1	(0)	0
5	Profit/(Loss) for the year (₹ in Crore)	0	(0)	(0)	0	0

For and on behalf of Board of Directors

Navin Agarwal Executive Chairman DIN 00006303

Place: Mumbai Date: May 07, 2019

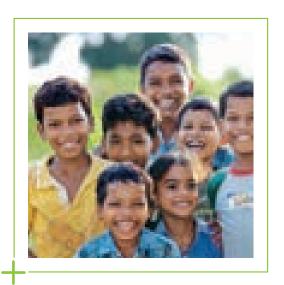
Srinivasan Venkatakrishnan Whole-Time Director and

Chief Executive Officer DIN 08364908

**GR Arun Kumar** Whole-Time Director and Chief Financial Officer DIN 01874769

Prerna Halwasiya Company Secretary ICSI Membership No. A20856







## ZINC-LEAD-SIVER I OIL & GAS I ALUMINIUM & POWER I COPPER I IRON ORE & STEEL

## VEDANTA LIMITED

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