

**4TH INDUSTRIAL REVOLUTION
INDUSTRY 4.0 : LEADING THE WAY**

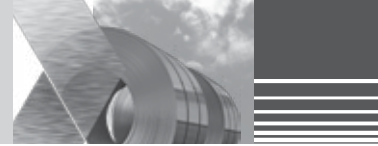


Vision



To be a Premier and
Integrated company in the
Aluminium value chain
with strategic presence in Mining
both domestic & global,
Metals and Energy sectors.





THE YEAR AT A GLANCE

PARTICULARS	UNIT	2018-19
PHYSICAL		
Bauxite	MT	72,30,546
Alumina Hydrate	MT	21,52,500
Aluminium	MT	4,40,242
Power (net)	MU	6,256
Wind Power	MU	330
FINANCIAL		
Export Turnover	₹ in crore	4,793
Gross Sales	₹ in crore	11,386
Profit Before Tax	₹ in crore	2,740
Profit After Tax	₹ in crore	1,732
Earning Per Share	₹	9.06
Book Value per Share	₹	56.20
Dividend	₹ per Share	5.75



REGISTERED OFFICE & CORPORATE OFFICE
NATIONAL ALUMINIUM COMPANY LIMITED
 CIN: L27203OR1981GOI000920
 NALCO Bhawan, Plot No. P/1,
 Nayapalli, Bhubaneswar - 751 013, Odisha
 Tel. : 0674-2303197
 Email: company_secretary@nalcoindia.co.in
 Website : www.nalcoindia.com

38th Annual General Meeting

Wednesday, the 18th September, 2019 at 11.00 A.M.
 at NALCO Bhawan, P/1, Nayapalli,
 Bhubaneswar - 751 013.

Contents

The year at a glance	1
Directors' Report	11
Annual Report on CSR Activities	41
Management Discussion & Analysis Report	45
Business Responsibility Report	62
Report on Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and outgo	83
Report on Corporate Governance	89
Extract of Annual Return	119
Secretarial Audit Report	127
Independent Auditor's Report & Financial Statements (Standalone)	137
Independent Auditor's Report & Financial Statements (Consolidated)	199
5 years performance at a glance - Physical & Financial	262

...and the saga continues



▲ Inaugural session of International Conference on Aluminium (INCAL 2019)



▲ NALCO Pavilion in Make in Odisha Conclave



▲ Inauguration of NALCO stall at 4th National Conclave on Mines & Minerals



▲ Launch of ALUMOF-The Mascot of INCAL-2019



▲ Dedication of NALCO-LV Prasad Secondary Plus Eye Hospital at Angul



▲ NALCO in PDAC-2019



▲ NALCO in IMARC-2019



▲ All India Partners Summit



▲ Customers Meet in Mumbai



▲ MoU with Vrindaban Gurukul Trust



Dr. Tapan Kumar Chand
Chairman-cum-Managing Director

Dr. Tapan Kumar Chand joined the company as Chairman-cum-Managing Director on 27.07.2015. Dr Chand is a highly competent and experienced professional having more than 30 years of rich experience in Mining and Metal Sector, out of which 8 years are at the helm of Affairs as Director in Coal & Steel sector.

An outstanding scholar and gold medalist in his student career, he has undergone training in International Centre for Promotion of Enterprises in Slovenia and Queensland University of Technology, Australia. He received Jawaharlal Nehru Award for outstanding performance as a Professional.

Dr. Chand has recently launched his 2nd edition book, "Aluminium : The Future Metal", which is just like a one-stop-shop providing much information on entire Aluminium Value Chain. His previous book 'Aluminium :The Strategic Metal' was well acclaimed by engineers, entrepreneurs, researchers, educationists & the corporate world.

He has been conferred with "D.Lit, the highest honour of Utkal University in recognition of his outstanding contribution towards Industry, Business Management & Nation Building. Hon'ble Governor of Jharkhand conferred him with highest management award 'Ravi J Matthal National Fellow Award' constituted by Association of Indian Management Schools. Times of India has conferred on him "The Achievers Odisha Award" and National Institute of Personnel Management, the National Fellow Award for his distinct contribution in the field of Human Resource Management. Dr. Chand is the President of Aluminium Association of India, the apex body representing the entire spectrum of Indian Aluminium Industry.



Shri Basant Kumar Thakur
Director (HR)

Shri Basant Kumar Thakur is the Director (HR) of the Company w.e.f. 04.07.2016.

Born on 19.12.1959, Shri Basant Kumar Thakur has a Diploma in Social Works along with a degree in History from Punjab University. He started his career in SAIL in 1981 and since then he served in various units including Durgapur Steel Plant, Bokaro Steel Plant, Salem Steel Plant, R&D Centre in Ranchi and Corporate Office in New Delhi, prior to joining NALCO as Director (HR). Shri Thakur is a hands on Human Resources professional with comprehensive experience including recruitment, retention, conflict resolution, change management, labour relation and benefit administration. He has four years of experience in Corporate Communications. In SAIL, he had collaborated with senior management to conduct organizational wide strategic planning in order to support and further the organizational goals. He played a vital role rebuilding Human Resources Department by updating Human Resources System, policies and procedure development, coaching, counseling, planning, direction and management of all HR activities in his three decades long career at SAIL. Shri Thakur is a life member of NIPM and is an Honorary President of NIPM, Utkal Chapter. He is also convener -CII Odisha HR-IR Panel.



Shri V Balasubramanyam
Director (Production)

Shri V. Balasubramanyam joined the Company as Director (Production) w.e.f. 01.01.2015.

Born on 01.12.1960, Shri V Balasubramanyam completed his B.Tech in chemical engineering and joined NALCO as a Graduate Engineer Trainee (GET) in 1984. During his long service association of three decades with NALCO, Shri Balasubramanyam has contributed significantly from Technology adoption to absorption in the field of aluminium technology. With his vast professional experience, which nested from project execution to plant operation at both the production complexes of NALCO, Shri Balasubramanyam held very critical and crucial positions in the organization before taking over as Director (Production).

Shri Balasubramanyam is a life member of Indian Institute of Metals (IIM), Management Committee member of Federation Indian Mineral Industries (FIMI) and also member of Energy Panel in Odisha chapter of the Confederation of Indian Industries (CII).



Shri Sanjib Kumar Roy
Director (P&T)

Shri Sanjib Kumar Roy is the Director (P&T) of the Company w.e.f. 03.02.2017.

Shri Roy completed B. Sc (Hons in Chemistry) from Ramakrishna Mission Vidyamandir, Belurmath and then B. Tech & M. Tech in Chemical Engineering discipline from Calcutta University. He began his career in NALCO as a Graduate Engineer Trainee in 1984. He was posted in the company's Alumina Refinery Complex in Damanjodi since inception of the project, where he held different key positions including two stages of expansion before becoming the General Manager (Refinery). Thereafter in May'2012, he was posted as General Manager (Smelter) at the company's Smelter Plant in Angul before his elevation as Executive Director (S&P). Shri Roy moved to the headquarters in Bhubaneswar as Executive Director (Production) in April 2015. He received the "Award of Excellence" for the lifetime achievement in the field of Engineering from Odisha Engineers Forum for the year 2018.

Shri Roy brings to this post his vast experience in the company's plant & operations as well as managing projects from conceptualization to commissioning.



Shri Pradip Kumar Mishra
Director (Commercial)

Shri Pradip Kumar Mishra joined the Company as Director (Commercial) w.e.f. 23.04.2018.

Born on 12.02.1961, Shri Pradip Kumar Mishra is a Post Graduate in English literature from Utkal University. He started his professional career as a Management Trainee in SAIL in the year 1983. He brings along rich and varied experiences in the field of marketing management. During his 35 years tenure in SAIL, he served in various positions, including being the Regional Manager in three regions of SAIL. He headed the domestic marketing of flat products of SAIL for over 3 years as Executive Director. Shri Mishra is the recipient of the prestigious Jawahar Award for outstanding contribution in marketing area in SAIL.



Shri Sridhar Patra
Director (Finance)

Shri Sridhar Patra joined the Company as Director (Finance) w.e.f. 01.09.2018. Before joining NALCO, he had served as Director (Finance) of THDC India Limited for a period of 5 years.

Born on 12.10.1964, Shri Patra is a member of Institute of Chartered Accountants of India and rank holder graduate in Commerce from Utkal University. Shri Patra is a seasoned Finance & Accounts Professional with results-driven and team oriented leadership and have demonstrated commitment to organizational growth. He has over three decades of experience in finance and accounts functions of various Public Sector Undertaking like Odisha Mining Corporation Ltd., Indian Rare Earths Ltd. and Mangalore Refinery & Petrochemicals Ltd (A subsidiary of ONGC Ltd.) with exposure in Corporate Accounts, Budgeting & Control, Direct & Indirect Tax Management, Strategic Financial & Business Planning, Financial evaluation of Contracts, Cost Excellence and Treasury function. Shri Patra has contributed significantly as an academician to professional accounting institutions apart from his employment in PSUs.



Dr. K. Rajeswara Rao
Part-time Official Director

Dr. K. Rajeswara Rao was inducted to the Board w.e.f. 19.02.2018. Born on 1st July, 1962, Dr. K. Rajeswara Rao has degree of Doctor of Philosophy (Ph.D.) in Social Sciences from the University of Jamia Millia Islamia, Delhi. He belongs to 1988 batch of Indian Administrative Service (IAS) from Tripura Cadre. He is currently working as Additional Secretary in the Ministry of Mines, Government of India, New Delhi. Dr. K. Rajeswara Rao has abundant experience of working in Central Ministries, State Governments and Public Sector Companies in sectors/ areas such as Welfare, Development, Governance, HRD, Urban Development, International Co-operation, Community Empowerment etc.



Shri Anil Kumar Nayak
Part-time Official Director

Shri Anil Kumar Nayak was inducted to the Board w.e.f. 27.03.2018.

Born on 16.05.1962, Shri Anil Kumar Nayak has done his M.A. in Politics from School of International Studies, JNU, New Delhi and M.Phil in Ethnicity and Political Development in the Ivory Coast from Delhi University. He joined Indian Ordnance Factory Services (IOFS-1986 Batch) on 15th Feb' 1987. He was Deputy Director General, Ordnance Factory Board, Kolkata looking after Industrial Relations of the entire organization comprising of 41 Ordnance factories before joining as Chief Labour Commissioner in Ministry of Labour in August, 2015. He got wide experience of working in other Government departments viz. Deputy Secretary to 5th Pay Commission, Deputy Secretary in Ministry of Defence, Regional Provident Fund Commissioner Gr.-I of Bihar and Odisha, Director in Ministry of Mines etc. He has been appointed as Joint Secretary, Ministry of Mines in March, 2018.

He brings with him varied experience in technical as well as administrative fields.



Shri Dipankar Mahanta
Part-time Non-official
(Independent) Director

Shri Dipankar Mahanta was inducted to the Board as a Part-time Non-official (Independent) Director w.e.f. 21.11.2015. He was re-appointed for further period of one year w.e.f. 21.11.2018 after completion of his three years tenure on 20.11.2018.

Born on 12th December, 1965, Shri Dipankar Mahanta did his MBA from Guwahati University and started with an entrepreneurial venture named M/s Consort Marketing, with an objective of marketing small scale industries products. Subsequently, he joined and served the Guwahati Stock Exchange in various capacities concerning the Indian Capital Market. He was the promoter director of Economic and Industrial Development Collaborative (India) Pvt. Ltd. a company with an object for imparting quality consultancy services and its implementation in the North East Region (NER). He was a consultant in designing and implementing a Handmade Paper unit for L.B.Agro Private Ltd near Guwahati. He was involved as co-consultant in projects like Diagnostic Study of Industrial Training Institutes (ITIs) of the NER for the NEC, Feasibility Study of a Market Complex Exclusively Selling Handloom and Handicraft Products for NEHDC, Study of the factors affecting the Process of Language Learning for DPEP, Study on 'Bamboo and Bamboo Products in Assam' for National Bamboo Mission, Study on 'Socio-economic Study of the Brick Field in Assam' for Pollution Control Board, Assam. He served Vivekananda Kendra, a voluntary organization in various capacities and later on he was the Associate Director, Research Council of the Vivekananda Kendra Institute of Culture (VKIC), a specialized project on Cultural Documentation and Research of India's North East. He also had the opportunities to serve CAPART (NEZ) under the Ministry of Rural Development, Government of India.

He is presently working in the field of Social Entrepreneurship with various social organizations, prominent amongst them is Vivekananda Kendra and Srimanta Foundation for Culture and Society. He is also a resource person and trainer for sessions on 'Knowledge of Self and its Management'.



Shri S. Sankararaman

Part-time Non-Official (Independent) Director

Shri S. Sankararaman was inducted to the Board as a Part-time Non-Official (Independent) Director from 21.11.2015. He was re-appointed for further period of one year w.e.f. 21.11.2018 after completion of his three years tenure on 20.11.2018.

Born on 19th May, 1962, Shri S. Sankararaman is a fellow member of the Institute of Chartered Accountant of India (ICAI). Shri S. Sankararaman is affected by muscular dystrophy and a wheelchair user from the age of 12. He is presently the Honorary Secretary of Amar Seva Sangam, an Institution for betterment of the handicapped and under privileged. He started his career in 1985 rendering professional services to various corporates before joining the Amar Seva Sangam in 1992. His mission is to empower the disabled citizen by establishing a "Valley for the Disabled" as a Rehabilitation and Development Centre for the region and developing models for self-help initiatives by integrating the disabled individuals with the society for improved living conditions in the villages.

He is a champion for the rights of the disabled persons and believes that disability is not a constraint but only a condition which can be managed with the right combination of rehabilitation and enablement. He has been instrumental in developing Amar Seva Sangam from scratch to its current position of leadership in the field of disability management with state-of-the-art infrastructure and deliver high quality rehabilitation programs across all age groups and across all disabilities. He was conferred with the Ashoka Fellowship for innovation and received several awards at the State, National and International levels in recognition of his services, which include a State Award from the Chief Minister of Tamil Nadu and National Awards from the President of India twice.



Shri Pravat Keshari Nayak

Part-time Non-Official (Independent) Director

Shri Pravat Keshari Nayak is a senior partner of leading Chartered Accountant Firm M/s. P. K. Nayak & Co. with over three decades of experience across in wide ranging areas of public and private sectors. His vast repertoire of financial expertise and experience spans across several corporates, banks and other financial institutions and government departments, agencies and Public Sector Undertakings. He has advised Adam Smith International, UK on a DFID funded reforms program for restructuring of PSUs in Odisha. He also holds degrees in Laws and diploma in Information System Audit (ICAI). Besides financial advisory and audits, including being an Independent Auditor in large social sector projects, he has proactively offered guidance to young entrepreneurs and start-ups. He has participated in many national seminars and conferences related to Finance, taxation and audits. His hobbies include caring for the environment and he is an avid lover of animals.



Prof. Damodar Acharya

Part-time Non-Official (Independent) Director

Prof. Damodar Acharya was inducted to the Board as an Independent Director on 21.11.2015. He was re-appointed for further period of one year w.e.f. 21.11.2018 after completion of his three years tenure on 20.11.2018.

Born on 2nd April, 1949, Prof. Damodar Acharya holds degree in Mechanical Engineering from NIT, Rourkela, Masters and PhD degrees from IIT, Kharagpur. He joined the Industrial Engineering faculty in the same institute in 1976. He has left his indelible mark in all the responsibility that he has taken in the institute, be it as head of the Department, Chairman JEE, DEAN (Sponsored Research and Industrial Consultancy), Executive Director STEP, Chairman of Vinod Gupta School of Management or as the Director of this first and the largest IIT in the Country.

As Founding Vice Chancellor of Biju Patnaik University of Technology, he laid a foundation of a robust Technical University Education system that is being emulated by others. He was the Chairman of All India Council of Technical Education.

He played important role in the establishment of IIT Bhubaneswar and was its first Mentor Director. He remained non official Director in the Central Board of RBI for four years and as an Independent Director in RCF for three years.

Prof. Acharya is Chairman of the Advisory Board of SOA University



Shri Maheswar Sahu

Part-time Non-Official (Independent) Director

Shri Maheswar Sahu was inducted to the Board as a Part-time Non-official (Independent) Director w.e.f. 21.11.2015. He was re-appointed for further period of one year w.e.f. 21.11.2018 after completion of his three years tenure on 20.11.2018.

Shri Maheswar Sahu has done B.Sc. (Engg.) in Electrical in 1977 from NIT, Rourkela and M.Sc. from University of Birmingham in 1994. He joined Indian Administrative Service (IAS) in 1980. He has served the Government of India and Govt. of Gujarat in various capacities for more than three decades before retiring as Additional chief secretary, Govt of Gujarat in 2014. His career span includes more than 20 years of service in industry and more than 10 years of active involvement in PSU management. He had worked more than 3 years in United Nations Industrial Development Organization. He was instrumental in organization of four Vibrant Gujarat events.

He served as director in many CPSEs. He was also Chairman/ Director in many State PSUs. He is now associated with a number of companies as Independent Director/Chairman. His area of specialization includes strategic management, public administration, corporate governance etc.



Smt. Kiran Ghai Sinha

Part-time Non-Official (Independent) Director

Smt. Kiran Ghai Sinha was inducted to the Board as a Part-time non-official (Independent) director w.e.f. 03.02.2017.

Presently, Smt. Sinha is a senate member of Patna University. She is also Chairperson, Scouts and Guides Fellowship, Bihar. She is member (Non Govt.), Hindi Salahkar Samiti, Ministry of Civil Aviation, Govt of India. She has been nominated as member of first Court of Mahatma Gandhi Central University, Champaran, Bihar. She has also been nominated as member of state level three member authority under PC-PNDT Act, 1994 by the Government of Bihar. Earlier, Smt. Sinha was senate member of Patna University for three terms in succession.

Smt. Sinha did her M.A. in Hindi from Patna University. She retired as an Associate Professor, Dept. of Hindi, Patna Women's college, Patna University. Smt. Sinha was also member, Bihar Legislative Council (BLC) for consecutive two terms from 2004-10 and again 2010-16. During her tenure as MLC, she was privileged to chair 3 Committees of the house viz. Urban Development Committee, Rajbhasha Committee & Child protection Women empowerment Committee. She was member, Local Board (Eastern Zone), Reserve Bank of India (2001-2004) and was also member, Board of Management and Member, Finance Committee, Rajendra Agriculture University, Pusa, Bihar for two terms. She was also a jury member for non-feature films category & feature film category in the 48th and 50th National Film awards. She was a member of a state delegation to the World Hindi Conference held at United Nations, USA (2007).



Shri Nagendra Nath Sharma

Part-time Non-Official (Independent) Director

Shri N N Sharma was inducted to the Board as a Part-time non-official (Independent) director w.e.f. 06.09.2017.

Born on 12th August, 1950. Shri N N Sharma has done B.Sc in Mechanical Engineering. At present, he is Chairperson, Centre for Corporate Social Responsibility and Sustainability at Birla Institute of Management Technology (BIMTECH), Greater Noida. He is also member of Social Audit Committee of ACC Ltd. Shri Sharma conducted capacity building programme of CSR professionals of corporates like NTPC, NHPC, SAIL and NPCIL. He has more than three decades of experience of working in social development sector. He was managing director of Rajasthan Consultancy Organisation (RAJCON) promoted by IFCI and other development organizations and also first general manager of UP Minorities Financial and Development Corporation.

He has also worked with UNDP and UNIDO and was associated with projects supported by the World Bank and DFID, UK.



Smt. Achla Sinha

Part-time Non-Official (Independent) Director

Smt. Achla Sinha was inducted to the Board as a Part-time non-official (Independent) Director w.e.f. 08.09.2017.

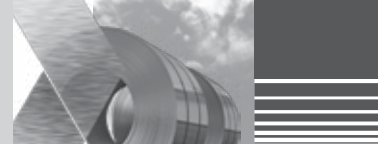
Smt. Sinha has done M.A. in English Literature from Patna University, M.Phil in Public Administration from Panjab University, Advance Professional Programme in Public Administration (APPPA) from Indian Institute of Public Administration (IIPA), New Delhi.

She is an Indian Railways Traffic Service officer (IRTS) of the 1982 Batch. She started her career as Assistant Commercial Manager from Danapur Division, Eastern Railway. She had since worked in various capacities for over three decades in the Ministry of Railways as i) Director (Tourism) ii) Executive Director (Statistics & Economics). In Delhi Division of Northern Railway as Chief Traffic Manager and in East Coast Railway, Bhubaneswar as Chief Commercial Manager (HOD).

She has also served on deputation thrice outside her parent cadre, Indian Railways as : Deputy Secretary, Ministry of Food Supply & Commerce, Government of Bihar, Director Estate, Ministry of Urban Development; Government of India; Additional Secretary, Central Information Commission (CIC).

She has won the General Manager Eastern Railway Award during the Annual Railway Week for outstanding performance. She has also been awarded the Best Woman Participant in the 30th Advance Professional Programme in Public Administration (APPPA) from IIPA, New Delhi.

She has written a number of concept papers to bring about improvements in Indian Railway's functioning as also in Urban Development Ministry, Government of India. Many of these concepts have since been discussed and implemented.



Shri S. D. Sahu
ED (Finance)



Shri R. S. Das
ED (M&R)



Shri Somanath Hansdah
Chief Vigilance Officer



Shri D. Mohapatra
ED (Production)



Shri M. P. Mishra
ED (S&P)



Shri S. Choudhuri
CGM (SHE, GE, Coal & TQM)



Shri S. Samantaray
ED (Marketing) I/c



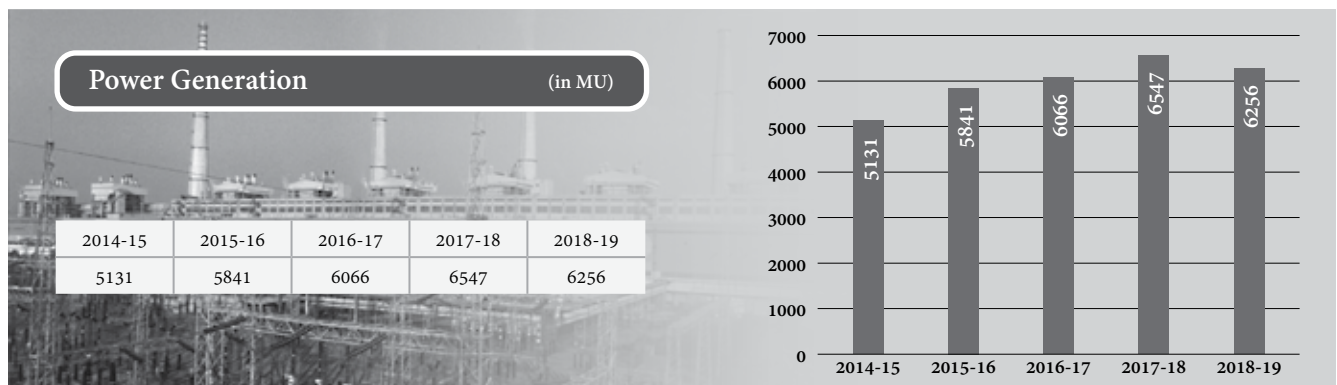
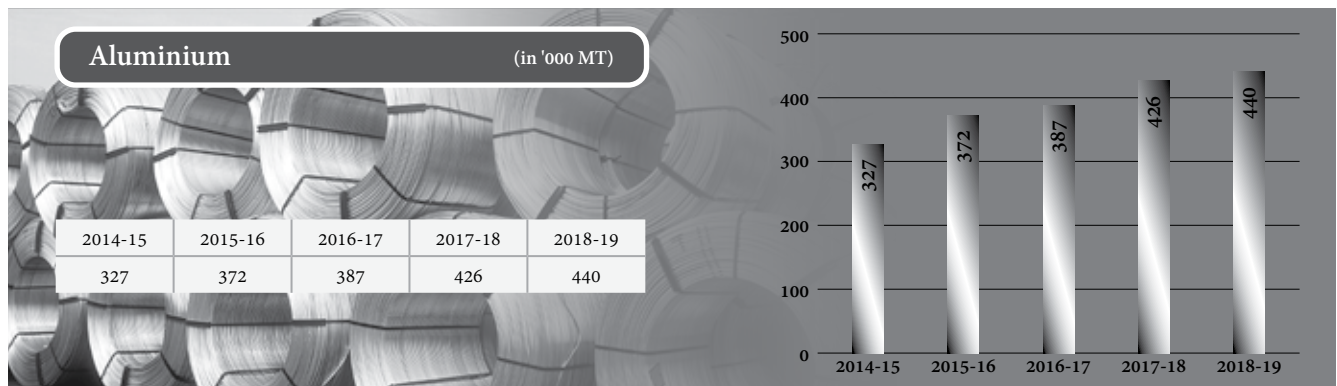
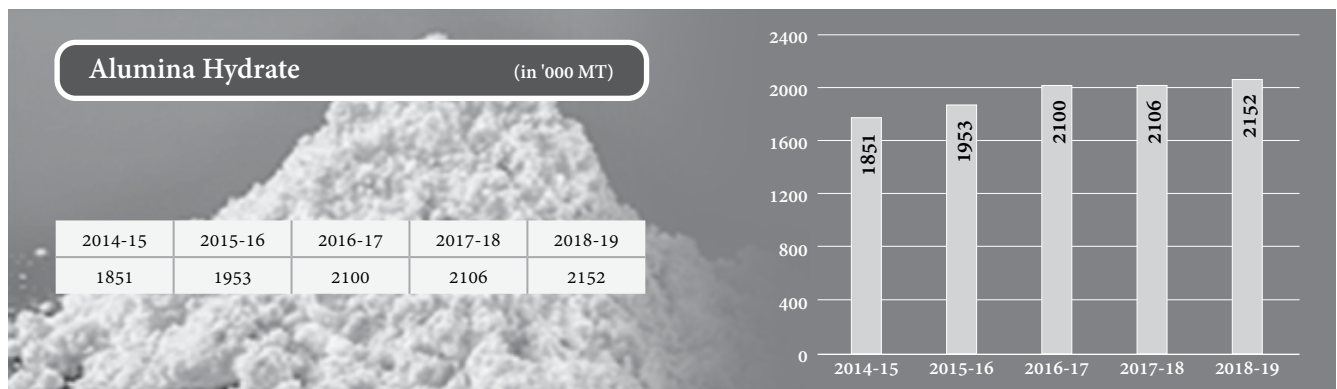
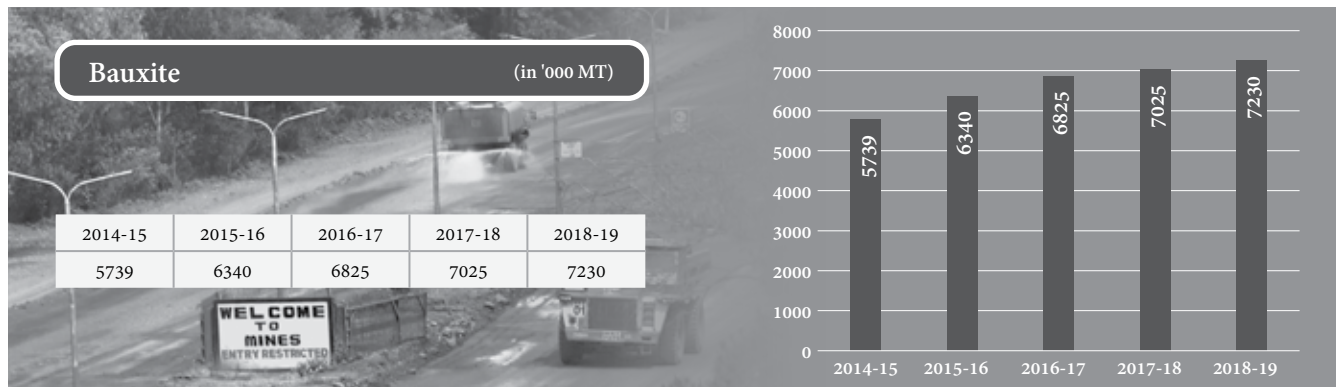
Shri N. K. Mohanty
Company Secretary

Board of Directors



(L to R): (Standing): Shri S.K. Roy, Shri Dipankar Mahanta, Shri P.K. Nayak, Shri B.K. Thakur, Shri V Balasubramanyam, Shri S. Patra, Shri P.K. Mishra,

(Sitting) Smt. Achla Sinha, Smt. Kiran Ghai Sinha, Prof. Damodar Acharya, Shri Maheswar Sahu., Dr. T.K. Chand, Dr. K. Rajeswara Rao, Shri A.K. Nayak, Shri N.N. Sharma, Shri S. Sankaraman

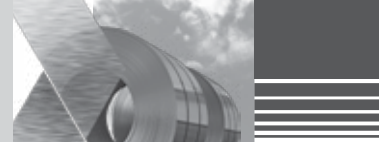


Directors' Report



Dear Members,

Your Directors have great pleasure in presenting before you the 38th Annual Report of your Company together with the audited financial statements (standalone and consolidated) and Auditors' Report for the financial year ended 31st March, 2019.



PERFORMANCE HIGHLIGHTS:

Physical Performance:

Production	Unit	2018-19	2017-18
Bauxite	MT	72,30,546	70,25,109
Alumina Hydrate	MT	21,52,500	21,05,500
Aluminium	MT	4,40,242	4,25,515
Electricity (Net)-CPP	MU	6,256	6,547
Wind Energy	MU	363	252

- Bauxite Mines (North-Central Block of Panchpatmali Mines) achieved 100% capacity utilization with transportation (production) of 68.25 lakh MT for third successive year.

Transportation from South block is 4.06 lakh MT and combined transportation of both the Mines is 72.31 lakh MT, highest ever since inception registering a growth of 2.9% over last year.

Total Bauxite excavation of 74.14 lakh MT during the year is also highest ever since inception registering a growth of 4.7% over last year.

- Alumina Refinery achieved 102.5 % of normative capacity (i.e. 21 lakh MT) with production of 21.53 Lakh MT Alumina Hydrate which is highest ever since inception.

Steam Generation Plant (SGP) of Alumina Refinery achieved highest ever net power generation of 512 MU registering a growth of 5.8% over last year.

- Aluminium Smelter achieved highest cast metal production of 4.40 lakh MT in last 8 years, registering a growth of 3.3% over last year.

New Product: The Company started commercial production of Strontium modified 6XXX series Aluminium Billet.

Smelter achieved highest ever production of wire rod, billet, T-ingot, green anode & rodded anode since inception.

Lowest specific DC power consumption of 13,370 Kwhr/MT since inception, against the norm of 13,450 Kwhr/MT.

Production of value added products of 1.52 lakh MT highest ever since inception registering a growth of 10.9% over last year.

CPP: All time low station heat rate of 2,662 Kcal/Kwhr achieved at CPP. CPP achieved specific coal consumption of 0.792 Kg/Kwhr against target of 0.830 Kg/Kwhr. Coal consumption reduced by around 2.7 lakh MT.

Wind Power: 4 wind power units at different location of the Country have generated 363 MU against 252 MU generated last year, registering a growth of 44%.



Shri Anil Mukim, Secretary Mines, Dr. T.K. Chand, CMD, NALCO, Shri A.K. Nayak, Jt. Secretary, Ministry of Mines along with Chairman, DRDO and Director (Operations), MIDHANI in discussion with Hon'ble Vice President of India Shri M. Venkaiah Naidu, on setting up of Special High Value Aluminium Alloy Plant

SALES PERFORMANCE:

Chemicals:

Your company achieved total Alumina sale of 13,17,633 MT during Financial Year 2018-19, which included total Alumina export of 12,44,256 MT. Corresponding figures for 2017-18 were 13,37,416 MT and 12,76,775 MT respectively. The marginal reduction in Alumina sale is attributable to increased production of Aluminium metal as compared to FY 2017-18.

Metal:

Your company registered total Aluminium metal sales of 4,40,597 MT during 2018-19, which is 3.35% higher than the sales figures of 4,26,316 MT achieved during 2017-18. The total Aluminium sale consists of all-time high domestic sales of 4,02,134 MT and export sales of 38,463 MT. Total domestic metal sales is inclusive of 3,10,702 MT effected from Smelter Plant and 91,432 MT from stockyards. An all-time low inventory of 892 MT was recorded at the end of financial year 2018-19.

A summary of sales achieved during 2018-19 is tabulated hereunder:

Description	Unit	Year ending 31.03.2019	Year ending 31.03.2018
Export			
Alumina	MT	12,44,256	12,76,775
Aluminium	MT	38,463	75,847
Domestic			
Alumina and Hydrate	MT	73,377	60,641
Aluminium	MT	4,02,134	3,50,469
Total Metal Sale	MT	4,40,597	4,26,316
Total Chemical Sale	MT	13,17,633	13,37,416

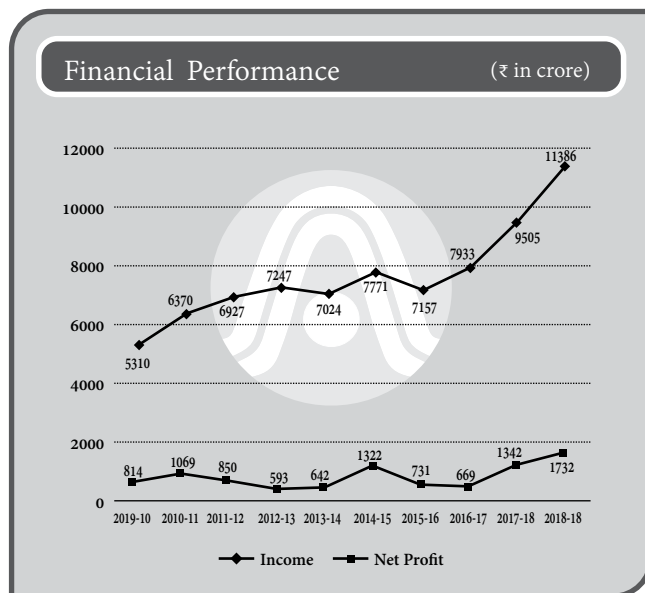
FINANCIAL PERFORMANCE:

The details of financial performance are given below:

Particulars	2018-19	2017-18
Revenue from Operations (Gross)	11,499	9,618
Other Income	326	300
Total Income	11,825	9,918

₹ in crores

Particulars	2018-19	2017-18
Raw materials consumed	1,920	1,465
Power & Fuel including Coal	2,927	2,748
Employee benefits expenses	2,072	2,261
Other expenses	1,690	1,749
Depreciation & amortization expenses	476	480
Total expenses	9,085	8,703
Profit Before Exceptional items	2,740	1,215
Add/(Less): Exceptional items [Income/(Expenditure)]	—	824
Profit Before Tax	2,740	2,039
Tax expenses	1,008	697
Profit After Tax	1,732	1,342



FUTURE OUTLOOK:

Alumina:

Global Alumina market remained turbulent through most part of the FY 2018-19. Production disruptions affected half capacity of Norsk Hydro's 6.3 Mt/y Alunorte – the world's largest alumina refinery. The threat of the plant's complete closure in September added huge volatility due to the potential shortages to the world's alumina supply. However, the Alunorte refinery aims to return to 75-85% utilisation by August/September 2019 and the new

2M t/y Al Taweelah refinery is expected to ramp up to full production by December 2019. These factors, besides others, have adversely impacted Alumina prices. Alumina prices are expected to hover in the range of USD 300 to 350 per MT during 2019-20.

Aluminium:

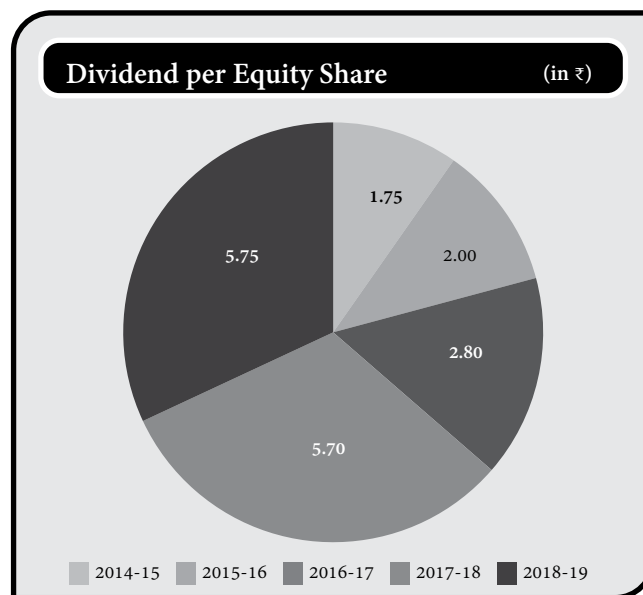
Global Aluminium industry witnessed extreme volatility in Aluminium prices during 2018-19. Prices shot up immediately after imposition of US sanctions on UC Rusal in April 2018, which were rolled back later. Prices have exhibited a downward trend since Jan-Mar 2019 quarter. The main reason for this negative market sentiment is the lasting uncertainty over US-China trade sanctions and the fear that it will hurt demand for metals. The global aluminium market is expected to be amply supplied in 2019, and most of the capacity increases (around 3 million tonnes) are expected to take place in China. This factor will likely keep Chinese exports at high levels. Aluminium prices are expected to trade in the range of USD 1750 to 1800 per MT during 2019-20.

In the Domestic Market, the demand for Aluminium is likely to remain strong, driven by usual high consuming sectors like automobiles, construction, power etc. Major thrust on infrastructure development over the last few years has led to rapid growth in the economy, and the trend is likely to gain momentum. The domestic primary aluminium producers have achieved nearly full capacity utilization. However, the falling global prices of Alumina and Aluminium are likely to put pressure on their profitability, since the domestic prices are linked to LME price. The threat of increasing aluminium import – which accounted for 58.9% of total aluminium consumption in 2018-19 – persists. Support from the Government in countering the same shall help the domestic producers to safeguard their market share and profitability.

DIVIDEND AND APPROPRIATIONS:

During the year the Company has paid interim dividend @ ₹4.50 per equity share amounting in total ₹839.53 crores.

The Board has also recommended a final dividend of ₹1.25 per equity share amounting to ₹233.20 crores for approval of shareholders in the ensuing Annual General Meeting. The total dividend for the financial year 2018-19 works out to ₹1072.73 crores as against ₹1101.77 crores during the previous year. Dividend including the applicable dividend distribution tax works out to a payout of 74.65% of the PAT against 98.78% of previous financial year.

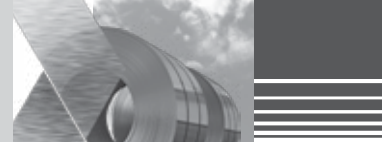


MOU PERFORMANCE:

Based on financial performance and achievement of other parameters laid down, your Company is likely to be rated “Excellent” as per the Memorandum of Understanding (MoU), signed by your Company with the Government of India for the financial year 2018-19.

RAW MATERIAL SECURITISATION:

- Mining Lease of Panchapatmali Bauxite Mine (Central & North Block) has been extended up to 16.11.2032 from existing 31.03.2020 and Mining lease of Panchapatmali Bauxite Mine (South Block) extended upto 19.07.2029 from 31.03.2020 by Government of Odisha as per Mineral (Mining by Govt. Company) RMC, 2015.
- For ensuring coal security of CPP, NALCO, Angul



(1200 MW Thermal Power Plant), the existing FSA of 47,16,480 MT G8 to G14 grade coal was renewed up to 30th April, 2023. The Bridge Linkage coal of 8,90,000 MT G12 & G13 grade coal, which was expiring on 1st May, 2019 was renewed and extended up to 31st March, 2021.

- For ensuring Coal security of SPP of your Company, the existing 2 FSAs of 8,73,324 MT indigenous coal were renewed up to 30th April, 2023. Similarly, the FSA of TG-IV (1,01,000 MT) with 50 % indigenous coal was renewed up to 23rd December, 2021.
- In addition to above for SPP in Linkage Auction Tranche-II, 2 Lakh MTPA G8 grade coal was booked from M/s. NCL and the FSA was signed on 21st July, 2017, which is valid for a period of 5 years i.e. up to 20th July, 2022.
- Your Company has participated for additional linkage coal in the Linkage Auction of Trench-IV held in November, 2018 & December, 2018 for SPP, Damanjodi, and have booked 59,688 MT G9 grade coal from Block-B of M/s. NCL for which the FSA was signed on 29th March, 2019 and is valid for 5 years i.e. up to 28th March, 2024. Further, your Company has booked 1,06,900 MT coal (39,200 MT G12 Grade coal from Spur-1 & 2, 42,000 MT G12 grade coal from Spur 5 & 6 and 25,700 MT G13 grade coal from Sardega Siding) linkage auction coal from M/s. MCL and the FSAs were signed on 9th April, 2019 and is valid for 5 years i.e. up to 8th April, 2024.
- Thus considering all above your Company has so far assured 12,90,412 MT linkage coal from indigenous source for SPP, Damanjodi against the requirement of 14.78 lakh MT for 22.75 lakh MT Alumina Hydrate production.
- Utkal D & E Coal block mines have been allotted to your company for coal. All out efforts are on to get the pending statutory clearances (issue of terms and conditions for reduced lease area, mutation, forest

clearance of safety zone) and make them operational at the earliest.

PROJECTS UNDER IMPLEMENTATION:

5th Stream of Alumina Refinery:

Your Company is in the process of setting up of 5th Stream in its existing Alumina Refinery which shall add 1.0 MTPY to its existing installed capacity of 2.275 MTPY (total capacity 3.275 MTPY), at a projected expenditure of ₹5,540 crores, based on improved Medium Pressure Digestion technology of M/s. Rio Tinto Alcan International Limited (RTAIL).

Your Company has obtained major statutory clearances like Environmental Clearance from MoEF & CC and Consent to Establish (CTE) from Odisha State Pollution Control Board. M/s. Thyssenkrupp Industrial Solutions (India) Private Ltd. has been appointed as EPCM consultant for the project. M/s. M.N. Dasturco, has been appointed as EPCM consultant for Steam and Power Plant of Alumina Refinery. Basic engineering for the project by M/s. RTAIL has been completed and detailed engineering has progressed to the tune of 17%. Process of awarding of long delivery contracts has started. Site activity comprising of survey and soil investigation work has already been started. Overall project progress got affected due to resistance by the local villagers in accessing your Company acquired land outside the existing boundary wall, which has been resolved amicably with the help of District Authorities and work has resumed in last week of June, 2019.

Alternate sourcing of Bauxite for 5th Stream:

Sourcing of Bauxite for 5th Stream Expansion of Alumina Refinery has been envisaged from Pottangi Mines. However, availability of bauxite from Pottangi Mines is expected beyond the scheduled commissioning of 5th Stream expansion.

Hence, sourcing of bauxite from South Block of your Company's existing Panchpatmali Mines has been planned through setting up of a crushing & conveying system for which a capital expenditure of ₹483 crores has been projected.

M/s. DCPL has been engaged as an EPCM consultant

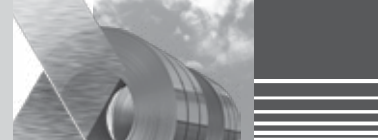


for above project. Design Engineering & pre-tendering activities are in advance stage.

Pottangi Bauxite Mines:

Pottangi Bauxite Mines (75 Million Tonnes) has been reserved by Govt. of India in favour of your Company. The status is as follows:

- Govt. of Odisha issued terms and conditions for grant of Mining Lease over the reduced area of 697.979 Ha on 14.05.2015.
- Mining Plan got approval of IBM on 27.07.2018.
- Terms of Reference issued on 28.06.2018 for obtaining Environmental Clearance from MOEF&CC, Govt. of



India. Base line environmental data study completed and EIAIEMP report has been prepared.

- Action is being taken for submission of Compensatory Afforestation (CA) schemes. Gram Sabha has been conducted in June, 2019 and being followed-up with authorities for issue of the Forest Right Certificate for obtaining Forest Clearance from MOEF&CC.
- Route survey for conveyor corridor has been completed for ascertaining the optimum route for conveying bauxite from Pottangi Mines to Alumina Refinery at Damanjodi.
- Opening of Mining is scheduled by May, 2022.

Utkal D & Utkal E Coal Blocks:

- Letter of Intent (Lol) for grant of Mining Lease of Utkal-D was issued by Govt. of Odisha on 30.10.2017.
- The process of transfer of land from the prior allottee, M/s. OMC by execution of land deed of Utkal-D has been completed on 31.01.2019.
- DGPS survey has been conducted and CA schemes submitted as part of obtaining Forest Clearance (FC) of Utkal-D.
- For Utkal-D, prior approval for 301.28 Ha mining lease area received from Ministry of Coal, Govt. of India and revised terms & conditions for grant of mining lease have been issued by Govt. of Odisha.
- M/s. MECON (Transaction Advisor) has prepared the tender documents and Coal Mining Agreement for selection of MDO for Utkal-D & E.
- M/s. RITES has submitted the Feasibility Study Report (FSR) for development of Railway Siding at Kerjang Railway Station for evacuation of coal.

Mining activities for Utkal - D is expected to start in 2019-20 and Utkal E will be operationalized thereafter after obtaining of statutory clearances.

25.5 MW Wind Power Project:

Your Company is in process of augmenting its wind power generation capacity from 198.40 MW to 223.90 MW by



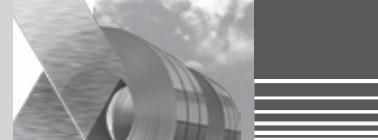
adding another wind power project of capacity 25.5 MW at Kayathar, Tamil Nadu at a capital expenditure of ₹163 crores. Substantial progress made on supply and execution of the equipments, however, the job is not completed yet due to cash crunch with the executing agency.

Alloy Wire Rod Mill:

Aluminium wire rods find its application in the power transmission sector. Due to recent industrial growth and village electrification in India resulting surge in power demand, there is large requirement of aluminium wire rods.



Laying of Foundation Stone of Wire-rod mill



Your company, would like to encash this opportunity by expanding its manufacturing base in Wire Rod segment. With this objective, Alloy Wire Rod manufacturing facility of 60,000 TPY of EC grade Aluminium Wire Rod or 40,000 TPY Aluminium alloy wire rod at 100% utilization has been planned.

Your Company has already accorded the investment decision for the project at a cost of ₹131.22 crores. M/s. MECON has been appointed as EPCM Consultant. Tendering activities are in progress. The project is expected to be commissioned by 4th Quarter of 2020-21.

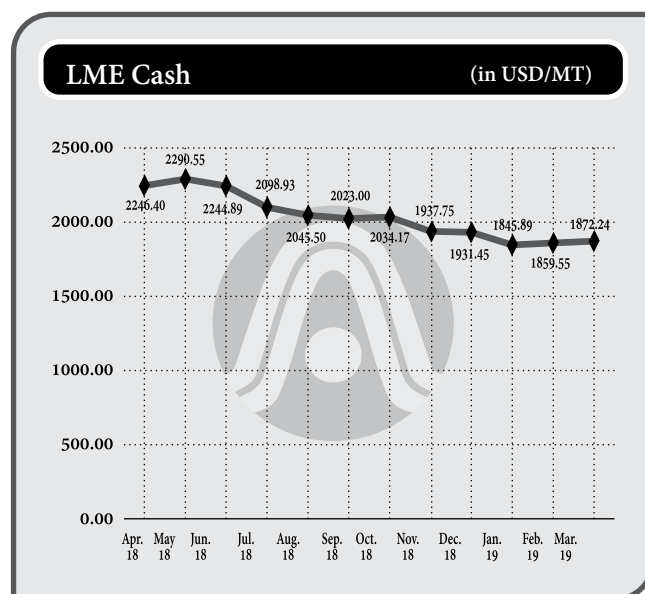
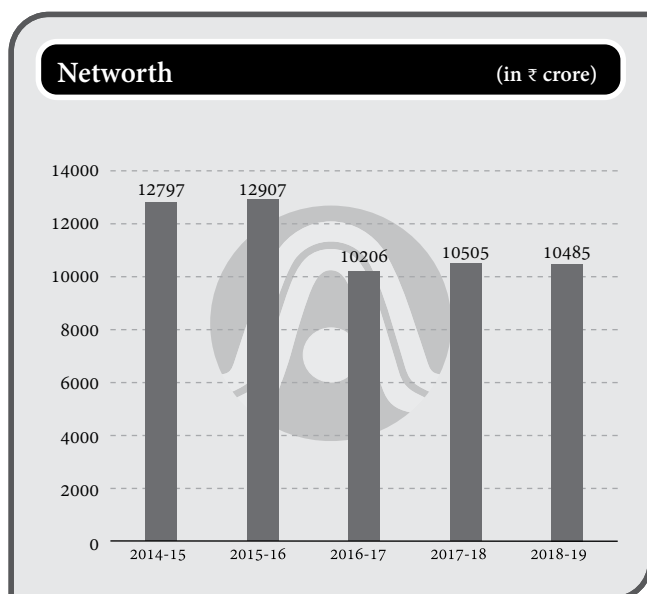
Brownfield Expansion of Smelter and Captive Power Plant:

Your Company is planning the brownfield expansion of Smelter at Angul by adding a 5th Potline (5 lakh MTPY) and upgradation of pot amperage of existing 4 Potlines from 180 KA to 220 KA (1 lakh MTPY) along with expansion of CPP by addition of 2 units of 660 MW each or any other configuration. M/s. EIL and M/s. DCPL have been engaged for preparation of DPR for Smelter expansion and TEFR/DPR for CPP expansion. For Smelter, Management presentation was given by EIL for finalisation of DPR. Draft DPR of CPP has been submitted by M/s. DCPL. However, no assurance is available from M/s. OPTCL. For emergency power availability with outage of 660 MW units. Hence, DPR is being reviewed.

BUSINESS DEVELOPMENT:

- **Caustic Soda Project in JV with Gujarat Alkalies and Chemicals Ltd. (GACL):** Your Company has formed a JV Company GACL - NALCO Alkalies & Chemical Pvt. Ltd. with GACL to set up 2.7 lakh TPA Caustic Soda Plant along with 130 MW Captive Power Plant (CPP) at Dahej in Gujarat. The project is being executed in full swing.
- **Angul Aluminium Park in JV with IDCO:** Your Company and Odisha Industrial Infrastructure Development Corporation (IDCO) have formed a JV Company for establishment of Angul Aluminium Park Pvt. Ltd. (AAPPL) for promotion of downstream industries in the State.
- **Coal Tar Pitch Plant in JV with NINL:** Your Company has signed a MoU with Neelachal Ispat Nigam Ltd. (NINL) to set up a Coal Tar Distillation plant based on the Coal Tar generated in NINL's Coke Oven Plant.
- **High End Aluminium Alloy Plant:** Your Company has signed a MoU with Mishra Dhatu Nigam Ltd. (MIDHANI) for establishment of High End Aluminium Alloy Plant in JV mode for Defence, Aerospace & Automobile Sectors. NITI Aayog has given clearance for the JV project in March, 2019. Approval of JV Agreement has been accorded by the Board of Directors of both the companies for formation of JV Company.





- **Acquisition of Strategic minerals in overseas:** Your Company, HCL and MECL have signed a MoU to set up a JV Company to identify, acquire, develop, process and make commercial use of strategic minerals in overseas locations for supply in India and thus boost “Make in India” initiative of Government of India.
- **Aluminium Downstream Projects:** Your Company has prepared Detailed Project Report (DPR) for establishment of Aluminium Downstream Projects in Kamakhyanagar block of Dhenkanal district in Odisha.
- **Commercialization of Li-Ion cell technology:** Your Company is venturing into production of Lithium-Ion cell. Your Company has been shortlisted by ISRO for transfer of Li-Ion cell technology and a memorandum of agreement has been signed with ISRO in April, 2019. Process for transfer of technology and training activities started.

CAPITAL EXPENDITURE (CAPEX):

The achievement in CAPEX is ₹919.39 crores during the year 2018-19, excluding investment in JV companies amounting to ₹58.20 crore.

RISK MANAGEMENT POLICY:

A Risk Management Policy has been formulated and

approved by the Board of Directors and the same is available in the Company’s website: www.nalcoindia.com

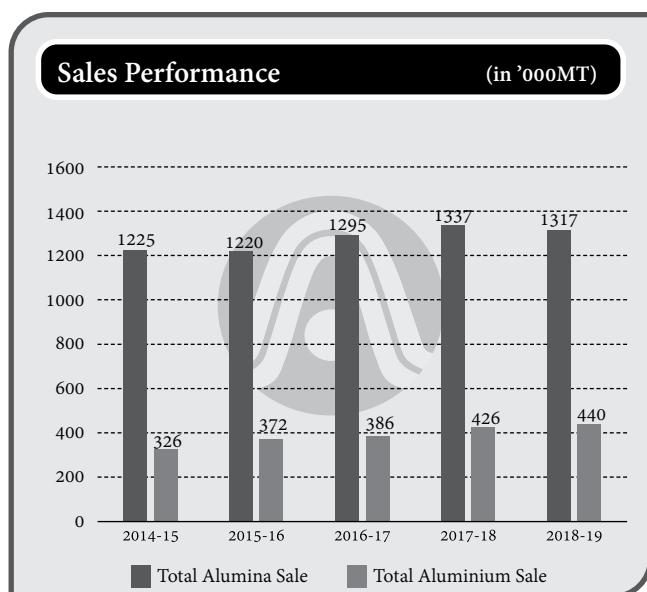
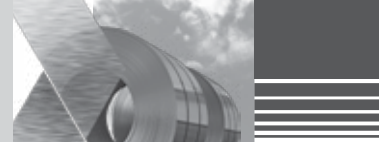
HUMAN RESOURCES MANAGEMENT:

Presidential Directives on SC/ST reservation:

Your Company fully complies with all applicable Presidential Directives and other guidelines in matters of reservation for SC/ST/OBC/EWS and other categories like the PWD and Ex-servicemen. Your Company has published an Equal Opportunity Policy for the PWD category in compliance with the RPWD Act, 2016. Out of total manpower strength of 6,496 as on 31.03.2019, there were 1,064 SCs (16.38%), 1,199 STs (18.46%), 824 OBCs (12.68%), 95 PWDs (1.46%) and 14 ESMs (0.22%) on roll. There were a total of 359 lady employees in your Company as on 31.03.2019.

Industrial Relations:

The Industrial Relations scenario in your Company reached the pinnacle of glory during the year 2018-19 by successfully providing a climate conducive to record performances on all fronts. The process of recognition of majority trade unions in different Units/Corporate Office was completed peacefully. After this, your Company finalised the Sixth Long Term Wage Settlement for non-executive employees for 10 years period from 01/01/2017 in a record time of about three months and only nine sittings in a very peaceful



and cordial atmosphere. The settlement complies with the applicable Government guidelines and has been finalised in the course of conciliation proceeding under the Industrial Disputes Act, 1947. There was no loss of mandays due to any Industrial Relations problem during the year. As always, zero tolerance to indiscipline continued to remain the hallmark of your Company's IR philosophy.

Social Accountability 8000:

For creating and maintaining a decent work place, your Company has adopted the International Standard, Social Accountability 8000 (SA-8000) since 2009-10. The Certification helped the Company in becoming more transparent in the areas of child labour, forced labour, safe and healthy work environment, working hours,



6th Long Term Wage Settlement

remuneration, freedom of association, collective bargaining process, discrimination and disciplinary practices to all stakeholders including employees, owner, customers, suppliers and other interested parties.

Your Company has successfully completed the transition process to new version i.e. SA 8000:2014 Standard. All the Units including Corporate Office are certified to SA 8000:2014 Standard as on date.

Certification of all Units and Corporate Office are being renewed every 3 years of cycles.



Industry-Academia Interaction during INCAL 2019

CORPORATE SOCIAL RESPONSIBILITY (CSR)

Annual Highlights on CSR:

Sharing happiness in caring communities is the mission and spirit of NALCO-CSR. Communities all around the operational areas of the Company along with the areas of National interest are taken care in terms of implementing various projects. The CSR projects/ programs are identified based on the internal assessment in operational areas directly by the Company and the recommendation of GoO and GoI through its CSR arm, NALCO Foundation.

All efforts are being taken to add value in fulfilling Corporate Social Responsibility (CSR) objectives through effective implementation of projects for sustainable developments. The Company has spent ₹3,049.78 lakh in FY 2018-19 towards CSR activities against the mandated CSR fund allocation of ₹2,738.00 lakh following its CSR policy framed in line with the Companies Act, 2013.

Focus has been given on sectors like Education, Healthcare,



(Above) Providing Financial Assistance to NALCO ki Ladlis on 39th Foundation Day of NALCO; (Below) Skill development project by NALCO Foundation



Sanitation, Safe Drinking Water Supply and Protection of National Heritage & Development of Iconic City. Also measure are being taken towards Environmental Sustainability and Skill Development to enhance employability. Some of the CSR initiatives under taken during by your Company during the Year 2018-19 are:

- Financial support to poor and meritorious girl students under “Nalco Ki Ladli” scheme.
- Residential Education to poor backward and tribal children from periphery villages of M&R Complex, Damanjodi.
- Free Health care services to people around the operational areas of Company through Mobile Health Units (MHUs).
- Developmental works in Iconic City-Puri.
- Battery Operated Vehicles Services from Jagannath Ballav Matha to Shree Jagannath Temple at Puri as well as Railway Stations at Puri, Bhubaneswar and Cuttack for Senior Citizens, Divyangans, Ladies with infant children.
- Solar street light and home solution in undeveloped/tribal dominated areas around plant operation.
- Skill development programs in and around operational areas.
- Drinking water supply projects in operational areas.
- Distribution of assistive devices for PWDs.

A detailed report on CSR activities prepared in line with



Development of Puri as Swachh Iconic Place by NALCO & Review of Swachh Iconic Place Puri

various applicable provisions of the Companies Act, 2013 is attached at **Annexure-I**.

EMPLOYEE SOCIAL RESPONSIBILITY (ESR)

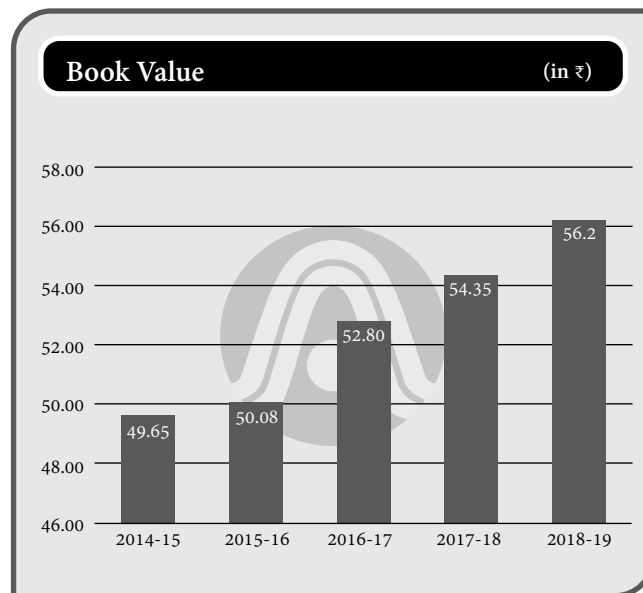
Corporate Social Responsibility (CSR) is a self-regulating business model that helps a Company be socially accountable to itself, its stakeholders and the Public. Company can be conscious of the kind of impact they are having all aspects of society including economic, social and environmental. NALCO, the Navratna PSU is socially responsible for the welfare of the society since its inception.

Nalco Ki Ladli is a flagship program undertaken by NALCO since the year 2015-16 in line with Ministry of Women & Child Development, GoI's "Beti Bachao, Beti Padhao"



NALCO's Tableau in Republic Day-2019, Bhubaneswar

campaign to support meritorious and economically backward girl students from periphery schools of the Company for their study. The initiative has been appreciated by the community around its operational areas as well as society at large and considering the success of this program, the Company has planned to scale up the program to PAN India level.

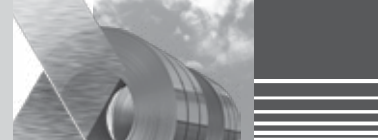


NALCO has declared the year 2018-19 as the year of "Sharing and Caring". In line with the motto and complementing above CSR initiative, CMD, NALCO has launched Employee Social Responsibility (ESR) on 1st January'2019 and appealed all the employees to lend their hand voluntarily for the cause of the society. Under the ESR scheme to start with, employees volunteered to support "Nalco Ki Ladli" by adopting one girl child each by contributing Rs. 3000/- per annum which is 50% of the scholarship amount and a matching grant of balance Rs.3000/- will be supported from normal annual CSR budget of the Company.

VISIT OF PARLIAMENTARY COMMITTEES

The following Parliamentary Committees visited the Company during the year 2018-19:

- Study Tour of the Standing Committee on Coal & Steel, Kozhikode, Kerela from 23.05.2018 to 25.05.2018.
- Study Tour of the Committee on Government



Assurance (2017-18) to Kolkata, Mumbai & Haridwar from 23.08.2018 to 28.08.2018 at Mumbai.

- Inspection/Tour Program of the Third Sub-Committee of the Committee of the Parliament on Official Languages of Central Government Offices located at Delhi, Bhubaneswar, Kolkata, Guwahati and Shillong from 28.09.2018 to 06.10.2018 held at Bhubaneswar.
- Standing Committee on Coal & Steel – Briefing by the Representation of the Ministry of Mines on the subjects: Implementation of District Minerals Foundation Trust (DMFT) and CSR Activities by PSUs under Ministry of Mines at New Delhi on 03.10.2018.
- Study Tour of the Standing Committee on Coal & Steel to Chennai, Vishakhapatnam and Bhubaneswar from 29.10.2018 to 01.11.2018 held at Bhubaneswar on 31.10.2018.
- Study Tour Program of the Standing Committee on Social Justice & Empowerment (2018-19) to Jamnagar, Mumbai & Bhubaneswar held on 15.01.2019 to 19.01.2019 at Bhubaneswar.

MANAGEMENT DISCUSSION & ANALYSIS REPORT

Management Discussion & Analysis Report in line with Regulation 34(3) read with Schedule-V of the SEBI (LODR) Regulations, 2015 is placed at **Annexure-II** to this report.

The report also contains:

- (a) various initiatives undertaken to further business development.
- (b) the details in respect of adequacy of internal financial controls with reference to the financial statements and risk management practices.
- (c) various initiatives taken up in the field of environment management at different units of your Company.

INFORMATION TECHNOLOGY FOR DIGITAL TRANSFORMATION

Your Company is using Information Technology to drive holistic digital transformation for business excellence.

SAP Enterprise Resource Planning (ERP) has been implemented in Sales and Distribution, Finance & Controlling, Materials, Human Resource and Production Planning, to ensure uniform process, to improve information availability, transparency and decision making. E-procurement of goods and services are carried out through Central Public Procurement Portal (GePNIC), GeM portal and SAP SRM. Centralized Employee Self-service Applications such as Attendance & Leave, Advances & Loans and reimbursements have been implemented. Hospital Management Systems have been implemented for the Company hospitals at Angul and Damanjodi.

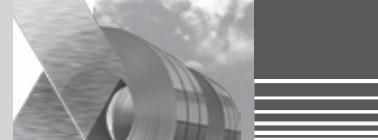
Governance and Monitoring: Online web-based application such as Capital Expenditure, Fund Monitoring, Compliance Management Systems have been implemented. In pursuit of a paperless, efficient, transparent and secure office practice, e-Office and Knowledge Management System (KMS) is being implemented.

Mobile Apps: As a part of digital initiatives, your company has launched various Mobile Apps such as “NAGINAA” – for Customer, “NAMASYA” - for MSE Vendors, “NISARG” – on CSR and “Hamesha Nalconian” – for Retired Employees.

Connectivity and Infrastructure: All plants and offices are connected on hi-speed dual MPLS based circuits. The in-house state-of-the-art Data Center at Bhubaneswar hosts the Business Critical Applications with Disaster Recovery Center at Damanjodi. Server Virtualization has been adopted for the Data Centre resulting in optimum utilization of computing resources in line with green practices. Your company has adopted multichannel video conferencing solution for effective communications between all business units.

Industry 4.0: Your Company is in the process of adopting Industry 4.0 practices using Industrial Internet of Things (IIoT), big data & analytics, for increased visibility into operations, improving efficiency and raising asset utilization.

Data Analytics: Emphasis is being placed on Analytics and Decision Support System to aid decision making process. Pilot implementation for HR, Marketing and Production is in progress.



IT Security: The IT practices are being aligned to meet the ISO 27001 standards covering the full arena of IT Security for IT infrastructure, Applications and Users. IT infrastructure and application security are ensured with network gateway and endpoint security solutions.

TOTAL QUALITY MANAGEMENT

- **Integrated Management System (IMS):**

On completion of Certification cycle of previous Certification Body, a new Certification Body i.e. Bureau Veritas was identified through tendering for conducting Recertification and Surveillance audit for maintenance of Management Systems and Energy Management System. They have already conducted Recertification Audit of Environment Management System of Mines, Alumina Refinery and CPP and Quality Management System of Alumina Refinery starting from November, 2018. IMS internal audits and Management Review Meetings have been conducted in all Units, as per schedule. As on 31.03.2019, all the units are operating with valid ISO9001:2015, ISO14001:2015 and OHSAS 18001:2007 certificates with international accreditation from UKAS, U.K. & RvA, Netherlands.

- **Energy Management:**

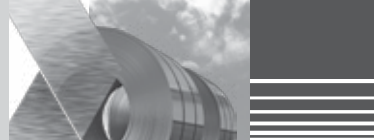
- Recertification Audit of CPP to ISO 50001 System was successfully completed and the unit was recertified. Three production units CPP, Smelter and Alumina Refinery, which are included in the Perform, Achieve & Trade (PAT) scheme of Bureau of Energy Efficiency (BEE) are operating with valid ISO 50001:2011 certificates, with accreditation from RvA, Netherlands.
- For energy conservation and improving energy efficiency, 9 Energy Management Programs in Smelter, 6 Energy Management Programs in CPP and 10 Energy Management Programs in Alumina Refinery were successfully completed during the year.

- **QCs & Kaizen:**

- Quality Circle activity has increased substantially during the year. With formation of new QCs, the total active QCS has increased to 96. In different Units of your Company, total 49 quality circle projects have been completed during the year.
- 13 Quality Circles from different units of your Company participated in the National QC Convention organised by QCFI at Gwalior and out of this, 8 QCs were placed in the highest category of recognition i.e. "Par-Excellence" and remaining 5 Quality Circles are adjudged as "Excellent".
- As per the Kaizen by SGA scheme, total 1,077 Kaizens were completed in Smelter, 836 Kaizens were completed in Alumina Refinery, 544 Kaizens were completed in CPP and 85 Kaizens were completed in Mines Unit during the year.
- Knowledge Portal on improvement activities by QCs & Kaizen is developed by TQM team of Alumina Refinery and uploaded in Intranet. Similar Knowledge Portal is also available in Smelter Unit Intranet.
- The All Odisha QC Convention was also organised for the 23rd successive year by your Company during April, 2018 to felicitate top Quality Circles & TPM Circles from Odisha.

- **Nalco Utkal Gaurav Madhu Sudan Das (NUGMSD) Quality Award:**

Applications were invited for Nalco Utkal Gaurav Madhu Sudan Das (NUGMSD) Quality Award and out of the total 19 manufacturing units from Odisha who had submitted application documents for the award, the top most unit from each category i.e. Large, Medium and Small category were conferred with the prestigious state level awards on 25th April, 2018.



- **Lean Six Sigma:**
05 LSS projects were identified and all 05 Nos. of lean Six Sigma projects have been successfully completed during the year in Alumina Refinery of your Company.
- **Business Excellence Initiative:**
Alumina Refinery Unit challenged the CII-EXIM Bank business Excellence Award framed in line with EFQM model of Business Excellence, for the year 2018 and was placed in Gold Plus Category and was felicitated during the CII National Quality Summit observed on 23rd - 24th November, 2018 at Bengaluru. At Smelter, preparations for Holistic Business Excellence in line of EFQM model was launched with an aim to compete for CII-EXIM Business Excellence Award 2020. Also at CPP, preparations for Operational Excellence Framework in line of EFQM model was launched with an aim to compete for CII-IQ's BE Star award in 2019.
- **5S System Implementation:**
5S workplace Management System implemented in Alumina Refinery qualified for certification by M/s. QCFI after audit in September, 2018. After recommendation by QCFI, Union of Japanese Scientists and Engineer (JUSE) issued the internationally recognised certificate to Refinery Unit.

In both Smelter & CPP, implementation of 5S Workplace Management System was assessed by experts from QCFI in June, 2018 and duly appreciated. In both the units, regular 5S management audits and reviews were done. Photographs of 5S implementation was uploaded in respective intra-unit website. Also at Mines, action is being taken for implementation of mine-wide 5S workplace management system with the help of M/s. QCFI.
- To promote use of Hindi in official work, Hindi Fortnight was observed from 01.09.2018 to 15.09.2018 at Corporate Office, Bhubaneswar, at S & P Complex, Angul and M & R Complex, Damanjodi and Hindi Week was observed at Regional Office. Several Hindi Competitions were organised separately for Hindi speaking and Non-Hindi speaking employees and students. On concluding day function at Damanjodi, '**Hindi Hasya Kavi Sammelan**' was organised by poets of national repute.
- On the occasion of pre-Holi celebrations, a Hindi 'Hasya Kavi Sammelan' was organised at Corporate Office, Bhubaneswar inviting famous humorous poet Chakachoundh Gyanpuri and his troupe.
- Hindi Teaching Program was implemented at Corporate Office, S&P Complex and M&R Complex and the employees who do not have working knowledge of Hindi, were nominated for Hindi Training, Hindi Typing and Hindi Computer training. 28 Employees passed Pragya course and incentives were awarded to them as per rules. Another batch of 22 employees are undergoing training. Hindi Workshops were organised to impart the training for employees in practical sessions for working in Hindi.
- Two meetings of Town Official Language Implementation Committee (Undertaking) Bhubaneswar and Town Official Language Implementation Committee, Angul, each were held under the chairmanship of your Company.
- Website of Company www.nalcoindia.com was renovated and is regularly updated for both in Hindi and English languages.
- During the year, your Company has provided Faculty Assistance on the subject "Unicode and Technical Facilities in Computer and Mobile phones in Hindi & Regional Languages" in the workshops, organised by different CPSUs and at Rajbhasha Sammelans.

IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY

As per the Official Language Act, 1963 and Official Language Rule, 1976, implementation of Hindi is being done in your Company.

- Bilingual Notings, Help-files for self-learning of Inscript Keyboard for working in Hindi are also uploaded at Intranet Website of Company.
- Mobile apps “NISARG” for Corporate Social Responsibility & “Namasya” for MSME were launched in Hindi.
- A Hindi musical Video clip “Amritam Gamaya” was released to spread the awareness on “Swachha Bharat Abhiyan”.
- Final meeting of experts committee of “Commission for Scientific and Technical Terminology” under the aegis of Ministry of Mines was hosted and organised at Corporate Office, Bhubaneswar on 27-28 August, 2018.
- Inspection of Corporate Office regarding implementation of Hindi was conducted by Committee of Parliament of Official Language in September, 2018. Rajbhasha Inspection of Eastern Regional Office, Kolkata was conducted by Assistant Director (Implementation), Deptt. of Official Languages, Kolkata in March, 2019.

SPORTS

- Your company continues to promote sports and sports persons in the country. As a part of promotion of sports events, your company sponsored ITF Odisha International Pro-tennis, Special Hockey World Cup Booklet, Bhubaneswar School Hockey



Felicitation to Dutee Chand (sprinter) for success in Asian Games

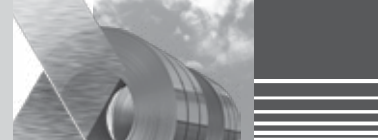
Tournament-2018, Table Tennis Championship-2018, Biju Patnaik All India Cricket Tournament, 60th Nalco Cup Sr. State Basketball Championship, Nalco East Zone Invitational Golf Tournament, 20th All Odisha Nalco Tennis Tournament, 9th Hockey Sr. Men National Championship-2019, Nalco Ajit Wadekar Memorial East Zone Dibyang Cricket Tournament, Sub Junior Boys and Girls National Championship.

- As a matter of policy to encourage young sports persons, your Company had supported young aspiring sports persons of National and State level.
- Your company have encouraged young players in different fields, like Mr. Kartik Jindal was sponsored by to participate in National & International Badminton tournament in 2018-19.
- Young Chess player of Odisha, Biswajit Mohanty (3rd prize winner in National level U-7) was financially sponsored by your Company as sports initiative.
- Your Company had also offered jobs to four women Hockey players from the state who participated in the Rio Olympics, as a policy to encourage young sports persons. Among them Ms. Sunita Lakra has already joined the Company and regularly participating in National and International Hockey tournaments.
- Other sports person of your Company are frequently participating in different sports activities like coaching, camping, training, and as selector for various National sports events.

VIGILANCE

Broad details of the vigil mechanism, established in your Company are given below:

- Your Company has a well-established vigilance department headed by a Chief Vigilance Officer (CVO) who is appointed on deputation from Government of India. Other vigilance officers who assist the CVO are selected on deputation basis in consultation with and concurrence of CVO. Your Company has



its vigilance set up at three locations, i.e. Corporate Office, Bhubaneswar, S&P Complex, Angul and M&R Complex, Damanjodi.

The vigilance functions are generally in the nature of preventive, punitive, surveillance and detection.

The Vigilance Department functions in brief are;

- Investigating complaints.
- Surprise checks in sensitive areas.
- Study of contract/purchase/sales files and Internal Audit Reports which are good source of information for vigilance cases.
- Suggesting system improvements.
- Circulation of CVC circulars/ guidelines.
- Giving vigilance clearances to various employees for various purposes, viz. NOC for issue of Passport, Promotion, Resignation/ Superannuation/ Voluntary Retirement, Conferment of Award, Foreign Assignment, Deputation and appointment of officers to Board level etc.
- Scrutiny of Property Returns.
- Advising management on rotation of officials in sensitive posts.
- Advising CMD on vigilance matters and matters relating to disciplinary procedures.
- Liasoning with CBI etc.
- Implementation of Integrity Pact.
- Conducting training programmes for awareness among employees and general public as a part of preventive vigilance mechanism.
- Several IT initiative undertaken like Learning Portal, Online Vigilance Clearance, Online Exit Process and Online Vigilance Portal.
- Updation of basic and vigilance data of the executives on DoPT portal.

Functions of CVO

The functions of CVO are as follows:

- Maintaining a good link with CVC and CBI besides organizing structured review meeting with CMD.
- Furnishing of various returns/reports to Ministry/ CVC/CBI.
- Assisting CVC in selection of Independent External Monitors (IEMs) for I.P (Integrity Pact).
- Assisting management in formulation/updation of anti-corruption policies/ measures.
- Assisting management in development of Integrity Index.

Whistle Blower Policy

Your Company believes in the conduct of the affairs of its constituents in a fair and transparent manner by adopting highest standards of professionalism, honesty, integrity and ethical behavior.

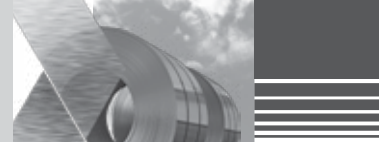
The purpose of this policy is to provide a framework to promote responsible and secure whistle blowing to prohibit managerial personnel action. It protects employees wishing to raise a concern about serious irregularities within the Company.

Details of the policy are available in the Company's website www.nalcoindia.com.

Corruption Risk Management Policy

Corruption is a special category of risk. Corruption Risk Management policy of your Company has been implemented to determine the key principles and requirement aimed at preventing corruption and compliance of anti-corruption law of India.

The policy reflects commitment of your Company and its management to high ethical standards at carrying on business in an open, transparent and honest ways aimed at improving corporate culture, compliance with the best practices in corporate governance and maintaining the business reputation in your Company.



Fraud Reporting

During the year, no fraud by the Company or any material fraud on the Company by its officers or employees has been reported by the Auditors in their report under section 143(12) of the Companies Act, 2013.

The company has a Board approved Fraud Prevention Policy and the same is placed in the Company's website: www.nalcoindia.com

Integrity Index Development

Integrity has been recognised as the integral part of a Company ensuring accountability, enhancing competency and boosting the ethical values of the personnel resulting in a corruption free environment. Integrity index is the image of a company other than financial parameters. In this regard, a framework was envisaged by CVC in 2017-18 to measure integrity index in Public Organizations for ensuring probity. 25 PSUs, State organizations and Ministry including your Company were selected by CVC for supporting IIM-Ahmedabad in developing the framework.

Performance, integrity perception, enabling systems, process management, compliances, are the broad parameters with detail questionnaire to bring out the level of probity, integrity, efficiency, transparency and compliance in the Organizations. The integrity index is to be computed based on these parameters including perceptions of the internal and external stakeholders.

Your Company responded actively by participating in the process in a time bound manner and bridging in the

gaps in the processes in many areas during the course of submission in the IID portal, which was finally submitted in February, 2018.

Online Data Updation on DoPT Portal

In line with CVC and DoPT directives, your company responded actively in regularly updating the basic and the vigilance data of the executives on the web portal "<https://doptapp.nic.in/solve/>"

RIGHT TO INFORMATION

In order to address the provisions of Right to Information Act (RTI), one Appellate Authority, one Public Information Officer and nine Assistant Public Information Officers responsible for providing information sought by stakeholders have been appointed.

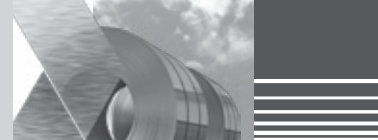
The following are the details of the RTI applications and appeals during 2018-19:

	Under Process as on 01.04. 2018	Received during the year (including cases transferred from other Public Authority)	No. of cases trans-ferred to other Public Authorities	Decisions where requests/ appeals rejected	Decisions where requests/ appeals accepted and settled	Under Process as on 31.03. 2019
Requests	18	337	Nil	107	232	16
First Appeals	Nil	61	Nil	04	56	01

The RTI requests and appeals are received and replied through both physical and online mode. Your Company is aligned with online RTI portal of Department of Personnel



National Technology Day



and Training (www.rtionline.gov.in) with effect from January, 2017.

LISTING IN STOCK EXCHANGES & PAYMENT OF LISTING FEES

The equity shares of your Company continued to be listed on BSE Limited and National Stock Exchange of India Ltd, the premier stock exchanges of the country, having nationwide trading terminals. The listing fees for the years 2018-19 and 2019-20 have been paid on time to the stock exchanges.

BUY-BACK OF SHARES AND DISINVESTMENT:

Govt. of India (GoI) shareholding was 56.59% of the total paid-up share capital after transfer of 6,98,88,827 numbers of shares to Bharat 22 ETF during 20th June, 2018 to 22nd June, 2018, as reported earlier.

During the year under review, the Board of Directors had approved the buy-back upto 6,73,11,386 fully paid-up equity shares of face value of ₹5/- each (representing 3.48% of the total no. of equity shares in the paid-up share capital of the company) at a price of ₹ 75/- per equity share each payable in cash for an aggregate consideration not exceeding ₹5,04,83,53,950/-. The Buyback offer period was opened from 13.11.2018 to 28.11.2018. (10 working days) and buyback process was completed within 56 days from the date of approval of the Board of Directors, in compliance with the provisions of the Companies Act, 2013 and SEBI Buyback Regulations, 2018. After completion of necessary formalities, final payment to the eligible shareholders was made on 04.12.2018 and shares bought back were extinguished on 07.12.2018. Post buyback, the paid-up share capital of the Company stood at ₹932.80 crores from ₹966.46 crores. The shareholding of Govt. of India post buyback stood at 56.77% of total paid-up share capital.

Further, during the year under review, GoI transferred 8,89,86,323 number of Equity Shares to Bharat 22 ETF scheme of GoI on 21.02.2019 and as on date, GoI holds 97,00,81,517 equity shares (total equity shares – 1,86,56,17,498) which is 51.998% of the total paid-up equity share capital of the your Company.

SERVICES TO SHAREHOLDERS

All matters relating to transfer/transmission of shares, issue of duplicate share certificates, payment of dividend, de-materialization and re-materialization of shares and redressal of investors grievances are carried out by the Company's RTA i.e. M/s. Karvy Fintech Pvt. Ltd., Hyderabad.

PAYMENT OF ANNUAL CUSTODY/ISSUER FEES TO DEPOSITORIES

Annual connectivity fees and custody fees/issuer fees for the years 2018-19 and 2019-20 have been paid on time to both M/s. National Securities Depository Ltd. and M/s. Central Depository Services (India) Ltd.

BUSINESS RESPONSIBILITY REPORT

In line with Regulation 34(2)(f) of SEBI (LODR) Regulations, 2015, a Business Responsibility Report for 2018-19 describing various initiatives taken by the Company on social, environmental and governance perspective, is attached at **Annexure-III** which forms part of this Annual Report.

Reports on Sustainable Development:

- The mandatory report on sustainability i.e. the Business Responsibility Report addressing the economic, environmental, social & governance aspects as required by SEBI, was completed and published & web-hosted.
- In addition to above report, a standalone report is prepared on voluntary basis, aligned with GRI G4 guidelines.

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO:

Research & Development:

- R&D Project on '1st stage trial production of Strontium modified 6XXX series Aluminium Billet & first billing' successfully completed on 08.12.2018 against MoU excellent target date of 15.12.2018.
- R&D Project on 'Fabrication and trial commercial

Panchpatmali Bauxite Mines, Koraput







Launch of Strontium Modified Aluminium Billet

use of a highly porous pervious concrete material from fly ash & first billing' successfully completed on 12.11.2018 against MoU excellent target date of 15.12.2018.

- In-House R&D units of your Company both at (i) Mines & Refinery Complex, Damanjodi and (ii) Smelter & Captive Power Complex, Angul were recertified by the Department of Scientific and Industrial Research (DSIR), Govt of India for a period of three years i.e. till 31.03.2021.
- MoU signed with M/s Eesavyasa Technology Pvt Ltd (ETPL) on 5th April, 2018 for sharing of royalty of the de-flouridization plant based on Emrion Nanotechnology.
- SysCAD software has been installed in Alumina Refinery plant which helps in various modelling studies for our Alumina Refinery plant.
- Laboratory section of NRTC has started functioning during this financial year with commissioning of major lab equipments including Thermo Gravimetric Analyser, XRD, UV Spectrometer, QEMSCAN etc. Testing of a numbers of samples of coal, bauxite, tepid ramming paste, as required by the Smelter and Refinery Plants has been done at the centre.
- One patent application has been granted and one patent application filed during the financial year.
- During the year two in-house R&D projects and four collaborative projects have been completed:
 - Collaborative project with NIT Rourkela “Embedded system for compressed air consumption monitoring in smelter plant” implemented.
 - In house project of Alumina Refinery Plant, “Replacement of synthetic flocculants by wheat bran flocculant” implemented in all three streams of plant.
 - In house project of Smelter Plant, “Improvement of oxidation behaviour of anodes” implemented in both GAPs of smelter plant.
- Eleven new collaborative R&D projects have been taken during the year. As on 31st March, 2019, five in-house projects and twenty four collaborative projects are in progress.

The particulars relating to Conservation of Energy, Technology Absorption, Foreign Exchange Earnings and Outgo, as required to be disclosed under the Companies Act, 2013 are given in the **Annexure-IV** to this report.

DIRECTORS' RESPONSIBILITY STATEMENT

Your Directors' pursuant to the provisions of Section 134(3)(c) and 134(5) of the Companies Act, 2013, hereby confirm that:



- In the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;
- The Directors had selected such accounting policies and applied them consistently and made judgments 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 and of the profit and loss of the company for that period;
- The Directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- The Directors had prepared the annual accounts on a going concern basis;
- The Directors had laid down internal financial controls to be followed by the Company and that such internal financial controls are adequate and were operating effectively; and
- The Directors had devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

CORPORATE GOVERNANCE

A report on Corporate Governance in line with Regulation 34 read with Schedule-V of SEBI (LODR) Regulations, 2015 and DPE guidelines is prepared and placed at **Annexure-V** to this report.

The Statutory Auditors of the Company have issued a certificate on Corporate Governance which is appended to the Corporate Governance Report.

CONTRACTS AND ARRANGEMENTS WITH RELATED PARTIES

The Policy on Related Party Transactions has been approved by the Board and placed in the Company's website which can be accessed at www.nalcoindia.com

Your Directors draw the attention of the members to note no. 39 of the financial statements which sets out related party disclosures.

No contract has been entered with any related party during the year under report. However, a report in Form AOC-2 is attached at **Annexure-VI** to this report.

DIRECTORS AND KEY MANAGERIAL PERSONNEL

In accordance of the provisions of the Act, the Board of Directors have appointed the following as Key Managerial Personnel:

- Dr. T. K. Chand, Chairman-cum-Managing Director.
- Shri V. Balasubramanyam, Director (Production).
- Shri B. K. Thakur, Director (HR).
- Shri S. K. Roy, Director (P&T).
- Shri P. K. Mishra, Director (Commercial) w.e.f. 23.04.2018.
- Shri S. Patra, Director (Finance) w.e.f. 01.09.2018.
- Shri N. K. Mohanty, Company Secretary.

Declaration of Independence by Independent Directors

The Company has received declaration from the Independent Directors of the Company confirming that they meet the criteria of independence as prescribed both under the Companies Act, 2013 and SEBI (LODR) Regulations, 2015.

Meetings of the Board

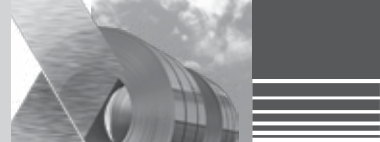
During the year, 9 (Nine) Board meetings were held. Details of the meetings are available in the report on Corporate Governance (**Annexure-V**) placed in this Annual Report.

Various Sub-committees of the Board

The details of various Sub-committees of the Board including Audit Committee, their composition, terms of reference, details of meetings held are given in the Corporate Governance Report (**Annexure-V**) placed to this report.

EXTRACT OF ANNUAL RETURN

Extract of Annual Return of the Company in the prescribed Form MGT-9 is annexed herewith as **AnnexureVII** to this Report.



GENERAL

Your Directors state that no disclosure or reporting is required in respect of the following items as there were no transactions on these items during the year under report:

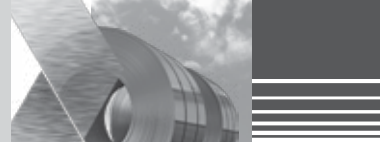
- Details relating to deposits covered under Chapter V of the Act.
- Issue of equity shares with differential rights as to dividend, voting or otherwise.
- Issue of shares, sweat equity shares and ESOS to employees of the Company.
- Neither CMD nor the Whole-time Directors of the Company receive any commission from the Company.
- No significant or material orders were passed by the Regulators or Courts or Tribunals which impact the going concern status and Company's operations in future.

Your Directors also state that no disclosure or reporting

is required in respect of the following areas as they are exempted for Government Companies by Ministry of Corporate Affairs vide notification dated 5th June, 2015, as amended and notification dated 5th July, 2017.

- Company's policy on Director's appointment and remuneration including criteria for determining qualification, attributes, independence, etc. as per Section 134(3)(e) and Section 178(2), (3) & (4).
- Manner in which formal Annual Evaluation of performance of Board, its Committees and individual Directors has been carried out as per Section 134(p) read with Rule 8 (4) of Companies (Accounts) Rules.
- Ratio of remuneration of each Director to the median remuneration of the employee and other prescribed details as per Section 197(12) read with Rule 5 of Companies (Appointment & Remuneration of Managerial Personnel) Rules.





Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013

During the year 2018-19, no case was reported under the Sexual Harassment of Women at Workplace (Prevention Prohibition & Redressal) Act, 2013.

Particulars of loans, guarantees and investments

Details of Loans, Guarantee and Investments covered under the provisions of Section 186 of the Companies Act, 2013 read with Companies (Meetings of Board and its Powers) Rules, 2014 are given in the note nos. 9 and 11 to Financial Statements 2018-19.

Subsidiaries, Joint Venture Companies and Associated Companies

In accordance with the provisions of Section 129 (3) of the Act, read with the Companies (Accounts) Rules, 2014, a report on the performance and financial position of each of the joint venture and associates and their salient features

are given in the note no. 41 and 42 of the Consolidated Financial Statements 2018-19 respectively. Salient features of JV/Associate companies in Form AOC-1 (Note 42) forms integral part of the consolidated financial statement of the Company. It is to mention that consequent upon application to MCA for striking off of the NPCIL Nalco Power Company Limited, the investment of the company in the said JV of ₹0.03 Crore has been written off.

AWARDS & ACHIEVEMENTS

- Alumina Refinery received the “**Good Green Governance Award - 2018**”, instituted by Srishti Foundation for excellent performance on Environmental Management on 22nd April, 2018 at New Delhi.
- Alumina Refinery has bagged the prestigious “**Greentech Environment Award-2018**”.
- NALCO bagged the “**Kalinga CSR Award - 2017**” in recognition of its Best CSR Activities for Sustainable





Knowledge Excellence Award to CMD



IIIE Coal India Productivity Award to NALCO

Development, during the 3rd National Seminar on “Corporate Social Responsibility Initiatives - 2018 (Evaluating Sustainable Development)” held at Bhubaneswar in June, 2018.

- Steam & Power Plant (SPP) of Alumina Refinery was awarded as “Power Plant Performer 2018 – CPP (Coal)” by Mission Energy Foundation at the “Thermal Power O&M Conference-Expo-Awards” function, held at New-Delhi.
- Dr. Tapan Kumar Chand, CMD, received “Knowledge Excellence Award” for Outstanding Contribution in Aluminium Knowledge domain, during the 22nd International Conference on Non-Ferrous Minerals and Metals 2018 at Ranchi.
- Smelter Plant of NALCO won prestigious “Golden Peacock Environment Management Award 2018” for excellent practices and significant achievements in the field of Environment Management.
- NALCO has received the prestigious “Dun & Bradstreet Award” for Excellence in Export performance.
- Dr. Tapan Kumar Chand, CMD received the “Indian Achievers’ Award” for Excellence in Business Leadership for outstanding Professional Achievement

and Inspiring Social Contributions during the National CSR Summit & Awards held at New Delhi.

- Panchpatmali Bauxite Mines bagged the 2nd Best Award in “Emergency Preparedness in Mines” during the “Half yearly Safety Week Celebrations, 2018-19” held under the banner of “Odisha Metalliferous Mines Safety Week Celebrations Committee (OMMSWCC)”.
- The Panchpatmali Bauxite Mines of NALCO bagged five prestigious awards at the concluding ceremony of 20th Mines Environment and Mineral Conservation (MEMC) week, held under the aegis of Indian Bureau of Mines, Govt of India, at Bhubaneswar.
- Alumina Refinery of NALCO has bagged the prestigious “CII-Exim Bank Business Excellence Award” for the year 2018 in the Gold Plus category.
- NALCO has bagged the “EIPC Gold Award” during the 34th EIPC Export Excellence Award ceremony at Kolkata.
- NALCO’s S&P Complex was awarded “HR Excellence” Award, instituted by Dream Foundation for adopting best practices in HR field in Angul.
- NALCO was recognised and awarded in multiple



CII - EXIM Bank Business Excellence Award to Alumina Refinery



Awards to NALCO Mines

categories including General working, Mechanical maintenance, Safety & Compliance, Safety Stall renovation and on Swachatta, during the “36th Annual Metallic Ferrous Mines Safety Week celebration held at Sukinda, Odisha”.

- Nalco received the “Brands of Odisha Pride of India CSR (Gold) Award”, instituted by The Sambad.
- NALCO has bagged the “Swachh Bharat Award” for Sanitation-Infrastructure Building & School Sanitation Initiatives during the National Swachhata Summit-2019, held in New Delhi in February 2019.
- NALCO's CMD Dr. Tapan Kumar Chand was conferred with the “CSR Leadership Award” in recognition of his initiatives to make CSR a part of the organizational culture of NALCO.
- The Honbl'e Governor of Jharkhand has conferred the prestigious “Odishara Baraputra (Business Leadership) Award” on Dr. Tapan Kumar Chand, CMD, during a function of 'Ama Utkarsh Odisha' held during February, 2019 in Mumbai, organised by the Prabasi Odia Community.
- Dr. Tapan Kumar Chand was awarded the “Global Indian Business Leader” for outstanding professional achievements and inspiring social contributions.
- Dalal Street Journal, India's top rated equity investment magazine, has rated NALCO as the fastest growing & high growth PSU in last 5 years. It has described NALCO as the Navratna of 2018.

- Dr. Tapan Kumar Chand, CMD has been given the Roll of Honour by Dalal Street Magazine for leading the company in growth path & achieving global benchmark of lowest cost producer of Bauxite & Alumina in the world.

COMMENTS OF COMPTROLLER AND AUDITOR GENERAL OF INDIA ON THE FINANCIAL STATEMENT OF THE COMPANY

Annual Financial Statements both standalone and consolidated as approved by Board has already been submitted to the office of Director General of Commercial Audit for their comments. The Comptroller and Auditor General of India has issued 'Nil' comments on the standalone and consolidated financial statements for the year ended 31.03.2019, vide letter no. 846/Co-ordn./0/1-10(NALCO)2019-20 and letter no. 971/Co-ordn./0/1-10(NALCO-CFS)2019-20 dated 26.06.2019 & 08.07.2019 issued by Director General of Commercial Audit and Member Audit Board I, Kolkata.

AUDITORS

Statutory Auditors

M/s. Guha Nandi & Co, Chartered Accountant and M/s. Patro & Co. Chartered Accountant were appointed as joint auditors of the company by the Comptroller and Auditor General of India for the financial year 2018-19.

The Statutory Auditors report on the Standalone and consolidated financial statements have already been placed before the Board in its meeting held on 30.05.2019.

Cost Auditors

In terms of the provisions of Section 148 of the Act read with the Companies (Cost Records and Audit) Amendment Rules, 2014, Cost Audit is applicable to the Company for the financial year 2018-19.

In compliance with the Companies (Audit and Auditors) Rules, 2014, the Board of Directors of the Company have on the recommendation of the Audit Committee, appointed M/s. Tanmaya S Pradhan & Co, as the Cost Auditors for the year 2018-19.

The Company will submit its Cost Audit Report to the Ministry of Corporate Affairs within the stipulated time period.

It is to mention that based on the recommendation of the Audit Committee, Board of Directors have appointed M/s. Niran & Co., Cost Accountants, as the Cost Auditors of the Company for the year 2019-20.

Secretarial Auditors

M/s. Deba Mohapatra & Co., Practicing Company Secretaries were appointed for undertaking Secretarial Audit job of your Company for 2018-19 in terms of Section 204 of the Companies Act, 2013 and Rules made there under. The report of the Secretarial Auditors is enclosed as **AnnexureVIII** to this report.

Internal Auditors

The Company has appointed the following CA firms for carrying out Internal Audit functions of the Company for the financial year 2018-19:

- (a) M/s. Rao & Kumar for Mines & Refinery complex, Damanjodi & Port Facilities, Visakhapatnam.
- (b) M/s. B N Mishra & Co. for Smelter Division, Angul. (w.e.f. 01.07.2018)
- (c) M/s. Tej, Raj & Pal. for CPP Division, Angul. (w.e.f. 01.07.2018)



- (d) M/s. SRB & Associates for Corporate Office, Bhubaneswar.
- (e) M/s. MKPS & Associates for Western Regional Office, Mumbai.
- (f) M/s. Prabir Ranjan Datta & Co. for Eastern Regional Office, Kolkata.
- (g) M/s. Raghavan & Muralidharan for Southern Regional Office, Chennai.
- (h) M/s. Bhatia & Bhatia for Northern Regional Office, New Delhi.

DIRECTORS

The following changes took place in the Board of Directors of your Company since the last report:

Appointment

- Shri Sridhar Patra was appointed as Director (Finance) of the Company w.e.f. 01.09.2018.

- Shri D. Mahanta, Shri S. Sankararaman, Shri P. K. Nayak, Prof. D. Acharya and Shri M. Sahu, Independent Directors were appointed by Govt. of India for a period of three years w.e.f. 21.11.2015 and their tenure ended on 20.11.2018. Subsequently, Govt. of India vide order no. 2(7)/2016-Met.I dated 19.11.2018 have re-appointed them for further period of one year w.e.f. 21.11.2018. Their re-appointment as Additional Directors and necessary special resolutions for appointing them as regular Directors have been proposed to be passed in the ensuing 38th AGM.

Cessation

- Shri K. C. Samal ceased to be Director (Finance) on the Board of your Company w.e.f 31.08.2018.

Your Directors wish to place on record their appreciation for the valuable services rendered by Shri K. C. Samal during his tenure on the Board of your Company.

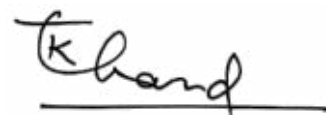


ACKNOWLEDGEMENT

Your Directors acknowledge the excellent support extended by Government of India particularly Ministry of Mines, DIPAM, DPE and other Ministries/Departments of the Government of India, GRIDCO, various Ministries/ Department of the Government of Odisha, Mahanadi Coalfields Ltd., Indian Railways, Comptroller and Auditor General of India, the Director General of Commercial Audit & Ex-officio Member, Audit Board, Kolkata, Statutory Auditors, Cost Auditors, Secretarial Auditors, Internal Auditors, Bankers, SBI Capital Markets Limited, Karvy Fintech Private Limited, Solicitors, JV Partners, Business Associates, other Government agencies, other CPSEs, valued and esteemed domestic and international customers, vendors and look forward for maintaining such mutually supportive business relationship in the coming years too.

Last but not the least, your Directors also place on record their deep sense of appreciation for the dedication, commitment, enthusiasm, unstinting efforts and sincere services rendered by the employees at various levels and particularly the active support and co-operation received from the Trade Unions & Officers' Associations for sustained improvements for yet another year of stellar performance. The Company's consistent growth was made possible due to their hard work, solidarity, co-operation and support.

For and on behalf of Board of Directors



Place: Bhubaneswar

(Dr. Tapan Kumar Chand)

Date: 06.08.2019

Chairman-cum-Managing Director



Yoga Day celebration

ANNUAL REPORT ON CSR ACTIVITIES: 2018-19

1. **A brief outline of the Company's CSR Policy, including overview of projects or programs proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programs.**

NALCO is committed to ensure inclusive growth of the marginalised sections of the society through its CSR interventions in peripheral villages near to its operations. It continues to address issues related to People, Planet & Profit for sustained growth of its business. As per the mandate of Companies Act 2013, since 2014-15 onwards, the company has been spending 2% of its average net profit during the three immediately preceding financial years under different heads stipulated under Schedule VII of the Companies Act, 2013.

The detailed Board approved CSR Policy of the Company is placed at Company's website i.e. www.nalcoindia.com.

Following is the overview of the initiatives, the Company is continually giving focus:

- **Indradhanush:** Poor tribal children from Maoist-infested villages of Koraput are sponsored for free residential education in reputed schools in the State of Odisha.
- **Nalco Ki Ladli:** To enhance the literacy rate of women and to bridge the gender inequality in Koraput and Angul district of Odisha, the Company adopts meritorious girl students of BPL families for their education by providing financial assistance.
- **Door step Health service in peripheral villages:** To provide health care at the remote peripheral areas, the Company is operating Mobile Health Units inclusive of basic medicines by treating more than 1 lakh patients every year in periphery villages. In FY 2018-19, more than 1.5 lakhs patients benefitted by MHU service.
- **Drinking water facility for the needy:** Providing safe drinking water in the water scarce periphery villages as well as pilgrims during world famous Ratha Yatra at Puri.
- **Support to Skill India:** Various Skill training to unemployed youths of the peripheral areas to make them employable.
- **Swachh Bharat initiatives:** Swachh iconic shrine development, swachh vidyalaya & ODF villages towards cleanliness, hygiene and overall wellbeing are taken up.
- **Rural infrastructure building:** Construction of roads, culverts, drains, shelter homes, renovation and revamping of community centers and water bodies in the periphery areas are carried out.

2. **The Composition of the CSR Committee:**

Shri D. Mahanta, Independent Director, Chairman

Shri S. Sankararaman, Independent Director

Shri M. Sahu, Independent Director

Smt. Kiran Ghai Sinha, Independent Director

Shri N.N. Sharma, Independent Director

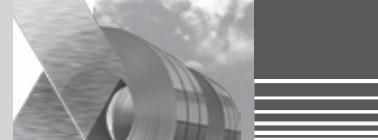
Shri V. Balasubramanyam, Director (Production)

Shri B.K.Thakur, Director (HR)

Shri S.Patra, Director (Finance)

3. **Average net Profit of the company for last three financial years:**

₹1,36,916.00 lakh.



4. Prescribed CSR expenditure (two percent of the amount as in item 3 above):

As per guidelines under Schedule VII of the Companies Act, 2013, the prescribed CSR expenditure for 2018-19 is ₹2,738.00 lakh.

5. Details of CSR spent during the financial year:

(a) Total amount spent for the financial year:

₹3,034.92lakh

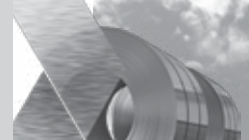
(b) Amount unspent, if any

Nil

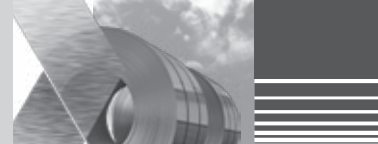
(c) Manner in which the amount spent during the financial year is detailed

(₹ in lakh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Sl. No.	CSR Project or activity identified	Sector in which the Project is covered	Projects or programs (1) Local areas or other (2) Specify the State and district where projects or programs was undertaken	Amount outlay (budget) project or program wise	Amount spent on the projects or programs Sub-head : (1) Direct expenditure on projects or programs (2) Overheads	Cumulative expenditure up to the reporting period	Amount spent: Direct or through implementing Agency
01	Health outreach Program- Mobile Medical Units, Diagnostic & awareness building through Information, Education, Communication (IEC) activities.	Point No.(i) of Schedule VII-Promoting preventive health care	Koraput & Angul District of Odisha.	361.00	143.85	867.68	Nalco Foundation & directly by the Company
02	(a) Construction of Toilets under SVA, Construction of House Hold Toilets under ODF initiative, School Toilets, Provision of water supply to toilets constructed under Swachh Vidyalaya Abhiyan.	Point No.(i) of Schedule VII-Promoting preventive health care and sanitation	Koraput & Angul District of Odisha & Visakhapatnam and Kakinada in Andhra Pradesh	100.00	53.21	983.29	Nalco Foundation & directly by the Company
	(b) Swachh Iconic City Project-Puri	Point No.(i) of Schedule VII-Promoting preventive health care and sanitation	Puri district of Odisha	476.67	91.60	733.06	Nalco Foundation & directly by the Company
03	Providing safe drinking water to periphery villages of plants and during Ratha Yatra at Puri	Point No.(i) of Schedule VII-Making available safe drinking water.	Angul, Koraput & Puri district of Odisha	366.47	301.64	517.75	Nalco Foundation & directly by the Company
04	Promoting education, a) sponsoring formal education of tribal children in reputed residential schools, b) Supporting Nalco ki Ladli c) Quality education to students of periphery area at Saraswati Vidya Mandir Angul & Damanjodi.	Point No.(ii) of Schedule VII-Promoting education including special education	Koraput, Angul and Khurda District of Odisha & Varanasi in Uttar Pradesh	539.12	1,910.60	7,922.02	Nalco Foundation



(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
05	Providing employment enhancing training to unemployed youth	Point No.(ii) of Schedule VII- Employment enhancing vocational skill	Angul, Koraput & Khurda district of Odisha and Gwalior in Madhya Pradesh	707.93	172.41	347.22	Directly by the Company
06	Empowering women through distribution of Charkha to women weaver & spinner in villages	Point No.(iii) of Schedule VII-Employment women	Khurda , Koraput and Puri district of Odisha	0.00	0.00	13.50	Nalco Foundation
07	Ensuring environmental sustainability, ecological balance through plantation, roof top solar power system.	Point No.(iv) of Schedule VII- Ensuring environmental sustainability, ecological balance	Koraput & Khurda district of Odisha	251.76	110.22	509.88	Nalco Foundation & directly by the Company
08	Contribution towards protection of national heritage and culture and development of traditional arts and handicrafts.	Point No.(v) of Schedule VII- Protection of national heritage , art & culture	Koraput, & Sambalpur district of Odisha	70.00	50.85	203.72	Directly by the Company
09	Promotion of Rural Sports	Point No.(vii) of Schedule VII-training to promote rural sports, Nationally recognized Sports, Para-Olympic sports & Olympic sports	Koraput district of Odisha	9.25	9.25	9.25	Nalco Foundation
10	Contribution to the Prime Minister's relief Fund/ Central Govt. Fund for socio-economic development/ welfare of SC/ST/OBC/ Minorities/ Women	Point No.(viii) of Schedule VII- Contribution to Prime Minister's Relief Fund or any other fund set up by Central Govt.	PAN India	0.00	0.00	400.00	Nalco Foundation
11	Rural development activities in periphery villages and other areas.	Point No. (x) of Schedule VII- Rural development projects.	Angul and Koraput district of Odisha, Gwalior and Shivapuri district of Madhya Pradesh & Vizianagaram and Visakhapatnam district in Andhra Pradesh	340.83	62.71	760.00	Nalco Foundation & directly by the Company
12	Administrative Expenditure for carrying various CSR Projects/Programme	—	—	195.00	128.58	241.10	Nalco Foundation
	Total:				3,034.92	13,508.47	



- Sl. No. 6 and Sl. No. 10 of the above table are running projects.
- Cumulative expenditure at column 7 of the above table is since FY: 2014-15.
- The above CSR expenditure forms part of the financial statements for the year 2018-19.
- NALCO Foundation, the CSR arm of NALCO is a Trust under Indian Trust Act exclusively set up to take up CSR activities of the Company.
- Most of the projects have been executed by NALCO Foundation, the CSR arm of NALCO in association with appropriate NGO's operating within the operational areas of the Company.

6. In case the Company has failed to spend the two percent 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 spent the two percent of the average of Profit of the last three financial years.

7. Future CSR Strategy:

Apart from ensuring sustainable growth in the areas in which the company operates by taking up various CSR schemes, NALCO also takes up welfare schemes like Swachh Bharat, Beti-Bachao-Beti-Padhao, Iconic shrine development, Skill India initiatives, etc. in line with national priorities. Moreover, its popular CSR scheme 'Nalco-Ki-Ladli' in line with Beti-Bachao-Beti-Padhao which promotes quality education to the meritorious girl children is being scaled up to pan-India level with a view to contribute in a meaningful way for the noble cause of bridging the gender inequality.

8. The implementation and monitoring of CSR Policy, is in compliance with CSR objectives and policy of the Company.

Sd/-

(Dr. T.K. Chand)

Chairman-cum-Managing Director

Sd/-

(Dipankar Mahanta)

Independent Director & Chairman
CSR & Sustainability Development Committee

MANAGEMENT DISCUSSION & ANALYSIS REPORT

INDUSTRY STRUCTURE AND DEVELOPMENTS:

Alumina:

During the Year 2018, total World Production of Metallurgical Grade Alumina (MGA) was 123.15 Million Tonnes, registering an increase of 0.6% over 122.42 Million Tonnes produced during 2017. Alumina consumption during 2018 was 123.95 Million Tonnes as against 122.72 Million Tonnes consumed during 2017, exhibiting a YoY increase of 1.0%. China was the major contributor in both production and consumption, having 57.1% share in production and 56.9% share in consumption of Alumina. World metallurgical grade alumina demand is expected to reach 129.88 Million tonnes in 2019, representing a year-on-year increase of 4.8%. However, the Alumina market is expected to remain in slight surplus of 0.7 Million Tonnes in 2019 with an expected production of 130.60 Million Tonnes.

Total Alumina production in India during the Financial Year 2018-19 was 65 Lakh Tonnes, thereby registering a YoY growth of 3.5%. Out of this, Nalco's contribution was 21.07 Lakhs (32%).

The bullish story that characterized alumina prices in 2018 is approaching its end. Norsk Hydro has started resuming production at Alunorte, and is expected to reach 75-85% of full capacity by August/September 2019. Emirates Global Aluminium is about to commence operations at the first phase of the 2M t/y Al Taweelah refinery.

World bauxite production during 2018 was around 320.2 million tonnes, which is 0.9% higher than 317.3 million tonnes produced in 2017. Global bauxite production during 2019 is expected to be around 340.6 million tonnes. Chinese refineries are rapidly switching to imported bauxite sources, and China is now importing record tonnages of bauxite. China imported over 25.8M tonnes of bauxite in Q1 2019, which is equivalent to over 65.5% of total Chinese bauxite demand during that time.

Aluminium:

World production of Aluminium during the year 2018 was 63.71 Million Tonnes, registering a meagre increase of 0.3% over production figures of 63.49 Million Tonnes achieved in 2017. At the same time, worldwide consumption of Aluminium increased 3.1% from 63.41 Million Tonnes in 2017 to 65.39 Million Tonnes in 2018. The market, thus, stayed in deficit of around 1.7 million tonnes during 2018. China was the largest producer as well as consumer during the year, contributing 57% share of the world production (36.15 Million Tonnes) and 55% of the world consumption (35.71 Million Tonnes) of Aluminium. China registered a negative aluminium production growth of 0.3% during 2018, while the rest of the world exhibited 1.2% growth in production. As far as Aluminium consumption is concerned, China registered 3.9% growth during 2018, while the rest of the world registered 2.2% growth. During FY 2018-19, consumption of Aluminium in India grew by 9.7%.

The average LME Cash Settlement Price during the Financial year 2018-19 was USD 2,036/- per MT, dropping 0.5% against the corresponding figure of USD 2,045/- per MT during 2017-18. The price rose during the first half of the year, but has kept low since October, 2018.

Estimated global Aluminium stocks at the end of Financial Year 2018-19 stood at 11.69 Million Tonnes, registering a decline of 11.54% against stocks of 13.22 Million Tonnes at the end of Financial Year 2017-18.

The global market deficit of about 1.7 Million Tonnes in 2018 is expected to reduce to about 1.0 Million Tonnes in 2019 with removal of US sanctions on UC Rusal and with resumption of full production of Alunorte Refinery.



STRENGTHS AND WEAKNESSES:

Strengths:

- Presence in both Domestic and Overseas Markets for its products, i.e., Aluminium and Alumina: Nalco's products have earned reputation in both domestic and global markets for adherence to highest quality standards, both in the Alumina as well as the Aluminium markets.
- Transparent pricing and marketing policies for both domestic and export markets: Sale of Nalco's Alumina and Aluminium products in the overseas markets are carried out through transparent 2-stage open global tenders. In the domestic market, MoU schemes have been operated successfully over the years, leading to large number of customers. MoU schemes allow Nalco to cater to various customers from different industries and across geographic locations. Pricing is also made in a systematic and objective manner.
- Multimodal logistics system for efficient service to customers: Nalco deploys an optimal mix of multimodal logistics for transportation of its products to its stockyards for domestic sales and to the ports for export sales. This helps in offering options to customers while taking deliveries.
- Regular tracking of feedback from customers and objective measurement of their satisfaction level.
- Wood Mackenzie have rated NALCO as lowest cost manufacturers of Bauxite and Alumina in world for 2018.

Weaknesses:

- Limited production capacity and product portfolio in both Aluminium and Alumina markets: Nalco's limited production capacity does not enable it to produce a wider range of products, which could help in enhancing Nalco's market penetration and market share
- Technological upgradation, expansion and downstream projects, planned to be taken up. Near future will address the above weakness.

OPPORTUNITIES AND THREATS:

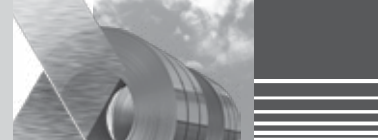
Opportunities:

Aluminium is an essential part of our daily lives. It is the third most abundant element after oxygen and silicon and the most abundant metal in the crust, constituting more than 8% of the earth's crust. As the sustainable material of choice, its applications span from everyday items like fuel-efficient vehicles and cans to cutting edge technologies. Combining strength and versatility, aluminium can be made thin enough to be crushed by human hands. At the same time, it can stand up to the most extreme applications, such as military aviation or space travel.

Its density is one-third that of steel. In vehicles, aluminium reduces weight and fuel consumption. Aluminium's strength can be adapted to different applications by modifying the composition of its alloys. Certain alloys are as strong as steel. Aluminium naturally generates a protective oxide coating, making it corrosion resistant and particularly useful for protection and conservation. Based on weight, aluminium is twice as good a conductor of heat and electricity as copper, and it plays a major role in power transmission lines. Its excellent formability enables manufacturing of deep-drawn and/or complex shapes like cans or car body parts. As a reflector of heat and light, aluminium is well-suited for applications such as solar technology and rescue blankets. Properly coated aluminium roofs can reflect up to 95% of the solar energy that strikes them, dramatically improving energy efficiency. Releasing no taste or toxins, aluminium is ideal for food and pharmaceutical packaging. Aluminium foil provides a complete barrier to light, oxygen, moisture, and bacteria. Aluminium is 100% and infinitely recyclable with no deterioration in quality.

The principal user segment in India for aluminium continues to be electrical and electronics sector followed by the automotive and transportation, building, construction, packaging, consumer durables, industrial and other applications including defence. Demand of aluminium in India is expected to grow at 7-8 per cent per annum and this will be driven by growth in sectors like electricity, transport, building, construction and packaging.

The Government of India is expected to invest highly in the infrastructure sector, mainly highways, renewable energy and urban transport, during the coming years. During Union Budget 2019-20, Government of India has allocated ₹4.56 lakh crore (USD 63.20



billion) for the sector, which includes development of post and telecommunications departments, Railways, road transport and highway, Green Energy Corridor Project, wind and solar power projects, telecom infrastructure, water supply and healthcare. All these massive investments are likely to boost Aluminium demand in the near future.

Threats:

Potential threats to Aluminium industry include the apparent slowdown in Chinese Aluminium demand, which prompts the Chinese aluminium producers to resort to increased exports of their produce. China exported a record 5.8 Mt of Aluminium in 2018, and there are no signs of reduction in the trend in 2019. Coupled with the trade tensions between US and the resultant trade tariffs, China is likely to be on the lookout for alternate markets for its Aluminium surplus, which in turn will push the Aluminium prices lower. Steady increase in crude oil and petroleum prices, along with volatility in raw material costs also lead to increased cost of production for the Aluminium producers, and is a serious threat to their sustainability. Another threat includes crackdown by Governments against environmental hazards associated with discharge of red mud or air pollution due to coal based power plants, as witnessed in case of Alunorte refinery and in China. The threat of substitutes like improvised steel, PVC, engineered wood, glass, carbon fibre, composites etc. are also perennial in nature.

Domestic primary aluminium manufacturers also face competition from scrap imports by secondary aluminium producers, which keep increasing every year and eat into the primary producers' domestic market share. In fact, quantity of Aluminium scrap imports in India has increased from 8.7 Lakh MT in 2015-16 to 13.5 Lakh MT in 2018-19, i.e., by around 56% in the last three years.

OUTLOOK FOR FUTURE:

International Outlook:

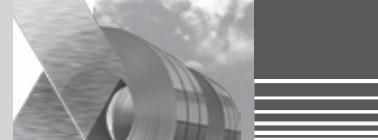
The Global outlook for Aluminium remains positive, despite trade wars among major economies. Global consumption of Aluminium is likely to reach 68.3 Million Tonnes in 2019, registering a y-o-y growth of 4.1%. Global Aluminium Production is likely to increase by 4.8% at 67.2 Million Tonnes. Overall there is likely to be a deficit of around 1.0 Million Tonnes. While this is bullish for prices, aluminium has not responded as the market was focused on other factors.

Production in China in 2019 is expected to grow 1.1% year-on-year, after reducing slightly in 2018. Chinese demand has continued to weaken. Consumption always slows on a seasonal basis in the early part of a year, but year-on-year growth has slowed sharply as well, with weakness in demand from the auto and construction sectors more pronounced in recent months. Total shipments from semis producers have been supported by continued sharp increases in export levels, and this is despite anti-dumping actions against Chinese common alloy sheet and foil from the US. However, there are threats to Chinese exports, concern is growing in Europe over the growth of imports from China, particularly for rolled products.

In the US, 2019 auto sales are off to a slow start adding to uncertainty for US demand in 2019. With fewer orders coming, record long backlogs are declining, and will likely lead to a drop off in build rates and aluminium demand in 2020, but for now 2019 appears to be on strong footing. The construction industry exhibited a decline in billings. The decrease was blamed on bad late winter weather.

European aluminium markets remain under pressure due to the impact of an economic slowdown in Europe and persistent competition from foreign suppliers of aluminium semis. While economic data shows an improvement in German industrial output and Western European monthly car production, suppliers continue to report a slowdown in orders, weakening prices and narrowing lead times across selected semi-finished products markets.

Global Aluminium markets are in a period of uncertainty, which has been reflected in lower prices in 2019. Potential escalation in US-China trade war is undermining global risk sentiment in the Aluminium market. Any increase in tariffs by the US is likely to dampen market sentiment, with Beijing also ready to retaliate to any escalation in the situation. Moreover, a new executive order by the US focuses on Iran's metals industry, imposing sanctions on steel, aluminium, iron and copper. The LME price in the short term



will be heavily influenced by the geopolitical situation, with any new tariffs creating significant downside risks to the price. Continued strengthening of US Dollar is also deterring investors. The average LME Aluminium price during Jan-Mar 2019 was USD 1,859 PMT, well below the USD 2,159 PMT registered during Q1 2018.

Domestic Outlook:

As per monetary policy published by RBI in June, 2019, India's GDP is likely to exhibit growth rate of 7.0 per cent in 2019-20, in the range of 6.4% to 6.7% during H1 and 7.2% to 7.5% during H2. India's (GDP) growth will be 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. A snapshot of Aluminium Production, Domestic sales and Exports by Primary producers, along with Aluminium consumption in India, is tabulated hereunder:

Description	2017-18	2018-19	Change (%)
Aluminium Production ('000 MT)	3,383.6	3,695.1	9.21
Aluminium Domestic Sales ('000 MT)	1,663.0	1,654.2	-0.53
Aluminium Export Sales ('000 MT)	1,724.4	2,037.6	18.17
Aluminium Imports ('000 MT)	1,957.6	2,317.7	18.38
Total Aluminium Consumption ('000 MT)	3,620.8	3,971.8	9.70

The Domestic Demand for aluminium in India is expected to benefit from the Infrastructure projects prioritized by the government. The government's thrust on the power which sector is the dominant consumer of aluminium in India, augurs well for the aluminium industry. The Automobile and food packaging industries are also expected to stoke aluminium growth. Furthermore, rapid urbanization should augment consumer demand, yet another positive for the sector. Moreover the per capita aluminium consumption is far below the global average. This offers a huge potential, given our demographic and economic outlook.

RISKS & CONCERNS:

Volatility in LME prices, fluctuations in US Dollar exchange rates, fluctuation in global production of aluminium metal, slowdown in the global economy and growing competition from secondary producers in the domestic market are the regular concerns. However, increase in prices of inputs particularly Caustic Soda, C P Coke, C T Pitch, Aluminum Fluoride and availability of Linkage Coal remained as concern during part of the year.

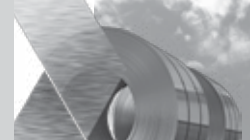
RISK MANAGEMENT:

The Company has a Risk Management Policy, which inter-alia incorporates guidelines issued by Government of India from time to time. Risk Management is under taken as a part of normal business practice and that as separate tasks at set time. The Company has a Risk Management Committee at Board level. The Committee reviews the exceptional Risk Reports and advise remedial measures from time to time. The risk mitigation measures are periodically reviewed to ensure that executive management controls risk through means of a properly defined framework. Periodical review is made to identify new risk areas along with mitigation plans. For the identified risks, the nominated risk officers maintain risk registers in prescribed format which are also overviewed by Internal Auditors of the Company as well as at senior management level. Deviations, if any, are reported to the Risk Management Committee

INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY:

The Company has a well-established and adequate system of internal control commensurate with the size and nature of its business. The Company's Internal Control System has been designed to provide for:

- Compliance with applicable statutes, policies & procedures, rules & regulations and delegated authority.
- Adherence to applicable Accounting Standards and Policies.
- Proper recording of transactions & timely reporting.
- Effective use of resources and efficient operations.
- Safeguarding of assets.



As per Section 134(5)(e) of the Companies Act, 2013, the Directors have an overall responsibility for ensuring that the Company has implemented system and framework of Internal Financial Controls, which are adequate and operating effectively.

The Company has well designed policies, procedures & guidelines in place to ensure control of its different areas of business operations and reporting. This includes delegation of powers, various manuals, rules, policies and guidelines formulated by the Company from time to time. The approved policies, procedures & guidelines are effectively and responsibly being used while executing business of the Company. The Company has developed & implemented an Internal Financial Control framework duly approved by the Audit Committee which includes internally entity level policies/processes and operating level standard operating procedures primarily aiming at bringing awareness amongst the officials dealing with affairs of the Company so as to ensure adherence of the policies, procedures, guidelines designed and put in place for effective control. This provides the Directors with reasonable assurance regarding the adequacy and operating effectiveness of controls with regard to reporting, operational and compliance risks.

Financial Statements are prepared in compliance with applicable Accounting Standards & on the basis of the Significant Accounting Policies as adopted by the Company duly approved by the Audit Committee and the Board. These Policies apply uniformly across the Company. The Accounting Policies supported by standard operating procedures are reviewed and updated from time to time. The Company uses ERP Systems as a business enabler and also to maintain its Books of Account. The Standard Operating Procedures and transactional controls built into the ERP Systems ensure proper recording, approval mechanisms and maintenance of records. The systems, standard operating procedures and controls are reviewed by management from time to time.

To ensure adequate internal control over financial reporting, the Company has incorporated in its Internal Financial Control framework, a detailed checklist covering all relevant areas affecting financial reporting.

The Company has entrusted its internal audit function to external Chartered Accountants' Firms to carry out audits at all locations and functional areas. The internal auditors have access to all the information in the organization which has been largely facilitated by ERP implementation across the organizations. The observations of internal auditors arising out of audits are periodically reviewed at appropriate level and compliances is ensured.

Material observations of internal auditors are submitted to Audit Committee for its review, analysis and advice to further strengthen internal control system. Action Taken Report thereon is submitted to Audit Committee periodically.

During the year, controls were tested and no reportable material weakness in design and effectiveness was observed as certified by Internal Auditors and as opined by Statutory Auditors in their report. The Company recognizes that the internal control framework needs to be regularly reviewed & revised to ensure that such systems are reinforced on an ongoing basis in consonance with changing business environment.

DISCUSSION ON FINANCIAL PERFORMANCE WITH RESPECT TO OPERATIONAL PERFORMANCE:

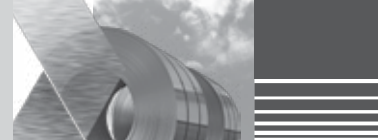
A) Financial Operation:

i) Revenue from Operation:

₹ in crores

Particulars	FY 2018-19	FY 2017-18	Change%
Export Turnover	4,792.71	4,075.46	18
Domestic Turnover	6,593.61	5,429.66	21
Gross Turnover	11,386.32	9,505.12	20
Other Operating Income	113.00	113.19	—
Total	11,499.33	9,618.31	20

It may be mentioned that consequent upon introduction of GST w.e.f. 1st of July, 2017, excise duty on sales which was included in the gross turnover is dispensed with. Hence gross domestic turnover for the year 2017-18 includes excise duty amounting to ₹128.96 crore collected on sales till 30th June, 2017 and no excise duty is included in gross turnover of 2018-19. The net domestic sale during the year has increased from ₹5,300.70 crore to ₹6,593.61 crore as compared to previous financial year registering a growth of about 24%.



Sales turnover during the year has increased over the preceding year primarily due to increase in average sales realization of both Alumina and Aluminium and increase in volume of Aluminium sales.

Average Sales realization of Aluminium has increased from ₹1,42,890 to ₹1,54,872 per MT and that of Alumina has increased from ₹23,866 to ₹33,935 per MT as compared to the previous year. Similarly the domestic sales volume of Aluminium and Alumina has increased by about 15% and 21% respectively.

During the financial year 2018-19, though there is a decrease in sales volume of Alumina from 13.37 Lakh MT to 13.18 Lakh MT, sales volume Aluminium has increased from 4.26 Lakh MT to 4.41 Lakh MT as compared to the previous year.

Other Operating Income during the year remains at the same level as that of previous financial year. Increase in export incentives on Aluminium due to increase in sales volume was countered with export incentives on Alumina due to decrease in sales volume. Similarly, increase in incentives on renewable power generation mainly due to increase in wind power generation was countered with decrease in finished goods internally consumed.

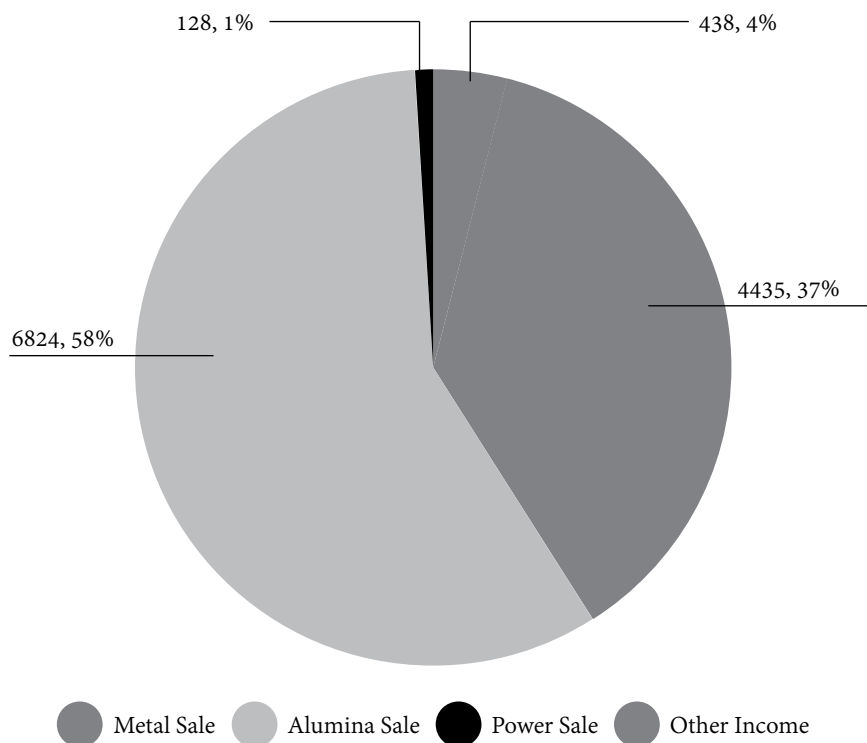
II. Other Income (Non-operating):

₹ in crores

Particulars	FY 2018-19	FY 2017-18	Change%
Other Income	325.87	299.65	9

Other non-operating Income is more compared to previous year mainly on account of higher investible surplus and higher yield as compared to previous year.

Income Breakup: FY 2018-19



Note: Other income includes operating income i.e. export incentive and incentive on generation of renewable energy and non-operating income i.e. income from investment in FD, Mutual fund and other miscellaneous income.



III. Expenditure:

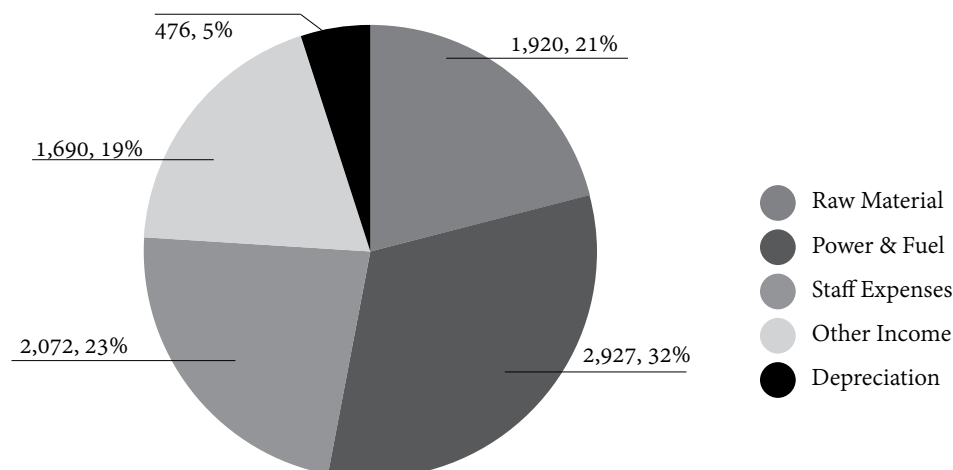
₹ in crores

Particulars	FY 2018-19	FY 2017-18	Change%
Raw Materials Consumed	1,919.68	1,465.31	31
Power & Fuel	2,927.12	2,747.92	7
Employee Benefit Expenses	2,072.28	2,261.20	(8)
Stock Accretion/Depletion	(5.08)	47.43	(111)
Other Expenses	1,692.79	1,590.14	6
Finance Cost	2.38	1.95	22
Depreciation	476.10	480.40	(1)
Excise Duty*	—	108.86	100
TOTAL	9,085.27	8,703.21	17

* Excise duty was subsumed with GST since 01.07.2017

- Increase in Raw material expenses compared to previous year is primarily attributable to increase in price of raw material like CP Coke, CT Pitch and Caustic Soda and increase in production volume of Alumina Hydrate and Aluminium metal. However, lower specific consumption of CP Coke, CT Pitch and Caustic Soda has reduced the expenditure partially.
- Increase in Power & Fuel cost is primarily attributable to higher effective price of Coal at CPP attributable to change in coal mix, increase in the price of HFO, increase in the rate of electricity duty from 30 paise to 55 paise per unit which was effective from 12th May, 2017.
- Decrease in Employee benefit expenses is mainly attributable to higher gratuity liability consequent upon increase in statutory gratuity ceiling from ₹10 lakh to ₹20 lakh w.e.f 29.03.2018 and increase in provisions towards Post-retirement Medical Benefit Schemes provided during 2017-18 consequent upon change in PRMBS scheme by the Company, which is not repeated in 2018-19. This decrease in employees benefit expenses is partially set-off by increase in PRP expenses for 2018-19 and increase in long term employees benefit expenses due to long term wage settlement of employees.
- The other expenses during 2018-19 has increased mainly due to increase in amortization of prepaid lease premium upon recognition of lease liability demanded by GoI and increase in royalty expenses with increase in bauxite production and higher LME. Increase in other expenses was partially set off by decrease in RPO expenses due to fall in trading prices of solar renewable energy certificates.

Expenditure Breakup: FY 2018-19



Note: Other expenses includes repair & maintenance, consumption of stores and spares, other manufacturing expenses, general administrative expenses, stock accretion and depletion, finance cost and S&D expenses.

IV. Profit After Tax and Earnings Per Share:

₹ in Crores

Particulars	FY 2018-19	FY 2017-18
Profit before Tax	2,739.92	2,038.83
Tax Expenses	1,007.52	696.42
Profit after Tax	1,732.4	1,342.41
Earnings per Share (of Rs.5/- each)	9.06	6.94

V. Significant changes in the Key Financial Ratios:

Particulars	FY 2018-19	FY-2017-18	Change
Operating profit Margin	25.4%	14.90%	70%
Return on net worth	16.52%	12.78%	29%

Note: The increase in operating profit margin is attributable to higher operating profit during the year on account of increase in sales realization of Alumina and Aluminium by 42% and 8% respectively.

The increase in return on networth is attributable to higher profit after tax earned during the year 2018-19 and decrease in networth consequent upon buyback of share and dividend payout.

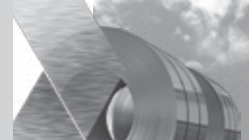
VI. Dividend Particulars:

Particulars	FY 2018-19	FY 2017-18
Interim Dividend (%)	90	94
Final Dividend (%)	25	20
Total (%)	115	114

B) Financial Positions:

₹ in Crores

Particulars	FY 2018-19	FY 2017-18	Change %
Assets			
Property, Plant & Equipment	7,953.28	7,845.21	1
Intangibles	215.21	209.47	3
Investments	256.59	710.57	(64)
Inventories	1,210.01	1,194.08	1
Trade Receivables	240.52	258.13	(7)
Cash & Bank	3,496.35	2,768.95	26
Loans	100.49	104.25	(4)
Other Financial Assets	11.60	165.69	(93)
Current Tax Assets	51.26	33.66	52
Other assets	1,611.65	1,323.79	22
Total	15,146.96	14,613.80	—
Equity & Liabilities			
Equity share capital	932.81	966.46	(3)
Reserve & Surplus	9,551.70	9,538.35	0.14
Deferred Tax Liability	1,130.67	1,151.45	(2)
Trade payable	1,306.91	977.37	34



Particulars	FY 2018-19	FY 2017-18	Change %
Borrowings	66.79	44.99	48
Other Financial liabilities	417.56	515.72	(19)
Provisions	696.44	811.97	(14)
Other Liabilities	1,044.08	607.49	72
Total	15,146.96	14,613.80	—

- Increase in the carrying amount of Property, Plant & Equipments is attributable to capitalization of additional plant and machineries required for South block operation of Mines, Ash pond at Refinery, Fire water hydrant at Smelter and progress in capital work for IP-LP turbine module and Lean slurry project at CPP.
- Investment in Mutual fund has decreased primarily due to utilization of fund for buyback of shares and dividend distribution. Surplus funds generated during the year was primarily invested in fixed deposits for better return and in compliance to investment guidelines issued by DPE. However, equity contribution has been made to the JV companies to an extent of ₹58.20 crore during the year.
- Trade receivable has decreased marginally due to decrease in bills remained unrealized both in Alumina & Aluminium compared to previous year.
- Increase in Cash and bank balances is mainly due to internal accruals. The cash and bank balance at the reporting date comprises of deposits with bank as short term investments and amount deposited in the account designated for the purpose of unpaid disputed electricity duty.
- Reserve & surplus has increased primarily on account of the residual profit after appropriation.
- Trade payables has gone up due increase in accrued wages and salaries consequent upon long term wage settlement for non-executive employees.
- The Company has transferred the required amount out of provisions, as assessed by the Actuary, created during 2017-18 to NALCO Group Gratuity Trust to meet enhanced gratuity limit subsequent to amendment in Payment of Gratuity Act, 1972 by Govt. of India resulting decrease in provisions during 2018-19.
- Increase in other liabilities during the year is primarily due to recognition of stamp duty demanded by Govt. of Odisha and increase in unpaid electricity duty liability.

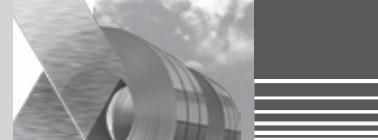
I. Key Financial Ratios:

Sl. No.	Particulars	2018-19	2017-18
1.	PAT/ Net worth	16.52%	12.78%
2.	EBIT/Net sales	24.08%	12.98%
3.	EBIT/ Capital Employed	26.75%	12.32%

II. Segment wise information:

Sl. No.	Particulars	Chemicals(Alumina)		Aluminium		Un-allocable		Total
		₹ in Crores	Share (%)	₹ in Crores	Share (%)	₹ in Crores	Share(%)	₹ in Crores
1.	Gross Sales	4,481	39	6,844	60	174	1	11,499
2.	PBIT(Before exceptional items)	1,820	67	778	28	142	5	2,740
3.	Capital Employed #	2,235	19	4,242	37	5,138	44	11,615
4.	ROCE (%) (2/3)	—	82	—	18	—	3	24
5.	PBIT Margin (%) (2/1)	—	41	—	11	—	218	24

#Capital employed under “Un-allocable Common” includes cash balance and assets of Wind Power Plant and expansion units.



COST REDUCTION MEASURES AND EFFORTS TO IMPROVE SPECIFIC CONSUMPTION OF CRITICAL RAW MATERIAL:

Smelter:

1. Graphitization of cathode of 581 running pots have resulted in reduction in D.C. electrical energy consumption in graphitized pots @ 55 KWH/MT.
2. Pneumatic conveying and Recycling of coke dust was commissioned on 29th September, 2018. Recycling of coke dust in production of green anode, thereby reducing raw Material consumption i.e. CP Coke & CT pitch.

CPP:

1. The performance of High/Intermediate Pressure (HIP) turbine module of Unit #7 was very low. The said turbine was replaced with new one. Due to this there is a saving of 30,660 MT of coal per annum.
2. As a part of cost reduction measures undertaken for chemical cleaning of condensers in unit # 2,3,5,6 and 7 has resulted in improvement condenser vacuum to the near design value. As a result, there is saving in coal consumption by 85,624 MT per annum.
3. Due to various improvement in plant process/equipments, specific coal consumption has reduced from 0.818 Kg/Kwh in 2017-18 to 0.792 Kg/Kwh in 2018-19.

Refinery:

A total 16 Cost Reduction Projects (CRPs) taken by the department out of which 05 CRPs are completed and balance are in various stages of completion. Some of the benefits, derived from the Cost Reduction Projects are given below:

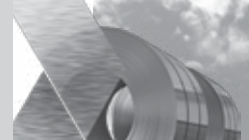
- Complete switch over from using of wheat bran to synthetic flocculent in flat bottom washers, resulting in Direct reduction in purchasing of materials to the tune of ₹3 crore per annum.
- Kelly filter-002 feed pump motor was modified by installing with a 75 KW rating motor from original motor rating of 110 KW. This down gradation of motor rating has resulted a power saving of 14 MWH per annum.
- Diaster filter-1001 feed pump - 1062A drive system was modified to eliminate counter shaft system. This modification has resulted a power saving of about 150 MWH per annum.
- Steam Heating Bundles installed in Digestions Tank-20 & 25 (Phases-I & II), resulted in steam condensate saving of 1m³/ hr in each phase.
- Modification job for Battery-G cooling water flow from EM type flowmeter (size 24") to DP type flowmeter, thereby saving the cost of spares and maintenance cost.

DISCLOSURE OF ACCOUNTING TREATMENT:

The financial statements of the Company have been prepared in accordance with Ind AS and relevant provisions of the Companies Act, 2013.

The financial statements have been prepared on historical basis, except certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below.

All assets and liabilities have been classified as current or non-current as per company's operating cycle and other criteria set out in Schedule-III of the Companies Act, 2013. Based on the nature of business, the Company has ascertained its operating cycle as 12 months for the purpose of current or non-current classification of assets & liabilities.



MATERIAL DEVELOPMENTS IN HUMAN RESOURCES/INDUSTRIAL RELATIONS FRONT INCLUDING NUMBER OF PEOPLE EMPLOYED:

Human Resources:

Manpower strength of the Company as on 31.03.2019 was 6,496 as against 6,776 at the last day of the previous year. The detailed breakup is given below:

Sl. No.	Position*	As on 31.03.2019	As on 31.03.2018
A	Executives	1,782	1,812
B	Supervisory	594	680
C	Skilled/Highly Skilled	3,568	3,691
D	Unskilled/Semi Skilled	552	593
	Total	6,496	6,776

*Includes GETs/MTs/SOTs/JOTs

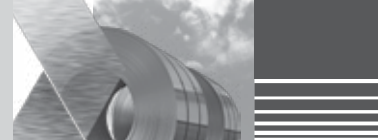
Training & Development:

In order to enhance the functional and behavioral competency of its employees and to align the individual need with the business objective of the organization towards increasing production and productivity as well as to improve business culture in the organization, there has been an unstinting effort by your Company to impart skill and behavioral training to its employees. In its commitment for social accountability and good corporate governance, the company also imparts skill development training to contract workers, apprentices, students from managerial and technical institutes as well as for local populations.

As regards regular employees, the Company has 17,121.5 training mandays for the year 2018-19 compared to 16,244.5 training mandays for the year 2017-18. Further, 21 executives were also sent to IIM, ASCI & IIT for various management development programme during 2018-19 compare to 17 executives sent during 2017-18. There were 890 apprentice trainees were engaged during the year 2018-19 compared to 870 apprentices engaged during the year 2017-18. As a part of corporate responsibility and industry academic interface, 3,160 students from different technical and management institutes across the country had undergone summer internship programme in various functional disciplines in the units and corporate office during 2018-19 as compared to 2,544 students during 2017-18. In-house skill development programmes for security personnel, contract labours and trainees were also organized with 5,133 mandays during 2018-19 across the company compared to 4,425.5 mandays during the year 2017-18.

In line with skill India campaign of Govt. of India, MOU has been signed with National Skill Development Council (NSDC)/National Skill Development Fund (NSDF) to provide Skill Development Trainings to 1,620 candidates during 2016-17 to 2019-20 with relevant qualification packs (QP) including RPL (Recognition of prior learning) certification training to 420 workmen engaged under various contractors at bauxite mines. The RPL certification programme was started with first batch of 21 workmen on 27.02.2017 and completed the 420 numbers in 21 batches during March, 2018. Further, for enhancement of employability and income generation in the three districts i.e. Koraput, Angul & Khurda, 660 candidates have already been trained in various skills like retail, health care, beauty & wellness, and hospitality in the 1st phase and 459 candidates among them are placed during 2017-18. Furthermore, training programme for the rest 540 candidates completed as on 28.02.2019 in the 2nd phase in different trades like retail, health care, apparel, banking and asst. electrical through different training partners and out of 540 candidates trained, 285 candidates are placed as on 31.03.2019.

Corporate Centre of Excellence for Mining Sector, with simulation facility, complying with the requisite guidelines of SCMS/NSDC is being set up at NRTC, Gothapatana, Bhubaneswar at an estimated cost ₹ 20 Crores which will be funded out of NALCO's CSR fund. The simulator based training will be imparted in the center and on the job training would be provided in the company's open cast mines at Damanjodi.



MoU signed with SCMS for preparation of DPR. Draft DPR submitted by SCMS is being finalised. The CEO, SCMS along with his team visited NRTC on 25th & 26th September, 2018 to assess the infrastructure available vis-a-vis the requirement before finalization of the draft DPR and also had interaction with senior management on establishing the Center of Excellence at NRTC. CEO, SCMS made a presentation regarding the same to the functional Directors and CMD on 10th October'18. As discussed and suggested in the meeting, the roadmap on the skill ecosystem at NRTC is being prepared and will be presented to the management.

A Skill Development & Incubation Centre jointly being developed by NALCO and Utkal University to take up collaborative projects under industry institute interaction programme. It is the first-of-its-kind center for the non-technical students to help them become job-ready. CPWD is preparing the DPR.

In addition to above, NALCO also selected two skilling partners M/s. Technopak and M/s. Frontline, in September, 2017 to impart training program to 2,000 unemployed youths at Angul, Damanjodi, Bhubaneswar and Vizag area. The program will include 150 nos from PWD category and 700 women candidates. The details of training imparted are as follows:

- (a) M/s. Frontline: The training program started at Damanjodi from December, 2017 and till now 8 batches (4 at Damanjodi & 4 at Vizag) with 221 youths have already been completed.
- (b) M/s. Technopak: A total no. of 21 batches are being given skill development trainings - 10 batches on Retail sales management & 5 batches in Hospitality management at Angul and 6 batches on sewing machine operation at Bhubaneswar. Till date 623 youths have completed the training programme.

A total no. of 255 students have already been placed in different agencies in retail, sewing machine operation and hospitality management sectors as on 31.03.2019.

In addition to the above, NALCO Foundation in collaboration with MPCON Ltd., Gwalior, conducted skill development training programme for 100 candidates (4 batches) in mobile repairing and laptop repairing at Madhya Pradesh as on 31.03.2019. The second phase of the training programme will be conducted for 12 batches and 300 more youths will be imparted training.

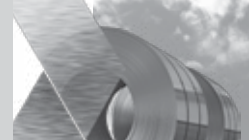
CORPORATE PLAN:

The new Corporate Plan rolled in January, 2018, envisage 3 years action plan, 7 years strategy and 15 years vision to improve both bottom line and topline of the Company. It has identified functional and business initiatives to give the Company a competitive edge in order to overcome the impact of commodity cycle.

The new business initiative includes growth through expansion in core business, forward integration through value addition downstream facilities, selective diversification and backward integration for raw material security. The identified functional and business initiatives are under various stages of implementation.

BUSINESS DEVELOPMENT:

- **Caustic Soda Project in JV with Gujarat Alkalies and Chemicals Ltd. (GACL):** NALCO has formed a JV Company "GNAL" with GACL to set up 2.7 lakh TPA Caustic Soda Plant along with 130 MW Captive Power Plant (CPP) at Dahej in Gujarat. Environmental Clearance for the project has been granted. Land has been transferred in the name of GNAL. Three major packages have been awarded. Financial closure has been completed in Feb, 2019. Project is scheduled to be completed in April, 2020.
- **25.5 MW Wind Power Project:** Project execution of 25.5 MW Wind Power Project at Kayathar in Tuticorin dist., Tamil Nadu is in progress. NFR (Noted for Record) has been issued by TANGEDCO (Tamil Nadu Generation and Distribution Corp. limited) to enable signing of Power Purchase Agreement (PPA). Land for all locations transferred to NALCO and Micro sitting activity completed. Substantial progress made on supply & erection of the equipments. However, the job is not completed due to cash crunch with executing agency.
- **Coal Tar Pitch Plant in JV with NINL:** NALCO has signed MoU with Neelachal Ispat Nigam Ltd. (NINL) to set up a Coal Tar Distillation plant of 20,000 TPA capacity based on the Coal Tar generated in NINL's Coke Oven Plant. Techno Economic Feasibility Report (TEFR) for the project has been prepared. Proposal for constitution of JV Company has been submitted to Ministry of Mines for clearance of NITI Aayog. Selection of Technology and preparation of Detailed Project Report (DPR) is in progress.



- **High End Aluminium Alloy Plant:** NALCO has signed a MoU with Mishra Dhatu Nigam Ltd. (MIDHANI) in April, 2017 for establishment of High End Aluminium Alloy Plant in JV mode for Defence, Aerospace & Automobile Sectors. Govt. of Andhra Pradesh has allotted 120 acres of land for the project. Based on the observations of NITI Aayog, DPR for the project is being finalized. NITI Aayog has given clearance for the project in March, 2019. NALCO and MIDHANI Board of Directors have approved the JV Agreement and formation of the JV Company.
- **Acquisition of Strategic minerals in overseas:** NALCO, HCL and MECL have signed a MoU in Sept, 2017 to set up a JV Company (JVC) to identify, acquire, develop, process and make commercial use of strategic minerals in overseas locations for supply in India and thus boost “Make in India” initiative of Government of India. Concurrence of NITI Aayog for formation of JVC has been obtained. NALCO, HCL and MECL Boards have approved formation of JVC.
- **Angul Aluminium Park in JV with IDCO:** NALCO and Odisha Industrial Infrastructure Development Corporation (IDCO) have formed a JV Company for establishment of Angul Aluminium Park Pvt Ltd (AAPPL), Angul for promotion of downstream industries in the state. Land for permanent approach road acquired by IDCO. Road development work has started. Boundary wall constructed.
- **Greenfield Aluminium Smelter in Odisha:** The Company has prepared a Pre-feasibility Report (PFR) for a proposed 0.6 MTPA Greenfield Aluminium smelter in Odisha.
- **Aluminium Downstream Projects:** NALCO has prepared a Detailed Project Report (DPR) for establishment of Aluminium Downstream Projects like Alloy Wheel Plant, Wheel Plant, Rolled Product Plant and Foil Plant in Kamakhyanagar block of Dhenkanal district in Odisha. The project has been cleared by High Level Clearance Authority, Govt. of Odisha.
- **Commercialization of Li-Ion cell technology:** NALCO is venturing into production of Lithium-ion cell / battery. The Company was shortlisted by ISRO for transfer of Li-ion cell technology. In this regard, NALCO has signed a Memorandum of Agreement (MoA) with ISRO for transfer of technology. Process for transfer of technology and training activities started.

ANCILLARY DEVELOPMENT:

Your Company continued its efforts for development of Ancillary Units and MSEs (Micro and Small Enterprises). Action taken during the year under review towards development of Ancillary Units & MSEs are as follows:

1. The procurement of products produced and services rendered by MSEs (Micro and Small Enterprises) of Odisha including Ancillary Units for FY 2018-19 stands at ₹361.17 Crore (as against ₹296.11 Crore of last FY). The total procurement of products produced and services rendered by MSE units (including those from outside Odisha) stands at ₹472.53 Crore during FY 2018-19 (as against ₹400.13 Crore during FY 2017-18 and it is 26.79% of the total procurement of Goods and Services made by Nalco against Govt. target of minimum 25%. For FY 2019-20, the target for procurement of products produced and services rendered by MSEs has been set at ₹442.5 Crore.
2. Nalco was awarded “Certificate of Excellence” in Odisha MSME International Trade fair, 2019 organised by MSME Deptt, Govt of Odisha from 28th January to 3rd February-19 at Unit-III Exhibition Ground Bhubaneswar.
3. Nalco participated in state conclave under SC/ST hub held at Bhubaneswar on 30.08.2018.
4. Nalco participated in the state level Vendor Development Programme-Cum-Buyer Seller Meet with Mother Plants organized by OASME, in association with MSME Development Institute, Cuttack and MSME Department, Govt of Odisha at Rayagada on 01.02.2019 and at Angul on 01.03.2019.
5. A national Level “Vendor Meet” was organized at M&R Complex, Damanjodi on 14.06.2018 in which MSE vendors both inside and outside Odisha participated.
6. The Sub- PLAC (Plant Level Advisory Sub-Committee) meeting for the year 2018-19 was conducted at M&R Complex, Damanjodi on 05.12.2018 in association with DIC Koraput.
7. A “Buyer-Seller Meet for SC-ST Entrepreneurs” was conducted at M&R Complex, Damanjodi on 05.12.2018 and at S&P complex on 28.03.19.
8. Nalco participated in vendor development programme cum buyer seller meet under national SC/ST Hub scheme at Cuttack on 16.01.2019 organized by MSME Development Institute, Cuttack.

9. Nalco participated in Udyam Samaagam held at Cuttack organized by MSME Development Institute, from 26.02.2019 to 28.02.2019.
10. Nalco's procurement data from MSEs (Micro and Small Enterprises) are being uploaded on a monthly basis in "MSME SAMBANDH" App of MSME Department, GOI.
11. NAMASYA (Nalco Micro & Small Enterprise Yogayog Application) APP has been launched by Nalco on 13.07.2018 to facilitate the existing MSEs registered with Nalco as well as MSEs not registered. The APP empowers MSEs with information about vendor registration process, items which can be supplied by them with technical specification, vendor development programmes and training programmes of Nalco etc.

Procurement made by Nalco from MSEs

Ministry of Mines/National Aluminium Company Limited - NALCO

- (A) Name of the Unit: Corporate Office, Bhubaneswar, Odisha
Nodal Officer: Sri Bibhu Datta Mohanty, GM(Materials)
Nalco Bhawan, P/1, Nayapalli, Bhubaneswar- 751013
Mobile: 9437561995, e-mail: bibhu.mohanty@nalcoindia.co.in
- (B) Name of the Unit: Smelter & Power Complex, Angul, Odisha
Nodal Officer: Sri Pravat Kumar Biswas, GM(Materials)
Smelter Plant, Nalco Nagar, Angul- 759145
Mobile: 9437083779, e-mail: pravat.biswas@nalcoindia.co.in
- (C) Name of the Unit: Mines & Refinery Complex, Damanjodi, Odisha
Nodal Officer: Sri Prasanta Kumar Sarangi, GM(Materials)
Alumina Refinery, Nalco, Damanjodi- 763008
Mobile: 9437962248, e-mail: prasanta.sarangi@nalcoindia.co.in

(Figures in ₹ Crore)

Sl. No.	Particulars	Year 2017-18	Year 2018-19	Target for 2019-20
I	Total annual procurement (In value) (*)	1,527.70	1,764.03	1,770
II	Total value of goods & services procured from MSEs (Including MSEs owned by SC/ST entrepreneurs)	400.13	472.53	442.5
III	Total value of goods & services procured from only MSEs owned by SC/ST entrepreneurs	NA (**)	12.88	110.6
IV	Total value of goods & services procured from only MSEs owned by women entrepreneurs	NA (**)	5.45	53.1
V	%age of procurement from MSEs (Including MSEs owned by SC/ST & women entrepreneurs) out of total procurement	26.19	26.79	25
VI	%age of procurement from only MSEs owned by SC/ST entrepreneurs out of total procurement	0	0.73	6.25
VII	%age of procurement from only MSEs owned by women entrepreneurs out of total procurement	0	0.31	3
VIII	Total number of Vendor Development programmes for MSEs	9	11	10
IX	Whether Annual Procurement Plan for purchases from MSEs are uploaded on the official website	Yes	Yes	Uploaded
X	Whether targets reported in Annual Report	Yes	Yes	To be reported

* This value excluded procurement of Coal, Fuel Oil, Caustic Soda, ALF₃, Synthetic Flocculants, Steel, Cement, Bearings, Lubricants, Proprietary items, imported items and Contracts for professional services/consultancy services/major turnkey contracts/contracts linked to specific technology.

** Not identified.



SAFETY, OCCUPATIONAL HEALTH & ENVIRONMENT:

Your Company being a responsible corporate citizen always gives utmost importance to Safety, Occupational Health and Environment and is committed to maintain sustainable work environment across all its production units. All the applicable statutes under Safety, Occupational Health and Environmental regulations are compiled proactively. While adhering to safety norms, your Company strives for continual improvement of personnel safety, health and the working environment with the goal of zero accidents, illness, incidents, waste generation and reduction in emissions. All the units are operating with valid “Consent to Operate” under Air & Water Act for the existing capacities and all 4 operating units have valid Factory Licenses, as applicable.

MINES:

Environment:

1. During the year 1,00,260 nos. of trees were planted at Mines against the target of 1,00,000 nos. of trees.
2. A biogas plant of 5 m³/day capacity was commissioned to treat the entire food waste generated in Mines canteen and generate biogas for use as a fuel. It was an effort towards converting waste to energy.
3. Panchpatmali Bauxite Mine received the 5-Star Rating Award under Star rating System of Indian Bureau of Mines for implementation of Sustainable Development Framework for the year 2017-18.
4. During the observation of Mines Environment & Mines Conservation week (ME&MC), 2017-18 at Bhubaneswar by Indian Bureau of Mines (IBM), Panchpatmali Bauxite Mine of NALCO received first prize in reclamation and rehabilitation, first prize in afforestation, first prize in sustainable development, overall best performance prize and Par Excellence Award for sustainable mining.

Occupational Health and Safety:

1. Successfully celebrated Half-Yearly Safety Week from 18.06.2018 to 22.06.2018 at Panchpatmali Bauxite Mines. Three other mines of Zone-2, Bhubaneswar region under DGMS participated in the safety theme competition. Panchpatmali Bauxite Mines received two prizes on the occasion.
2. In Annual Mines Safety Week Celebration 2018 from 20.11.2018 to 26.11.2018 at Panchpatmali Bauxite Mines, total 32 Mines of Bhubaneswar region under DGMS participated in the safety theme competition. Our Mines received 5 prizes. In addition our mines won both MMPL awards (Worker as well as Supervisor category).
3. PME of all eligible employees (NALCO) was carried out during the F.Y. 2018-19.
4. Slope Stability study of Mine access road (ghat section) has been carried out in March, 2019.

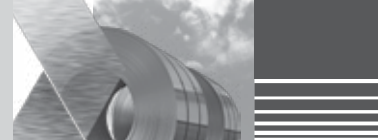
ALUMINA REFINERY:

Environment:

1. Fly ash utilization is 69.59% during the financial year.
2. The achievement for plantation is 19,788 nos. (Saplings) against the target of 15,000 nos.
3. Hazardous waste and plastic waste of used filter clothes is channelized through the authorized agency, M/s. Ramky Enviro Engineers Ltd, Sukinda, Jajpur and M/s. Geocycle India, Bhatapara, Raipur.
4. Bio additive microbial dosing is continuing for STP-IV, for achieving the norm for discharge effluent water. Revamping of STPs will be done as per CTO condition.

Occupational Health and Safety:

1. With regard to Road Safety measures, 3(three) nos. Radar Speed gun were procured and road safety monitoring is being carried out by our safety team periodically.



2. Two nos. of Alcohol breath analysers were procured by Alumina Refinery and handed over to CISF for implementation for checking at the gate, as a road safety measure.
3. 490 nos. of regular employees were imparted training on Safety and Environment with the faculty support of National Safety Council. For contractor workers, formal class room training was also arranged in different phases, where 2,334 nos. of contractor workers were covered through CLMS system.
4. As regards to periodical medical check-up of our regular employees, the percentage of attendance of PME is 94.47%.
5. Retro-reflective signages in local languages were also displayed in Alumina Refinery in order to build awareness on Safety, Health and Environment amongst workmen.
6. Awards received during the year are:
 - (i) Pollution Control Excellence Award for the year 2018, organized by Odisha State Pollution Control Board (OSPCB).
 - (ii) CII EHS Award for the year 2018, organized by CII.
 - (iii) Kalinga Safety Award (Gold) for the year 2017, organized by IQEMS.
 - (iv) Green Tech Award for the year 2018, organized by Green Tech Foundation.
 - (v) Good Green Governance Award for the year 2018, organized by SRISHTI Foundation.

SMELTER:

Environment:

- Smelter Plant, NALCO won GOLDEN PEACOCK ENVIRONMENT MANAGEMENT AWARD 2018 for excellent practices and significant achievements in the field of Environment Management in Mineral and metallurgical section.
- As a part of dust suppression and resource conservation, Pneumatic conveying & recycling of coke dust system commissioned on Sept, 2018.
- A concrete containment pool & pump house were commissioned to collect surface water runoff of Rolling plant area & in operation since 04.08.2018. The water is being treated through defluoridation plant and reused in the plant.
- STP water Recycling project at S&P Township was completed with installation of pumps and laying of dedicated network of pipeline for the parks in township.

Occupational Health and Safety:

- Nalco Smelter Plant received “KALINGA SAFETY AWARD (SILVER)” from the Hon’ble Governor of Odisha.
- Cast house –B was developed as a model Safety “AAINA”.
- Smelter Plant observed National Safety Week and an Annual Journal “SURAKHYA DARPAN” was released to mark the occasion.
- Smelter Plant adopted few small scale industries namely M/s. INDFAB, M/s. SAKUNTALA ALUMINIUM Industries and M/s. OMFED, ANGUL for improving their safety performance as per the direction of Director of Factories & Boilers, Odisha.

CAPTIVE POWER PLANT:

Environment:

1. Up-gradation of Industrial Drain Water Recycling System (IDWRS) was carried out to recycle back all the Industrial effluent and ensure zero discharge from IDWRS.
2. Wheel washing system has been installed in the ash silo areas to dislodge ash from the wheels of ash carrying vehicles in June, 2018.



3. E-waste (Electrical and Electronic waste) of around 7.3 ton has been disposed off through authorized recyclers and revenue of ₹2,02,072/- has been realised.
4. Mechanical waste converter for treatment of the solid waste generated from canteen and horticulture has been procured and installed at Main canteen. The Mechanical Converter processes the wastes to manure.
5. After retrofitting by installing an additional pass and revamping of existing ESPs (electrostatic precipitator) of old Units, i.e. Unit-1, 2, 3, 4, 5 & 6 Stack emission has been maintained well within the Norm. Ammonia dozing is being done regularly to reduce the particulate emission further and meet the standard prescribed by MoEF & CC vide notification dtd. 07.12.2015.
6. Rain water Harvesting and Recycling system is used as a make up to Fire hydrant System of RCPH-1 and make up to Raw water reservoir. This step contributes towards improving water conservation & reduce water drawl from river Brahmani thereby providing water security in CPP. In the year 2018-19, around 7,51,087 M³ of water from rain water harvesting system and around 1,57,254 m³ of water from exit point was recycled and re-used.
7. STP (Sewerage Treatment Plant)-I has been upgraded with addition of phytoid bed and extended aeration system to meet the recent norms stipulated by CPCB and has been kept in operation throughout the year. The treated STP water is utilized for horticulture purposes only. In the year 2018-19 around 6,5000 m³ of treated STP water is used in horticulture purpose.

Occupational Health and Safety:

1. About 2,399 contractor workers have been covered under Audio & Video safety awareness programme in the year 2018 (Jan - Dec).
2. 1,130 nos. of employees & 2,447 nos. of contractor workmen have been covered under PME health checkup programme.
3. Mock drills are being conducted involving NDRF team, District Crisis Group & Safety department for assessing response of the emergency service team members.

NURSERY ACTIVITIES DURING 2018-19:

Your Company is operating total five nurseries i.e. three at S&P Complex and two at M&R Complex, including the one at Mines which is a high altitude nursery. The nurseries raise various type of seedling for afforestation, ornamental use and fruit bearing seasonal variety seedlings and potted plants which also being partially meet internal requirement for plantation. 1,00,000 nos. of seedlings have been raised at mines nursery during the year. During the year 11,100 nos of fruit bearing seedlings were distributed to villagers to help them improve greenery in the region. The nursery at Mines significantly contributes to the crucial afforestation activities of the backfilled mined out areas to preserve the natural topography. During this year, 16.23 hectares of reclaimed area was rehabilitated with plantation.

CAUTIONARY STATEMENT:

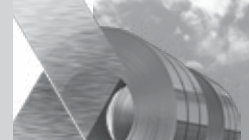
Certain statements made in the Management Discussion and Analysis Report relating to the Company's objectives, projections, outlook, expectations, estimates and others may constitute 'forward looking statements' within the meaning of applicable laws and regulations. Actual results may differ from such expectations whether expressed or implied. Several factors could make significant difference to the Company's operations. These include climatic and economic conditions affecting demand and supply, government regulations and taxation, natural calamities over which the Company does not have any direct control.



BUSINESS RESPONSIBILITY REPORT for 2018-19

Section A: General Information about the Company

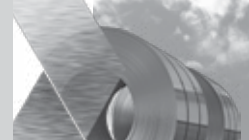
Sl. No.	Particulars	Company Information
1	Corporate Identification Number(CIN) of the Company	L27203OR1981GOI000920
2	Name of the Company	National Aluminium Company Limited
3	Registered Office & Corporate Office	NALCO Bhawan Plot No. P/1, Nayapalli Bhubaneswar -751013, Odisha, India
4	Website	www.nalcoindia.com
5	E-mail ID	investorservice@nalcoindia.co.in
6	Financial year reported	FY 2018-19
7	Sector(s) that the company is engaged in (industrial activity code-wise)	Bauxite Mines : Industrial Group Code 07292 Alumina Refinery : Industrial Group Code 20119 Aluminium Smelter : Industrial Group Code 24202 Electricity Generation : Industrial Group Code 35102
8	List of three key products/services that the company manufactures/provides	<ol style="list-style-type: none"> 1. Alumina <ul style="list-style-type: none"> • Calcined Alumina • Alumina Hydrate • Specialty Alumina & Hydrates 2. Aluminium <ul style="list-style-type: none"> • Standard Ingots • Sow Ingots • T-Ingots • Alloy Ingots • Wire Rods • Billets & High Speed Alloy Billets • Flat Rolled Products (Coils, Sheets & Chequered Sheet) • Mechanised Sows, • Foil Stock 3. Electricity
9	Number of International Locations	NIL
	Locations in India	<ol style="list-style-type: none"> a) Registered & Corporate Office , Bhubaneswar – 751013, Odisha b) Mines & Refinery Complex, Damanjodi-763008, Odisha c) Smelter Plant, Nalco Nagar, 759145, Angul, Odisha d) Captive Power Plant, Angul , 759122, Odisha e) Port Facilities, Port Area, Visakhapatnam– 530035, Andhra Pradesh



Sl. No.	Particulars	Company Information
	Locations in India	f) Wind Power Plants i) Wind Power Plant-I : Gandikota, Andhra Pradesh ii) Wind Power Plant-II : Ludarva, Rajasthan iii) Wind Power Plant-III : Devikot, Rajasthan iv) Wind Power Plant-IV : Jath, Maharashtra g) No. of Port Offices : 03 (Visakhapatnam, Kolkata, Paradeep) h) No. of Regional Offices : 04 (New Delhi, Mumbai, Chennai, Kolkata) i) Branch Office : 01 (Bengaluru) k) No. of Stockyards : 09 (Jaipur, Faridabad, Baddi, Kolkata, Chennai, Visakhapatnam, Bhiwandi, Vadodara, Delhi)
10	Markets served by the Company	During the FY 2018-19, the following Aluminium markets were catered to by the company (in addition to India) : Bangladesh, Malaysia, Korea & Singapore. Calcined Alumina produced in excess of the Company's own requirement is exported. During FY 2018-19, the following Alumina markets were catered to by the company (in addition to India) : Egypt, Iran, UAE, Qatar, Indonesia, Malaysia, Netherland, Iceland & USA.

Section B: Financial Details of the Company

Sl. No.	Particulars	Company Information
1	Paid up Capital as on 31.3.19	INR 932.81 Crores
2	Total Turnover	INR 11,499.32 Crores
3	Total Profit after Taxes	INR 1732.40 Crores
4	Total Spending on Corporate Social Responsibility (CSR) a) in INR : b) As a percentage of average Net Profit during the three immediately preceding financial years (%):	a) <i>A sum of INR 3034.92 lakh was spent during the year on CSR activities.</i> b) The actual expenditure on CSR activities indicated above is 2.217% of average Net Profit for the <i>three previous Financial Years i.e. . 2015-16, 2016-17 & 2017-18.</i>
5	List the activities, in which expenditure on CSR as mentioned above, has been incurred	i) Health outreach Program-Mobile Medical Units, Diagnostic & awareness building through Information, Education, Communication (IEC) activities. ii) (a) Construction of Toilets under SVA, Construction of House Hold Toilets under ODF initiative, School Toilets, Provision of water supply to toilets constructed under Swachh Vidyalaya Abhiyan. (b) Swachh Iconic City Project-Puri. iii) Providing safe drinking water to periphery villages of plants and during Ratha Yatra at Puri.



Sl. No.	Particulars	Company Information
		iv) Promoting education, <ul style="list-style-type: none"> a) sponsoring formal education of tribal children in reputed residential schools b) Supporting Nalco ki Ladli c) Quality education to students of periphery area at Saraswati Vidya Mandir Angul & Damanjodi v) Providing employment enhancing training to unemployed youth <ul style="list-style-type: none"> vi) Empowering women through distribution of Charkha to women weaver & spinner in villages vii) Ensuring environmental sustainability, ecological balance through plantation, roof top solar power system viii) Contribution towards protection of national heritage and culture and development of traditional arts and handicrafts ix) Promotion of Rural Sports x) Contribution to the Prime Minister's relief Fund/Central Govt. Fund for socio-economic development/welfare of SC/ST/OBC/ Minorities/ Women xi) Rural development activities in periphery villages and other areas

Section C – Other Details

- Does the Company have any Subsidiary Company/Companies?
No
- Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s).
Not applicable
- 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 percentage of such entity/entities. [Less than 30%, 30-60%, More than 60%]
No other entities i.e. suppliers contractors etc. are involved in financing any BR initiatives. All the initiatives of Business Responsibility(BR) are totally financed by the organization.

Section D: Business Responsibility (BR) Information

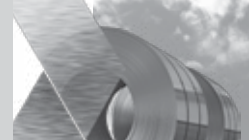
1. Details of Director/Directors responsible for BR:

a) Details of Director/Directors responsible for implementation of BR Policy/Policies

Sl. No.	Particulars	Details
1	DIN Number	06965313
2	Name	Shri V. Balasubramanyam
3	Designation	Director (Production)

b) Detail of the BR head

Sl. No.	Particulars	Details
1	DIN Number	06965313
2	Name	Shri V. Balasubramanyam
3	Designation	Director (Production)
4	Telephone Number	0674-2300660
5	e-mail ID	dirprod@nalcoindia.co.in



2. Principle wise (as per National Voluntary Guidelines) BR Policy/ Policies

The Nine Principles are mentioned below :

Principle 1 (P1) : Business should conduct and govern themselves with Ethics, Transparency and Accountability.

Principle 2 (P2) : Business should provide goods and services that are safe and contribute to sustainability throughout their life cycle.

Principle 3 (P3) : Business should promote the wellbeing of all employees.

Principle 4 (P4) : Business should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.

Principle 5 (P5) : Businesses should respect and promote human rights.

Principle 6 (P6) : Business should respect, protect, and make efforts to restore the environment.

Principle 7 (P7) : Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner.

Principle 8 (P8) : Businesses should support inclusive growth and equitable development.

Principle 9 (P9) : Businesses should engage with and provide value to their customers and consumers in a responsible manner.

2 a) Details of Compliance (in Y/N)

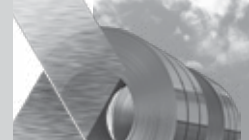
The response regarding the above 9 National Voluntary Guidelines (NVG) principles (P1 to P9) is given below:

Sl. No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1.	Do you have a policy/ policies for 9 NVG principles?	Y	Y	Y	Y	Y	Y	Y	Y	Y
2.	Has the policy being formulated in consultation with the relevant stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.	Does the policy conform to any national/international standards? If yes, specify. (50 words) *	Y	Y	Y	Y	Y	Y	Y	Y	Y
4.	Has the policy been approved by the Board? *	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Is yes, has it been signed by MD/owner/CEO/appropriate Board Director?	Y	Y	Y	Y	Y	Y	Y	Y	Y
5.	Does the company have a specified committee of the Board/ Director/ Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	Y	Y	Y
6.	Indicate the link for the policy to be viewed online. **	Y	Y	Y	Y	Y	Y	Y	Y	Y
7.	Has the policy been formally communicated to all relevant internal and external stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
8.	Does the company have in-house structure to implement the policy/ policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
9.	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/ policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
10.	Has the company carried out independent *audit/evaluation of the working of this policy by an internal or external agency?	Y	Y	Y	Y	Y	Y	Y	Y	Y

Y indicates 'Yes'

* The Sustainable Development (SD) Policy addresses the essence of the nine NVG principles . **The SD Policy is approved by the Board & signed by CMD** and implementation of the same is done by operating Management Systems conforming to International Standards ie. ISO 9001, ISO 14001, ISO 50001 , OHSAS 18001 & the SA8000 standard. Necessary internal evaluation of the SD policy is done during review of sustainable development activities. Besides the spirit and intent of the NALCO Code of Conduct, **Vision, Mission and Core Values** statements, all applicable national and international laws as well as important resolutions of international conventions are captured in the different policies implemented by NALCO. In addition policies adopted by NALCO for different thrust areas reflect the purpose and intent of the United Nation Global Compact, GRI guidelines and international standards such as ISO 14001, OHSAS 18001 and SA 8000.

** Link of the SD Policy: https://nalcoindia.com/wp-content/uploads/2018/12/SD_Policy.pdf



A few other specific policies, company manuals & documents which reinforce the essence & spirit of the nine NVG principles, are mentioned below :

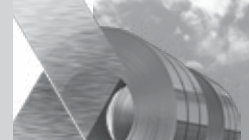
NVG Principles	Policies, Manuals, Documents
Principle 1: Ethics, transparency & accountability	<ol style="list-style-type: none"> Code of Business Conduct and Ethics for Board Members and Senior Management: Fraud prevention policy : https://nalcoindia.com/wp-content/uploads/2018/12/Nalcofraudpreventionpolicy.pdf Whistle blower policy : https://nalcoindia.com/wp-content/uploads/2018/12/Whistleblowerpolicy_nalco.pdf Delegation of Power Vigilance Manual Marketing Guidelines Purchase Manual Contracts Manual https://nalcoindia.com/wp-content/uploads/2019/01/CONTRACT-MANUAL-2013-updated-till-15-03-2019.pdf Stores Manual Integrity Pact: https://nalcoindia.com/wp-content/uploads/2018/12/Integrity-Pact-Program.pdf
Principle 2 : Sustainability in life-cycle of product	Occupational Health & Safety Policy: https://nalcoindia.com/wp-content/uploads/2018/12/OHS_Policy.pdf
Principle 3: Employee well-being	HR Manual
Principle 4: Benefitting Stakeholders	Quality Policy https://nalcoindia.com/wp-content/uploads/2018/12/QualityPolicy.pdf Core Values “BEST” https://www.nalcoindia.com (Home Page)
Principle 5: Promotion of human rights	Social Accountability Policy https://nalcoindia.com/wp-content/uploads/2018/12/SA_POLICY_Approved.pdf
Principle 6: Environmental protection	Environment Policy https://nalcoindia.com/wp-content/uploads/2018/12/EnvironmentPolicy.pdf
Principle 7: Responsible public policy advocacy	Core Values “BEST” https://www.nalcoindia.com (Home Page)
Principle 8: Inclusive growth	CSR Policy https://nalcoindia.com/wp-content/uploads/2019/01/CSR-Policy-2019.pdf
Principle 9: Customer value	Quality Policy https://nalcoindia.com/wp-content/uploads/2018/12/QualityPolicy.pdf

2 (b) If answer to Sl. No. 1 at 2 a), against any principle is ‘No’, please explain why: (Tick up to 2 options)

S. No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1.	The company has not understood the Principles									
2.	The company is not at a stage where it finds itself in a position to formulate and implement the policies on specified principles									
3.	The company does not have financial or manpower resources available for the task									
4.	It is planned to be done within next 6 months									
5.	It is planned to be done within the next 1 year									
6.	Any other reason (please specify)									

NOT APPLICABLE

Since answer to the question at Sl. No.1 of 2(a) above is Yes for all the nine NVG principles, the questions at 2 b) are not applicable.



3. Governance related to Business Responsibility (BR) :

3.1 Indicate the frequency with which the Board of Directors, Committee of the Board or CEO to assess the BR performance of the Company. Within 3 months, 3-6 months, Annually, More than 1 year.

During F.Y. 2018-19, the CSR and SD Committee of the Board met on 04.05.2018, 23.07.18, 12.11.18 & 07.02.2019 in order to review CSR & SD activities of the organization. The draft BR Report of 2017-18, was reviewed in the meeting on 23.07.18 and recommended for approval of Board. Frequency of meetings , during 2018-19 , has been four times in a year.

3.2 Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

Yes, both Business Responsibility (BR) Report and Sustainable Development report are prepared annually & available in website.

Business Responsibility (BR) Report which is mandatory as per SEBI requirements, is prepared based on the National Voluntary Guidelines and is published on annual basis as part of Annual Report. The weblink for 2017-18 Annual Report is:

<https://nalcoindia.com/wp-content/uploads/2018/12/37TH-NALCO-AR-2017-18-DELUXE.pdf>

A Sustainable Development (SD) Report is also prepared on annual basis, since 2011-12, as per GRI guidelines and made available in website under Environment & Safety template. The web link for Sustainable Development Report 2017-18 prepared as per GRI STANDARD is

<https://nalcoindia.com/wp-content/uploads/2019/07/sustainable-development-report2017-2018.pdf>

Section E : Principle-wise Performance

Principle 1 Business should conduct and govern themselves with Ethics, Transparency and Accountability.

1.1 Does the policy relating to ethics, bribery and corruption cover only the company?

No.

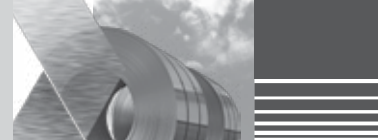
Does it extend to the Group/Joint Ventures/ Suppliers/Contractors/NGOs /Others?

Yes, We are committed to ethical business practice and transparency in every facet of our activity and expect reciprocation from our suppliers, contractors, service providers and investors. Our contract Manual and Purchase Manual have adequate provisions for dealing with such eventuality. The Sustainable Development Policy, “The Code of Business Conduct & Ethics for Board Members and Senior Management” and Core Values, reflect our commitment towards integrity, ethical practices and transparency. The system is further augmented with “Fraud Prevention Policy”, “Whistle Blower Policy”, “Code of Conduct for prevention of Insider Trading”, CDA rules applicable to all executives, Certified Standing Order applicable to all other employees. Any malafide deviation in form of fraud, bribery, appeasement etc. in any business transaction attracts stringent action as per our vigilance manual, CVC Guideline, SEBI guideline, Code of Conduct and other applicable guidelines.

Integrity Pact is also implemented for all contracts of ₹ 50 Lakh and above, in order to further bolster the transparency drive . Protection is extended to any outsider complaining under Public Information Disclosure and Protection of Informer (PIDPI) Scheme of Govt. of India.

1.2 How many stakeholder complaints have been received in the past financial year and satisfactorily resolved by the management?

i) 16 vigilance related **stakeholder complaints** were received during the year, while 10 complaints were pending at different stages of investigation from previous year. Out of these 26 complaints, 17 complaints were decided to their logical end and closed with necessary actions while 9 complaints are in different stages of investigation. Based on observed irregularity and violations necessary action as per Nalco Vigilance Manual and CVC Guideline are taken on deserving cases.



ii) **Investor Complaints**

In total, 429 number of **complaints** were received during the F.Y. 2018-19 and all of them have been resolved satisfactorily. The detailed breakup of investor related complaints is given below :

<i>Particulars</i>	<i>Received during the year</i>	<i>Complaints resolved</i>	<i>Complaints pending</i>
SCORES	05	05	Nil
Stock Exchanges	Nil	Nil	Nil
Individuals	424	424	Nil
TOTAL :	429	429	Nil

iii) **Right to Information Act (RTI):**

During F.Y. 2018-19, a total of 311 applications were received in addition to the 18 pending ones from previous year. Also 26 applications were transferred for information from other sources. As on 31.3.19, 232 requests for information were accepted and replies sent , while 107 such requests were rejected. As on 31.3.19, 16 requests for information are pending. Also out of 61 First Appeal cases, 56 appeals are accepted and information provided, 4 appeals are rejected and 1 appeal is pending.

iv) **No complaints regarding child labour/forced labour/ involuntary labour; Discriminatory employment; Sexual Harassment** were received during 2018-19 and no complaints regarding above are pending as on 31.3.19.

Principle 2 : Business should provide goods and services that are safe and contribute to sustainability throughout their life cycle.

1.1 List up to 3 of your products or services, whose design has incorporated social or environmental concerns, risks and and/or opportunities.

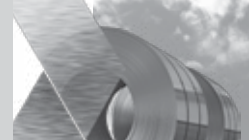
The three major products are : *Calcined Alumina, Aluminium, Electricity.*

All our production units have been subjected to Environment Impact Assessment during project stage and necessary Environment Management Plan were chalked up right from the beginning and our Bauxite Mine is operating under approved Mining plan and mined out area is restored to its virgin state with appropriate Mine Closure Plan to control any adverse impact from product and service on environment or society. Aspect Impact Study, Hazard Identification & Risk Assessment and Emergency Management Plans are also drawn up with periodic reviews in which some environmental and social concerns, risks and opportunities got addressed. All environmental statutory compliances have been done.

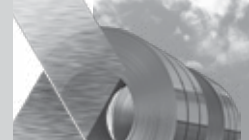
The environment concerns, risks, opportunities for our products are addressed as outlined below at Table-A:

TABLE-A

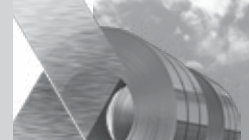
Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
Alumina Refinery	Calcined Alumina	a. <i>Air Pollution</i> b. <i>Water Pollution</i> c. <i>Land contamination</i>	1. Air Pollution: i) <i>Stack Emission</i> ii) <i>Dust in Calcined Alumina, Bauxite, Coal and Ash handling areas</i>	1. Air Pollution: i) Electro Static Precipitators (ESPs) provided in Boiler for collecting particulate matters from Flue Gas of Boiler. ii) ESP is provided in Calciners for collection of Alumina dust generated in calcinations process. • Bag filters and de-dusting system are provided in Alumina loading and unloading area to prevent dust emission.



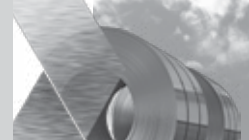
Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
Alumina Refinery	Calcined Alumina	<ul style="list-style-type: none"> a. Air Pollution b. Water Pollution c. Land contamination 	<p>2. Water Pollution</p> <ul style="list-style-type: none"> i) Waste effluent ii) Sewage & Waste water. iii) Surface Runoff water <p>3. Land Contamination</p> <ul style="list-style-type: none"> i) Lime grit ii) Red mud iii) Ash. 	<ul style="list-style-type: none"> • Sprinkler and de-dusting system are provided in Lime Grit, Redmud, Ash, Coal and Bauxite handling areas to control fugitive emission. <p>2. Water Pollution:</p> <ul style="list-style-type: none"> i) Effluents are treated in treatment facilities ii) The waste water treatment, recycling and reuse is carried out for Ash pond overflow water and redmud pond overflow water. <ul style="list-style-type: none"> • Recycling of return water from ash pond is reused for ash slurry making. • Red mud pond return water is reused for red mud slurry making and mud washing thus recycling caustic. • Sewage Waste water is treated in Sewage Treatment Plant and the same is recycled and reused for Horticulture purposes. iii) Surface runoff water is stored in the Sabari Lake and disposed to outside after necessary treatment if required. <p>3. Land Contamination:</p> <ul style="list-style-type: none"> i) Lime Grit is disposed to recyclers for Brick or other allied product manufacturing. ii) Redmud utilization for extraction of Iron concentrate and Gallium from Redmud is being explored. iii) Higher utilization of fly ash by motivating entrepreneurs for utilization of fly ash in areas such as :Utilisation of fly ash in manufacturing of fly ash bricks, cement, road construction, dyke making, filling up low lying areas etc.
Smelter	Aluminium	<ul style="list-style-type: none"> • Air pollution • Water pollution • Land contamination 	<p>1. Air Pollution</p> <ul style="list-style-type: none"> i) Fluoride & particulate emission from the FTP stacks due to pot operation. ii) Generation of PFC during anode effect, detailed below* <p>2. Water Pollution:</p> <ul style="list-style-type: none"> i) Generation of fluoride contaminated surface runoffs. 	<p>1. Air Pollution:</p> <ul style="list-style-type: none"> i) Adsorption of Fluoride gases in primary alumina by dry scrubbing method in FTPs. Online Continuous monitoring of emission at FTP stacks is done. ii) The Smelter plant is equipped with ALPSYS pot regulation system, which minimizes anode effect by timely dosing Alumina. <p>2. Water Pollutions:</p> <ul style="list-style-type: none"> i) Surface runoffs are collected in three HDPE lined holding pools through dedicated drains. The fluorinated surface runoff is treated in Defluoridation plants.



Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
Smelter	Aluminium	<ul style="list-style-type: none"> • Air pollution • Water pollution • Land contamination 	<p>3. Land Contamination Generation of Hazardous waste like (i) SPL, (ii) Dross, (iii) Shot blasting waste etc.</p>	<p>2. Water Pollution: i) (Operated on Ion Exchange technology and latest emrion nano technology). The treated water is then recycled for cooling, horticulture & other plant use.</p> <p>3. Land Contamination: (i) SPL is stored in impervious lined engineered landfill & in concreted sheds to prevent land contamination. Carbon portion of SPL is segregated & is stored separately in concreted floor sheds for future utilize in energy recovery. E-Auction of carbon portion of SPL to authorized re-processor is on the way. (ii) Aluminium Dross is recycled into the pots. A legacy stock of 6000MT of dross which can not be recycled is on the way for e-auction. (iii) Shot blasting waste etc. is being disposed off in common Hazardous waste landfill at Sukinda, Jajpur.</p>
CPP	Electricity	<ul style="list-style-type: none"> • Air Pollution • Water Pollution • Land Contamination 	<p>1. Air Pollution i) Flue Gas from Boiler ii) Fugitive Dust from Coal and Ash Handling Area. iii) Heat emission in flue gas to atmosphere.</p> <p>2. Water Pollution i) Effluent Waste water ii) Sewage Watste water iii) Surface runoff water</p>	<p>1. Air Pollution: i) ESP is provided in Boiler flue gas emission path for extracting particulate matters. ii) Dust Extraction and Sprinklers system are provided in Coal and Ash Handling areas to control fugitive dust. iii) Heat recovered from flue gas by Air Heater and Economiser prevents heat contamination of atmosphere and improves Boiler Efficiency.</p> <p>2. Water Pollution: i) Effluent treatment plant is provided for treatment of industrial waste water. The treated water is used for ash slurry making. ii) Decanted water from ash pond is reused for ash slurry making. • Sewage Treatment Plant is provided for treatment of Sewage Waste water. The sewage waste water after treatment is reused for Horticulture & plantation purposes. iii) Rain water harvesting system & Surface runoff water is used in fire hydrant system for firefighting.</p>



Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
CPP	Electricity	<ul style="list-style-type: none"> Air Pollution Water Pollution Land Contamination 	<p>3. Land Contamination:</p> <ul style="list-style-type: none"> Mill Rejects Ash Scraps (Metallic and Non-metallic scraps) 	<p>3. Land Contamination:</p> <ul style="list-style-type: none"> Mill Rejects is stored in demarcated low lying areas for disposal to authorized parties for reuse. The Ash in slurry form is disposed to Ash pond. The project for lean slurry disposal to Mines Void for reclamation of mined out area is in progress. Dry Ash is also used for low lying area filling, Stone quarries void filling, disposed to value added product manufacturer for ash brick making and use in Asbestos, cement etc. under a subsidy scheme. The Scraps are sold to recyclers.
Mines	Bauxite	<ul style="list-style-type: none"> Air Pollution, Water Pollution Noise pollution Solid waste pollution 	<p>1) Air pollution</p> <ul style="list-style-type: none"> Emission from heavy vehicles Fugitive Dust emission during Bauxite mining, Handling including crushing in crusher and conveying in conveyor. <p>2) Water Pollution:</p> <ul style="list-style-type: none"> Waste water from Canteen , Vehicle Washing and sewage from toilets 	<p>1) Air pollution:</p> <ul style="list-style-type: none"> Proper selection and maintenance of vehicles to minimize emission from vehicles. Water spraying on haul roads and stock pile area with 5 nos. of 28 KL mobile sprinkler and fixed sprinklers along haul road <ul style="list-style-type: none"> Suitable blast design and delayed blasting using NONEL detonators to minimise dust generation Implementation of dry fog system at Crusher and Conveyor to suppress dust & fully covered conveyor to prevent dust generation Adoption of vacuum suction/wet drilling in all drill machines Peripheral barrier of 7.5 m width with plantation to retain dust particles <p>2) Water Pollution:</p> <ul style="list-style-type: none"> In-situ peripheral barrier all around active mining area to prevent silt laden rain water to go out <ul style="list-style-type: none"> Check dams at strategic points to filter muddy water if any from mining areas Collection of rain water in mining area in sumps and percolation of collected water into ground

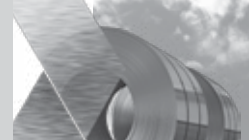


Unit	Products	Environmental Concerns	Risks	Opportunities / Mitigation Measures
Mines	Bauxite	<ul style="list-style-type: none"> Air Pollution, Water Pollution Noise pollution Solid waste pollution 	<p>3) Noise pollution</p> <p>i) Noise during blasting and operation of heavy vehicles</p> <p>4) Solid waste pollution:</p> <p>i) Overburden material from excavation of minerals</p> <p>5) Land Degradation</p> <p>i) Excavation of overburden and ore material by blasting and use of machinery.</p>	<ul style="list-style-type: none"> Water from toilets treated in septic tanks and disposed in soak pits, canteen waste water treated in biological treatment unit, wash water from vehicle washing area treated in oil water separator. Treated water from canteen and vehicle wash area fully reused for dust suppression and plantation <p>3) Noise pollution:</p> <p>i) Suitable blast design including delayed blasting using NONEL detonators to minimise the generation of noise</p> <ul style="list-style-type: none"> Peripheral plantation to prevent propagation of noise Selection of suitable equipment generating less noise, provision of noise proof cabins in HEMMs and provision of PPEs to workers <p>4) Solid Waste Pollution:</p> <p>i) 100% reuse of top soil and overburden fully reused for back filling of mined out areas</p> <p>5) Land Degradation:</p> <p>i) Concurrent mining and backfilling of mined out areas.</p> <ul style="list-style-type: none"> Rehabilitation of mined out area with extensive plantation to convert the barren land into a forest.

* Perfluorocarbons (PFCs) i.e. tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6) emissions are produced in the primary aluminium reduction process at Smelter, during anode effects. Tetrafluoromethane and hexafluoroethane emissions are monitored very closely due to their potent greenhouse effect and long atmospheric lifetime. The Smelter Plant is equipped with the most advanced ALPSYS pot regulation system, which helps in reducing the frequency and duration of anode effect by timely dosing alumina into the pot. For the year 2018-19, the PFC emission from Smelter Potline has been estimated using AP (Aluminium Pechiney) overvoltage method and their values are given below:

Type of PFC	Actual Emission
CF_4 (kg/T Al)	0.0233
C_2F_6 (kg/T Al)	0.0028

- 2.2 For each product, provide the following details in respect of resource use (energy, water, raw material) per unit of product (optional).
- i) Reduction during sourcing/production/distribution achieved since the previous year throughout the value chain.



The reduction achieved during the last fiscal is depicted in Table B below:

TABLE-B

Specific Consumption per unit of production	Unit of Measurement	Norm	Previous Year (F.Y. 2017-18)	Current Year (F.Y. 2018-19)
Explosive consumption in Bauxite Mines	Gram/MT	145	128	74.61
Coal for steam generation in SPP of Alumina Refinery	Tonne/Tonne	0.650	0.647	0.635
Electrical energy in Alumina Refinery	KWH/Tonne	320	316	315.5
Aluminium Flouride Consumption	KG/MT	19	19	16
Net carbon consumption for hot metal in Smelter	Kg/MT	430±5	430	424
Fuel oil consumption in CPP	ml/KWH	0.80	0.42	0.87

ii) Reduction during usage by consumers (energy, water) has been achieved since the previous year.

Being in the commodity sector, monitoring of energy and water use at consumers end is not feasible. However, enhanced use of aluminium in transport sector provides great opportunity for reduction in fuel/energy consumption. Being recyclable and with low recycling energy requirement aluminium metal once produced can be reused with minimum energy consumption.

2.3 Does the company have procedures in place for sustainable sourcing (including transportation)?

Yes.

Sustainable Sourcing is the integration of social, ethical and environmental performance factors into the process of selecting suppliers. For social performance of suppliers, SA-8000 standard has been implemented & Social Accountability Policy is in place. Integrity Pact of Nalco takes care of ethical performance factors. Integrity pact is a signed document which commits a contracting authority and bidders to comply with best practice observing maximum transparency. Similarly, the suppliers are asked to comply with the environmental policy & guidelines of Nalco.

Bauxite the important raw material for aluminium production is sourced from our captive mines located few kilometers away from our Refinery. Aluminium Smelting require huge electrical energy for which we have Captive power plant located near our Smelter. Coal availability for power plant is sourced from coal mines located few kilometer away at Talcher. Coal availability is ensured through long term Fuel Supply Agreement and Bridge Linkage. Any shortfall in coal supply is made up with procurement of coal through e-auction route. Other major raw materials like Aluminium Flouride, Caustic Soda, C T Pitch & C P coke etc. are procured through multiple vendors. Our own railway siding at Budhapank, Angul, port facility at Vizag for export and import, Merry goround railway for coal transportation and cable belt conveyor for bauxite haulage to Refinery augment our transportation system.

2.4 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?

Ancillary Development Policy of the organization promotes development of local vendors. The MSE facilitation cells at units implement the policy by providing guidance in Technical, Commercial areas to these vendors to improve their competitiveness. The goods and service which can be offered by MSE units are listed and displayed prominently and web hosted in our website



for wider circulation and awareness. Namasya (NALCO Micro and Small Enterprise Yogayog Application – Bi-lingual App for MSE) is a mobile App for MSE Vendors which empowers MSEs with required information about vendor registration process, items which can be supplied by them with technical specification, vendor development programmes and training programmes of NALCO etc. Nalco's procurement data from MSEs (Micro and Small Enterprises) are being uploaded on a monthly basis in "MSME SAMBANDH" App of MSME Department, GOI. Display halls at M&R complex and S&P complex display the products along with technical knowhow for developing the product & information regarding annual requirement and last procurement price etc. are provided to MSE entrepreneurs. Relaxation in tendering process i.e. waiver of EMD and tender fees etc. are extended to such units to encourage them to participate in bidding. Our purchase manual is suitably amended to extend purchase preference to MSE units quoting in the band of 15% of lowest quoted price for the products and service earmarked for them.

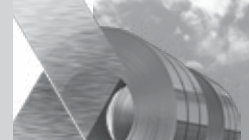
The procurement of products produced and services rendered by MSEs (Micro and Small Enterprises) of Odisha including Ancillary Units for FY 2018-19 stands at ₹361.17 Crore (as against ₹ 296.11 Crore of last FY). The total procurement of products produced and services rendered by MSE units (including those from outside Odisha) stands at ₹472.52 Crore during FY 2018-19 (as against ₹400.13 Crore during FY 2017-18 and it is 26.79% of the total procurement of Goods and Services made by Nalco against Govt. target of minimum 25%. For FY 2019-20, the target for procurement of products produced and services rendered by MSEs has been set at ₹442.5 Crore.

- Nalco participated in state conclave under SC/ST hub held at Bhubaneswar on 30.08.18.
- Nalco was awarded "Certificate of Excellence" in Odisha MSME International Trade fair, 2019 organised by MSME Deptt., Govt. of Odisha from 28th January to 3rd February-19 at Unit-III Exhibition Ground Bhubaneswar.
- Nalco participated in the state level Vendor Development Programme-Cum-Buyer Seller Meet with Mother Plants organized by OASME, in association with MSME Development Institute, Cuttack and MSME Department, Govt. of Odisha at Rayagada on 01.02.19 and at Angul on 01.03.19.
- Nalco participated in Udyam Samaagam held at Cuttack by MSME Development Institute, from 26.02.19 to 28.02.19.
- A national Level "Vendor Meet" was organized at M&R Complex, Damanjodi on 14.06.2018 in which MSE vendors both inside and outside Odisha participated.
- The Sub-PLAC (Plant Level Advisory Sub-Committee) meeting for the year 2018-19 was conducted at M&R Complex, Damanjodi on 05.12.18 in association with DIC Koraput.
- A "Buyer-Seller Meet for SC-ST Entrepreneurs" was conducted at M&R Complex, Damanjodi on 05.12.2018 and at S&P complex on 28.03.19

1.5 Does the company have a mechanism to recycle products and waste? If yes, what is the percentage of recycling of products and waste?

Yes.

As a primary producer of Aluminium metal we are not in to recycling of aluminium but Compared with the production of primary aluminium, recycling of aluminium products needs as little as 5% of the energy and emits only 5% of the greenhouse gas. So far as recycling of waste is concerned we recycle process waste, metal rejects and waste products, effluent & industrial drain water, decanted water from Ash pond and Redmud Pond to maximum possible extent. We also implement rain water harvesting, ground water charging and sewerage water treatment at our units. *In the year 2018-19, 17,017,960 cubic metre water from CPP*



ash pond ; 8140664 cubic meter water from Refinery ash pond and 3132854 cubic meter water from Refinery Red Mud Pond was recycled. Some of our achievements in this regard is presented in the Table C below:

TABLE C : Recycling/ Reuse of waste

Unit	Utilisation	Percentage
Bauxite Mines	Overburden utilized for concurrent reclamation of mined out areas	100%
Alumina Refinery	Caustic Soda recycled from waste redmud	8.31%
	Ash utilization in Refinery	69.59%
	Recycling of Ash pond water	93.61%
Smelter	Recycling of Aluminium scrap	100%
	Aluminium dross recycled as input to process	86%
	Recycling of spent anode	100%
CPP	Ash Utilisation in CPP	75.47%

Principle 3: Business should promote the wellbeing of all employees.

3.1 Please indicate the total number of employees :

As on 31.3.2019, the total strength of employees in regular employment is 6496.

3.2 Please indicate the total number of employees hired on temporary/contractual/casual basis as on 31.3.19 :

No contractual/temporary/casual employees are engaged by Nalco. Job Contractors working in areas like hospitality, maintenance, sanitation, conservancy and project activities etc. have engaged 10767 contract labours to discharge their contractual obligations.

3.3 Please indicate the number of permanent women employees :

As on 31.3.2019, total 359 permanent women employees are employed .

3.4 Please indicate the number of differently-abled permanent employees :

Total 95 nos. of differently-abled persons are on regular employment as on 31.3.19.

3.5 Do you have an employee association that is recognized by management.

There are five Recognised Unions in Nalco, one each in Smelter, CPP, Refinery, Mines & Corporate Office.

3.6 What percentage of your permanent employees , is members of this recognized employee association?

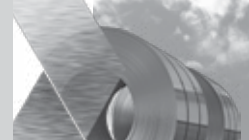
The representation of employees in different recognized unions are given below.

Smelter – 44.83%, CPP – 52.68%, Refinery – 47.99%, Mines – 57.85% & Corporate – 76.22%.

3.7 Please indicate the number of complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.

The status is :

Sl. No.	Category	No. of complaints filed during the F.Y. 2018-19	No. of complaints pending as on 31.03.2019
1	Child labour/ forced labour/ involuntary labour	Nil	Nil
2	Sexual harassment	Nil	Nil
3	Discriminatory employment	Nil	Nil
4	Any other grievances	60	15



3.8 What percentage of your under mentioned employees were given safety & skill upgradation training in the last year?

Permanent Employees; Permanent Women Employees; Casual/ Temporary/ Contractual Employees; Employees with disabilities. The status related to above training is placed below :

Category of employees	Present Strength	Persons undergone Safety and Skill Up-gradation Training	Percentage of persons undergone Safety and Skill Upgradation Training
Permanent Employees(Excluding women & physically challenged employees)	6042	2194	35.31%
Permanent Women Employees	359	108	30.08%
Casual/ Temporary/ Contractual Employees	Nil	—	—
Employees with Disabilities	95	25	26.31

- 10767 Contractual workers are engaged through different contractors out of which 5,627 contractual worker have undergone Safety & Skill Up-gradation training i.e. 52.26%

Principle 4 : Business should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized.

4.1 Has the company mapped its internal and external stakeholders?

Yes. Perceptions of internal stakeholders i.e. employees and external stakeholders i.e. Customers, Suppliers, Investors, Government and their representatives and committees, Local Communities, Regulatory Authorities, Service Providers & Job Contract Workers are solicited through formal or informal channels of engagement. Engagement leads to exchange of ideas, redressal of concerns and convergence of interests, leading to reinforced trust, long-term association and win-win relationship. Complementing this well-established fact, is our comprehensive engagement mechanism which enables a proactive dialogue with our internal as well as external stakeholders. We solicit stakeholder expectations and accordingly streamline our policies, processes and products with a view to address the same.

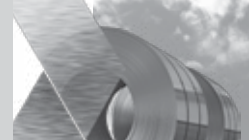
4.2 Out of the above, has the Company identified the disadvantaged, vulnerable and marginalized stakeholders?

Yes, Socio-economic base line survey is carried out in periphery areas of our plant and mines to identify the disadvantaged, vulnerable and marginalized stakeholders. In accordance to that R&R policy has been formulated and has been implemented.

4.3 Are there any special initiatives taken by the company to engage with the disadvantaged, vulnerable and marginalized stakeholders?

Our CSR initiative is totally focused on economically weaker section of the society. Health, Education. Employment, Culture etc. are some of the thrust area of our intervention. Development of disadvantaged, vulnerable and marginalized stakeholders and their socio economic nourishment is always high on our agenda. We take up various initiatives that range from large-scale, long-term projects to one-off need-specific initiatives, aimed towards touching lives of those who are socio-economically marginalized and opportunity- challenged. Illustrated below are some of the key initiatives undertaken during the financial year FY18-19:

- Door step Health service in peripheral village:** Healthcare facility to periphery villagers inclusive of basic medicines through Mobile Health Unit (MHU) & OPD centers.
- Indradhanush:** Residential education to tribal students of periphery villages of Damanjodi in collaboration with reputed schools at Koraput and Bhubaneswar.
- Nalco ki Ladli:** Financial assistance for perusing education to meritorious girl children belongs to BPL category from Koraput & Angul district of Odisha.



- d) **Swachh Bharat Initiatives:** Swachh iconic shrine development, Swachh Vidyalaya & ODF villages towards cleanliness, hygiene and overall wellbeing.
- e) **Drinking water facility for the needy:** Provision of drinking water facility in peripheral villages of M&R Complex, Damanjodi, Proposed Pottangi Bauxite Mines area, S&P Complex, Angul & Utakal D&E Coal Block, Chhendipada.
- f) **Support to Skill India:** Skill development programme to enhance employability of the local unemployed youth and Recognition of Prior Learning (RPL) of contract workers
- g) **Rural infrastructure building:** Construction of roads, culverts, drains, shelter home, renovation and revamping of community centres and water bodies etc. in periphery villages.

Principle 5: Businesses should respect and promote human rights.

- 5.1 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 principles are not only applicable for all our employees, but these are also extended to contractors, suppliers and service providers of all the outsourced jobs. The Human Rights practices mandated vide applicable statutes i.e. Factories Act 1948, Industrial Disputes Act 1947, Mines Act 1972, Contract Labour (R&A) Act 1970, Payment of Gratuity, 1972 are followed strictly in the Company. Also, in the job contract conditions for Suppliers & Contractors, important human rights issues i.e. Child Labour, Forced and Compulsory Labour, Discrimination, Disciplinary Practices, Wages & Work Schedule are suitably addressed vide SA 8000:2014 requirements to proscribe any violation. SA 8000:2014 standard is implemented in our production units, Mines and Corporate Office.

- 5.2 How many stakeholder complaints have been received in the past financial year and satisfactorily resolved by the management?

Status of complaints from stakeholders are outlined at 1.2.

Principle 6: Business should respect, protect, and make efforts to restore the environment.

- 6.1 Does the policy related to Principle 6 cover only the company or extends to the Group/Joint Ventures/Suppliers/Contractors/NGOs/others?

Suppliers & contractors are examined for their environmental commitment under our Environment Policy before entrusting any job to them. Suitable clauses are included in our NIT and work order to ensure implementation of sound environmental practices by our suppliers and contractors.

- 6.2 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.

We have adopted green energy initiatives like generation of wind power and solar power to check emission of Green house gases and associated global warming as detailed below.

- Four Wind Power Projects –i) 50.4 MW at Gandikota, Andhra Pradesh, ii) 47.6 MW at Jaisalmer, Rajasthan, iii) 50 MW at Devikot, Rajasthan and iv) 50.4 MW at Jath, Maharashtra are in commercial operation.
- Three Roof-top Solar Photo-Voltaic Plants of capacity 160 KWp, 100 KWp & 50 KWp are operating respectively at Corporate Office, NALCO Township & HRD Centre of Excellence and Nalco Research and Technology Centre (NRTC) at Bhubaneswar.
- Another 320 KWp Rooftop Solar Power Project has made operational at NRTC, Bhubaneswar.
- Study is being undertaken to assess the feasibility/viability of setting up roof top solar plants at various locations of Nalco at Damanjodi, Angul & Vishakhapatnam.
- During the year toatal 10,197 saplings are planted in different areas of S&P complex and 15,500 seedlings are distributed to villagers to improve green cover in the area.



- In Alumina Refinery, 19,736 trees are planted and 3,877 seedlings are distributed.
- In our Panchpatmali Mines, total 1,00,260 saplings are planted during the year to rehabilitate mined out area and augment afforestation drive. Also 11,100 seedlings, mostly of indigenous fruit bearing species are distributed to peripheral villagers.
- The high altitude nursery at Mines spread over an area of 3 Acres helps in development of indigenous species of plant suited to local climate and condition. Last year the nursery has produced 1 lakh saplings for plantation.

The wind power details are available in NALCO website and the weblink is <https://nalcoindia.com/business/operation/wind-power-plants/>

6.3 Does the company identify and assess potential environmental risks?

Yes, Potential environmental risks are identified through Comprehensive Environment Impact Assessment, Aspect Impact Studies, Hazard Identification & Risk Assessments and Emergency Management Plans etc. The environment concerns, risks, opportunities for our products are addressed as outlined at para 2.1, Table-A:

6.4 Does the company have any project related to Clean Development Mechanism (CDM)? If so, provide details thereof. Also, if yes, whether any environmental compliance report is filed?

50.4 MW Wind Power Plant at Gandikota and 47.6 MW Wind Power Plant at Jaisalmer are taken under Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC). The wind power projects are grid connected renewable energy projects that generate electricity through utilization of wind energy and help in significant reduction of GHG emissions.

50.4 MW Wind Power Plant at Gandikota - CDM project

CDM Project activity has obtained Host Country Approval (HCA) from National CDM Authority (NCDMA), Ministry of Environment and Forests, Govt. of India. The project activity has been validated by (UNFCCC) accredited Designated Operational Entity (DOE). Registration of the project with UNFCCC is under process. Estimated amount of annual average GHG emission reductions is 85,927 tons of CO₂ equivalent.

47.6 MW Wind Power Plant at Jaisalmer- CDM project

CDM Project activity has obtained Host Country Approval from National CDM Authority (NCDMA), Ministry of Environment and Forests, Govt. of India. Registration of the project with UNFCCC is under process. Estimated amount of annual average GHG emission reductions is 83,426 tons of CO₂ equivalent.

6.5 Has the company undertaken any other initiatives on – clean technology, energy efficiency, renewable energy? If yes, please give hyperlink for webpage etc.

Initiatives undertaken on renewable energy are highlighted below:

- **Wind Power Projects:** 50.4 MW at Gandikota, Kadappa, Andhra Pradesh, 47.6 MW at Ludarwa, Jaisalmer, Rajasthan, 50 MW at Devikot, Jaisalmer, Rajasthan and 50.4 MW at Jath, Sangli, Maharashtra are in operation.

NALCO has placed order for setting up of 25.5 MW Wind Power Project at Kayathar in Tuticorin dist., Tamil Nadu. The project is under execution.

The wind power details are available in NALCO website and the weblink is <https://nalcoindia.com/business/operation/wind-power-plants/>

- **Rooftop Solar Projects:** 160 kWp at Nalco Corporate Office, 100 kWp at Nalconagar Township, 370 kWp at Nalco Research and Technology Centre (NRTC), Bhubaneswar are in operation.

NALCO is pursuing for installation of rooftop solar projects at its various locations at Smelter & Power Complex Angul, Mines & Refinery Complex, Damanjodi & Port Facility, Vishakhapatnam under MNRE scheme.



6.6 Are the Emissions/Waste generated by the company within the permissible limits given by CPCB/SPCB for the financial year being reported?

All emissions/ waste generated by the operating units of the company are within the permissible limits prescribed by CPCB/ SPCB. The environmental statement containing such information is submitted to regulatory authority every year.

6.7 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.

One show cause was issued at Smelter w.r.t. to hazardous waste management handling and consequently direction was issued to install some pollution prevention measures which are under process of implementation.

Principle 7: Business, when engaged in influencing public and regulatory policy, should do so in a responsible manner.

7.1 Is your company a member of any trade and chamber or association? If Yes, Name only those major ones that your business deals with:

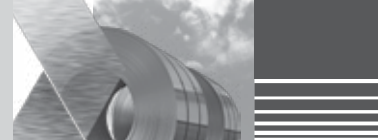
Yes, The major ones are :

1. Aluminium Association of India
2. Standing Conference of Public Enterprise (SCOPE), New Delhi
3. Federation of Indian Mineral Industries (FIMI), New Delhi.
4. National Safety Council, Mumbai
5. Quality Circle Forum of India, Secunderabad
6. Indian Ceramic Society, Kolkata
7. Confederation of Indian Industry (CII), New Delhi
8. Utkal Chamber of Commerce & Industries, Bhubaneswar
9. Engineering Export Promotion Council, Kolkata
10. Federation of Indian Export Organisation, New Delhi
11. International Chamber of Commerce, Delhi
12. Chemical and Allied Products Export Promotion Council, Kolkata
13. National Institute of Personnel Management, Kolkata
14. Odisha State Productivity Council
15. All India Management Association

7.2 Have you advocated/lobbied through above associations for the advancement or improvement of public good? If yes, specify the broad areas (E.g., Governance and Administration, Economic Reforms, Inclusive Development Policies, Energy Security, Water, Food Security, Sustainable Business Principles, Others)

Yes. Broad areas taken up for public good are :

- o Fly ash utilization
- o Water recycling and conservation
- o Climate Change imperatives
- o Conservation of Environment
- o CSR and peripheral development
- o Skill Development & Employment Generation



- o Increased use of Aluminium in automobile, Power transmission, construction and packaging sector
- o Sustainable mining
- o Energy , Water , Mineral conservation
- o Safety, Health and Ergonomics at workplace
- o Economic Leadership by betterment of industries.
- o Development of downstream aluminium industries through Make in India scheme of Govt. of India.

Principle 8: Businesses should support inclusive growth and equitable development.

8.1 Does the company have specified programmes/ initiatives/projects in pursuit of the policy related to Principle 8? If yes, details thereof.

Yes, The preamble and Guiding principle incorporated in CSR Policy of NALCO affirm our conviction for Inclusive growth and equitable development. Company believes that sustainable, equitable growth is the only acceptable business model. The Company aspires to grow its business by reducing adverse environmental footprint and creating positive social impact among the vulnerable and marginalized section of the society in the sphere of education, healthcare, women empowerment, promotion of livelihood, enduring rural infrastructure, promoting and restoring cultural heritage, promoting sports etc.

8.2 Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/any other organization?

The CSR activities of the Company are undertaken through: (i) Rehabilitation and Periphery Development Advisory Committees (RPDACs) (ii) NALCO Foundation (iii) Directly by NALCO

- i. **RPDAC** - Govt. of Odisha has constituted Rehabilitation & Periphery Development Advisory Committee (RPDAC) for Angul Sector and Damanjodi Sector under the Chairmanship of respective Revenue Divisional Commissioner. Other Members of the Committee includes District Collector, Local MLAs, MPs, People's representatives and representatives from Nalco. Upon receipt of the approved list of projects, the same are placed before CSR &SD committee and Board of Directors for detail deliberation and consideration.
- ii. **NALCO Foundation** – NALCO Foundation is focused on socio-economic development of the immediate villages located in the periphery of NALCO's operational areas and other aspirational areas of the state and country. NALCO Foundation has adopted a project based accountability approach through need-based approach and by ensuring participation of the primary stakeholders at the grassroots level in the project management process. The Foundation further intervened in capacity building of youths, women, PRI members & other stake holders.
- iii. Some of the projects are also being executed by NALCO directly.

8.3 Have you done any impact assessment of your initiative?

Yes, We have undertaken social impact assessment initiatives from time to time . Some of our initiatives undertaken in this regard are presented below.

- i) Social impact Assessment of projects of NALCO Foundation was conducted by Central University of Odisha, Koraput during the year 2012.
- ii) Social Impact Assessment (SIA) of the CSR projects implemented by Nalco were carried out by Utkal University, Bhubaneswar in 2017.
- iii) An Impact Assessment Study was made with the support of Madras School of Social Work (MSSW), Chennai in 2019.



8.4 What is your company's direct contribution to community development projects- Amount in INR and the details of the projects undertaken?

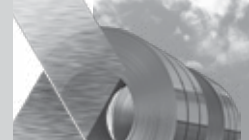
For the financial year 2018-19, a total amount ₹3034.92 lakh has been spent for CSR activities. Some of the major activities are:

- i) Nalco Foundation has successfully addressed the issues of the poorest people in the periphery of plant areas by running Mobile Health Units. Total 5604 Mobile Health Camps are arranged in S&P complex, M&R Complex and Pottangi Mines area treating 1,54,270 patients.
- ii) As a awareness building measure 15000 books titled "Health is Life" has been published and shared among students, teachers, employees and villagers in the periphery areas of S&P complex, Angul and M&R complex, Damanjodi.
- iii) A State-of-Art modern eye care hospital has been constructed at S&P Complex, NALCO in association with LV Prasad Eye Institute with a target of treating 60,000 patients and performing 6000 surgeries.
- iv) Through residential education programme "Indradhanush" NALCO has sponsored 920 students from the 19 priority periphery villages of M&R complex, Damanjodi and 15 villages of Pottangi in three institutions namely; KISS, Bhubaneswar, Adarsh Vidyalaya and Bikash Vidyalaya at Koraput till the academic year 2018-19.
- v) While complementing the "Beti Bachao Beti Padhao" scheme of Government of India, Nalco Foundation has sponsored education for 292 meritorious girl students from periphery villages under its "Nalco Ki Ladli" scheme.
- vi) In line with the **Swachha Bharat Mission** 50 nos. of toilets have been constructed in the remote village called Upargadati, Damanjodi, 264 toilets in Kukudang Gram Panchayat, Angul making it Open Defecation Free, Another 94 toilets are under construction in peripheral villages of S&P Complex.
- vii) A total nos. of 901 HHs are getting drinking water facilities due to the Installation of bore well with force lift pump in 17 periphery villages of Damanjodi. The spring-based water supply project for Aripurtraghati & Kandhapurtraghati from the periphery of M&R complex is in progress which would benefit 315 nos. of HHs. People of 25 periphery villages from the periphery of S&P complex, Angul have been covered under drinking water supply through tanker during summer.
- viii) Under Swachh Iconic Place program, NALCO has undertaken 19 projects in Puri such as Beautification & maintenance of Gandhi Park, Construction of open air auditorium, Renovation of museum inside Shree Jagannath Temple, Provision for drinking water during Car festival etc.
- ix) NALCO has distributed Charkhas to women weaver and spinners of Khurda, Koraput & Puri district of Odisha. Also as a responsible partner of NSDC, NALCO Foundation has trained 30 girls & women trainees in sewing machine operator & has a plan to start the training of security guard, driving & healthcare etc. in near future.
- x) NALCO has contributed towards protection of National heritage and culture and development of traditional art and handicrafts in Sambalpur & Koraput district of Odisha, such as development of "Mahima Saint Santha Kabi Bhima Bhoi Smruti Pitha" at Rairakhol, Sambalpur.
- xi) Nalco has contributed to rural development activities such as construction of roads, culverts, drains, shelter home, renovation and revamping of community centres and water bodies etc. in periphery villages.
- xii) Besides NALCO has given stress on promotion of Rural Sports in Koraput district of Odisha.

8.5 Have you taken steps to ensure that this community development initiative is successfully adopted by the community?

The need is being identified involving the community around through PRA (Participatory Rural Appraisal) and FGD (Focused Group Discussion). The community group viz. Youth Groups, Women Group, Self-help Groups (SHGs), Farmers Group, Children's Group etc. participate in project formulation & management to focus community ownership & sustainability.

NALCO collaborates with Government bodies, NGOs and with other Programme Implementing Agencies (PIA) to implement



community development initiatives in the thematic areas of health, education, livelihoods, rural development, environment (Plantation) and ethnicity for maximum effect.

Principle 9: Businesses should engage with and provide value to their customers and consumers in a responsible manner.

9.1 What percentage of customer complaints/consumer cases are pending as on the end of financial year ?

Customer complaint are addressed in Nalco through a QMS based procedure with scope for visit by competent commercial or technical executives for on site assessment of complaint status if required. In case of a claim for compensation, the same is thoroughly evaluated by an approved committee and proposal recommending necessary compensation if any, is released after approval of competent authority.

No Customer Complaints pending as on 31.3.2019, Status report on Customer Complaints as on 31.3.19 is:

Complaints pending as on 31.03.2018	1
Complaints received during FY 2018-19	11
Complaints disposed during FY 2018-19	12
Complaints pending as on 31.3.19	0
Percentage of Customer Complaints Pending on 31.3.19	0%

9.2 Does the company display product information on the product label, over and above what is mandated as per local laws?

No.

Only the information mandated by law is provided on product label .

For Aluminium metal, the product grade, stack no., bundle no., net weight is displayed on the product label. In case of Rolled Products, name of the Company & production unit and place, Coil No, Grade, Size (Thickness X Width) in mm, Net Weight (in kgs.), Signature of the inspecting authority, Date of Packaging, No. of sub-stacks and total no. of sheets per packet (for Rolled sheets only) is displayed on the product label. In case of Alumina, name and logo of the company, product description, product code is displayed on the packaging. In case of special product Hydrate, net weight / gross weight are also displayed.

9.3 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.

No.

9.4 Did your company carry out any consumer survey/ consumer satisfaction trends?

Yes. Capturing the perception of customers and consumers on our products and associated service, is given top priority in our organization. Our Quality Policy profess meeting the needs and expectations of the customer and consistently improving our system and work ethos as the chosen path for achieving excellence in business. We collect feedback about our product and service both from formal and informal channels and constantly work on it to enhance our brand image. Customer satisfaction survey is conducted biannually every financial year for the two six-monthly periods ending September & March, in order to capture customers’ perceptions over the period. The average customer satisfaction Index over the year computed based on response obtained from customers, is above the target. The trend observed in customer satisfaction index is taken as one of the basic indicator to asses our own performance in marketing front and is utilized to develop strategy for further market penetration.



REPORT ON CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNING AND OUTGO

REPORT ON CONSERVATION OF ENERGY:

A. Conservation of Energy:

(i) The steps taken or impact on Conservation of Energy:

Enhancement of operational Efficiency is one of the priority areas and through this reduction in consumption of energy, raw materials etc. has resulted in reduction of cost. Many such initiatives have been taken up by Capital Repair Group and Small Group Activities (SGAs) by catching up technological advancements and enhancing the energy efficiency in its different activities and processes during the FY 2018-19.

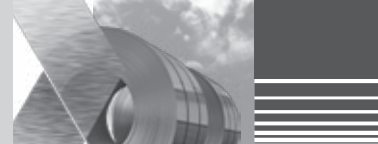
Energy conservation measures adopted in different units are as under:

Bauxite Mines:

- 54 nos. of LED 90W street light fixtures were commissioned along the haul road in place of 250 Watt HPSV fixtures resulting in energy savings of 43.7 MWH/ annum.
- 80 nos. of 250 W energy efficient, high luminous intensity high bay LED luminaries have been installed in place of 400 Watt HPSV high bay luminaries in Central Store, HEMM bays and Daily Maintenance Garage. This results in energy savings of 55.48 MWH/ annum.
- 200 nos. of 70 Watt Well glass fixtures have been replaced by 60 Watt LED Luminaries. This results in energy savings of 18.254 MWH/ annum.
- 20 nos. of Astronomical timers have been installed in lighting circuits in place of digital timers with a view to conserve energy. This results in energy savings of 34.0 MWH/ annum.
- VFD's have been installed in 250 KW Stream 1 Crushers (both) motors in September and energy savings have been recorded for six months in the FY 18-19. This results in energy savings of 9.7 MWH/ annum.

Alumina Refinery:

- As a part of Energy Conservation project, Replacement of APH in Boiler no.-1 and Boiler no.-3 was carried out, this has resulted in improvement in Boiler efficiency.
- Use of dewatering aid for reduction in moisture of feed hydrate to Calciners for reducing in Fuel oil consumption.
- Use of Thermol (Fuel oil additive) to reduce fuel requirement in Calciner is going on as per requirement.
- Replacement of tube lights and incandescent bulbs with LED tubes and bulbs (18,250 nos) at all major roads and public buildings.
- Replacement of the old vent steam control valves with new and improved design valves has been planned. Procurement action is in progress.
- This financial year we have consumed 20,870 TOE less energy on prorated basis for Equivalent Calcined Alumina production.



Smelter Plant:

- CII, Eastern Region recognized the effort of NALCO for Excellence in Energy Conservation Awards in the LARGE SCALE CATEGORY for the year 2018, awarded ENCON -4 star award in a function organized by CII, Eastern Region on 17/08/2018 at Kolkata.
- 75 pots have been graphitized with reduction in D.C. energy consumption @55 KWH /MT.
- Recycling of coke dust generated at Bake oven-1 and slot cutting machine-1 to GAP-1 which will be used for production of green anode at GAP-1 was commissioned on 29th Sep 18.
- Winch trolley communication control system for ABF- 2 & 3 for reduction in consumption of power and HFO was commissioned on 30th Nov'18 so as to reduce power and HFO consumption.
- Replacement of existing conventional light fitting by LED light fitting (6309 Nos) in smelter plant so as to reduce energy consumption.

Captive Power Plant (CPP):

1. Chemical cleaning of condensers were done in Unit# 2,3,5,6 & 7. After chemical cleaning of condenser tubes condenser vacuum has improved to near design value thereby resulting in saving of 85,624 MT coal.
2. Energy saving of 7,31,552 KWh was achieved through replacement of total 9102 LED fitting in place of conventional light fitting.
3. The performance of High/Intermediate Pressure (HIP) module turbine of Unit #7 was very low. The said turbine was replaced with new one. Due to this there is a saving in coal consumption by 30,660 MT per annum.

Energy conservation projects proposed or in progress during 2018-19:

Mines: Nil.

Alumina Refinery:

1. Replacement of tube lights with 18 Watts LED tubes (15,700 nos) and CFL and incandescent bulbs with 07W and 09W LED bulbs balanced lights in plant process areas.
2. Use of Dewatering Aid in Filtration area to reduce fuel requirement in Calciner.
3. Use of Thermol as fuel oil additive in calciners to reduce fuel requirement in Calciner.

Captive Power Plant (CPP):

1. R&M of existing Air-preheater with advanced profile heating element and double sealing arrangement in other units has been undertaken. This will result in increase in boiler efficiency by about 1.14% due to reduction in air leakage and increased heat transfer.
2. Old reciprocating air Compressors are being replaced with Energy efficient Screw Compressors in phases. This will help in reduction in power consumption.

Smelter:

Energy conservation project proposed or in progress:

- Installation of Anode Slot Cutting Machine at Rodding Shop-II under implementation so as to reduce in specific D.C. energy consumption in Pots and to improve process stability.



- Replacement of reciprocating compressor with centrifugal compressor under implementation so as to reduce the specific Energy consumption.
- Development of low energy cell technology for smelter plant (AP2XN)” in collaboration with Rio Tinto Alcan (RTA) is in progress so as to reduce Electrical Energy consumption in pot lines.

(ii) Steps taken by the company for utilizing alternate sources of energy:

Your Company is commercially operating the following Wind and Solar Power Generation Units:

1. 50.4 MW Wind Power Plant at Gandikota, Kadap, Andhra Pradesh.
2. 47.6 MW Wind Power Plant at Ludarva, Jaisalmer, Rajasthan.
3. 50 MW Wind Power Plant at Devikot, Jaisalmer, Rajasthan.
4. 50.4 MW Wind Power Plant at Jath, Sangli, Maharashtra.
5. 310 KWp Rooftop Solar Power Plant at NALCO Bhawan, NALCO Nagar and NRTC Building.

During the year, your Company has generated 363 MU from wind power and 0.346MU from Solar Power Plants.

(iii) The capital investment on energy conservation equipments:

Alumina Refinery:

1. Replacement of Air Pre heater in Boiler I and III at a cost of ₹417.68 lakhs.
2. Replacement of LED bulbs and tube lights at a cost of ₹40.00 lakhs.

Smelter:

ITEMS	INVESTMENTS (₹ in lakh)
● 101 POTS -CATHODE BLOCKS WERE RE LINED WITH GRAPHITISED IN POT LINES	6,708
● WINCH TROLLEY COMMUNICATION CONTROL IN BAKEOVENS OF CARBON PLANT	69
● TECHNICAL CO-DEVTMENT OF AP2XN TECHNOLOGY IN POT LINES	26
● PNEUMATIC CONVEYING & RECYCLING OF COKEDUST IN CARBON PLANT	23
● ENERGY SAVING DEVICE IN BREAKER ASSY OF POTLINE	18

CPP:

1. Replacement of old HIP turbine module with new more efficient module in Unit - 7 :- ₹24.25 crores.
2. Condenser chemical cleaning in unit - 7,6,3,2 & 5 :- ₹0.686 crores.
3. Replacement of existing light fitting with energy efficient LED tube lights, LED Street Lights, LED high bay fittings:- ₹0.495 crores.

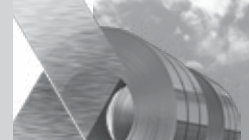


B. TECHNOLOGY ABSORPTION, ADAPTATION & INNOVATION:

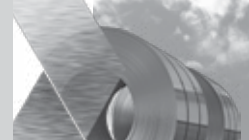
Sl. No.	Technology	Benefits thereof
1	Embedded system for continuous online monitoring of compressed air pressure and temperature, implemented in smelter plant.	Real time data acquisition will help in control of the air pressure and energy consumption in smelter plant.
2	Boric acid treatment of anodes, implemented in both GAPs of carbon area of smelter plant.	Improvement in anode quality, reduction in net carbon consumption and better pot performance.
3	Natural flocculant Wheat Bran completely eliminated from use and fully substituted with Synthetic flocculants in all three streams of plant.	<ul style="list-style-type: none"> ● Achievement of desired settling rate to achieve higher feed. ● Higher mud compaction to reduce caustic soda consumption in physical form. ● Elimination of large handling equipment, operation and maintenance of large installations. ● All the above led to lower material cost, lower energy cost and lower O&M cost.

DETAILS OF TECHNOLOGY IMPORTED /UPGRADED DURING LAST 5 YEARS:

SL. No.	Technology Imported/ Upgraded	Year of import / upgraded	Has Technology been fully absorbed	If not fully absorbed, area where this has not taken place, reasons therefore and future plans of action
1.	Six numbers online particulate matter(PM) analysers installed & commissioned in FTPs of pot line	2014-15	YES	—
2.	Three numbers on line ambient air quality monitoring stations commissioned inside smelter plant	2014-15	YES	—
3.	Online effluent monitoring station commissioned at the outlet of effluent treatment plant.	2014-15	YES	—
4.	Automated Alumina mixing system for crushed bath plant at rodding at Rodding shop-1	2014-15	YES	—
5.	C.P. Coke blending system installed in GAP1	2014-15	YES	—
6.	Mogen sen screen installed in GAP 1 so as to increase its availability	2014-15	YES	—
7.	RTDAS (Real Time Data Acquisition System) for FTP 1-6 stacks, Bake-oven Stacks, 3 Nos. new ambient air monitoring stations and effluent monitoring station for continuous uploading of monitoring data to the server of OSPCB through GPRS service	2015-16	YES	—
8.	Installation of Fume Treatment Center in Anode Baking Furnace -1.	2015-16	YES	—
9.	Centralized SCADA system commissioned at FTP-5 to monitor the status of 10-different plants (FTP 5 to 8, Silo 5 to 8, HDPS-1 & 2).	2016-17	YES	—
10.	The SCADA & HMI system of Billet casting Machine upgraded from industrial key pad based workstation to latest touch screen based workstation.	2016-17	YES	—



SL. No.	Technology Imported/ Upgraded	Year of import / upgraded	Has Technology been fully absorbed	If not fully absorbed, area where this has not taken place, reasons therefore and future plans of action
11.	New product, CH-90 grade Billet (High Speed Extrusion Billet) developed and commercialized.	2016-17	YES	—
12.	Smelter effluent water treatment plant based on EMRION Nano technology was set up.	2016-17	YES	—
13.	C.P. Coke blending system installed in GAP-II	2016-17	YES	—
14.	Treatment of Boric Acid was done in GAP-1 & GAP-2 green anodes so as to improve the quality of anode	2016-17	YES	—
15.	The PLC processor system of Carbon Recycle System at Rodding Shop- 2 was upgraded to state-of-the-art Control Logix platform from PLC-5 family.	2017-18	YES	—
16.	The PLC system (comprising of Processor, I/Os, Power Supply & Operator Control Panel) for Plano Milling machine at Central Repair Shop was upgraded to state-of-the-art Siemens S7-1200 system from the obsolete S7-200 system because of technological obsolescence.	2017-18	YES	—
17.	Up-gradation of wireless communication system of Heat regulation system of ABF-3.	2017-18	YES	—
18.	With in-house engineering, STP-I was renovated and put to operation by installing phytoid filter & improved aeration system to meet the recent norms stipulated by CPCB and also to comply with CTO condition. The treated STP water is utilized for horticulture purpose	2017-18	YES	—
19.	Installation of recuperator in one of the melting furnace of Rolling plant commissioned so as to optimise the HFO consumption	2017-18	YES	—
20.	Casting Station in Rodding-1 was revamped with installation of new auto casting system. This project will provide safe work atmosphere and also can cater to the need of 220kA up-gradation.	2017-18	YES	—
21.	Nalco launched a new value added product AA 3105 (Al-Mn-Mg) twin roll casting alloy from Rolling plant for fan blade manufacturing. This value added product will strengthen Nalco's product mix & cater to the requirement of customers	2017-18	YES	—
22.	Cold rolling mill was revamped & re-commissioned by installation of latest generation of automation system by the OEM M/s Fata S.p.A. so as to upgrade the electrical and operator control system in Rolling plant.	2017-18	YES	—
23.	Pneumatic conveying & Recycling of coke dust system commissioned on Sept, 2018 as a part of dust suppression and resource conservation.	2018-19	YES	—
24.	Winch trolley communication control system for ABF-2 & 3 for reduction in consumption of power and HFO was commissioned so as to reduce power and HFO consumption.	2018-19	YES	—



SL. No.	Technology Imported/ Upgraded	Year of import / upgraded	Has Technology been fully absorbed	If not fully absorbed, area where this has not taken place, reasons therefore and future plans of action
25.	Improvement of Billet Quality with better surface finish through addition of Strontium in 6000 series, a new grade was developed & Commercialized.	2018-19	YES	—
26.	Monitoring of pressure & temp of compressed air network by use of Embedded technology & GPRS was implemented for the first time in Smelter Plant	2018-19	YES	—
27.	The obsolete existing AB PLC 5/ 15 system of Billet Cutting machine upgraded to Allen Bradley make Control Logix PLC System including its Servo drive system	2018-19	YES	—
28.	Installed & commissioned the VBD method of analysis for CP coke in order to replace apparent density method to eliminate the use of Mercury as per directive of statutory requirement	2018-19	YES	—
29.	Latest High precision and accurate instruments such as AAS,UV-VIS spectrometer, digital CCS machines installed and commissioned for day to day analytical activities.	2018-19	YES	—
30.	Upgradation of “Wireless Communication System” of entire Anode Baking Furnace-3 Fire system has successfully carried out using the new generation client and access modules supplied by M/s Siemens AG	2018-19	YES	—
31.	Gas make air dryers (All Four Dryers) automation system was upgraded to overcome the challenges of obsolescence, includes the PLC processor, SCADA system and networking system upgradation in compressor house	2018-19	YES	—
32.	Cu-deoxo installed in the nitrogen plant for generation of ultrapure nitrogen to supply to the degassers of casters	2018-19	YES	—
33.	Method of determination of Carbon content of electrode bath samples of pot lines successfully established with existing LECO analyser which was a requirement as per RTA recommendation.	2018-19	YES	—
34.	Double roll Crusher installed in GAP1 so as to increase its availability	2018-19	YES	—

Expenditure on R&D:

₹ in lakhs

Nature	2018-19	2017-18
Capital	2,199	1,886
Revenue	901	909
Total	3,100	2,795
R&D Expenditure as % of turnover	0.27	0.30

- C. The foreign exchange earnings for the year 2018-19, ₹4,647.38 crores is as against ₹3,573.75 crores in 2017-18. The foreign exchange outgo for the year under report was ₹312.95 crores as against ₹547.67 crores in the previous year.



CORPORATE GOVERNANCE REPORT

Philosophy on code of governance

Corporate governance is a synonym for sound management, transparency and disclosure, encompassing good corporate practices, procedures, standards and implicit rules which propel a Company to take sound decisions, thus maximizing long-term shareholder value without compromising on integrity, social obligations and regulatory compliances. It is about maintaining a balance between economic, social, individual and community goals. Corporate Governance instill a control system to ensure highest degree of accountability, transparency and credibility in an organization.

An organization's success is possible on sustainable manner when it encourages transparency in all facets of its dealing and practise good governance at all level. In NALCO, business is done not only to strengthen the bottom line but also for long-term value creation for all stakeholders without compromising on integrity, societal obligations, environment and the regulatory compliances. NALCO endorses its core value as BEST: **Benefitting stakeholders, Excellence and quality, Sustainability, Trust & Integrity.**

A stronger Corporate Governance norm enhances the trust and confidence level of investors' community in the market. In this pursuit, SEBI brought lot of changes in the SEBI (LODR) Regulations, 2015 to be practised by the listed entities on basis of the recommendations made by the Kotak Committee on Corporate Governance.

I. BOARD OF DIRECTORS

The Board is the apex body of the Company stipulating guidelines and framing polices for the running of the organisation on sustainable manner. The Board needs to have a blend of executive directors who are basically functional directors having expertise in respective fields and keep guiding the management on day-to-day activities and non-executive directors including Independent Directors who bring in rich experience and wisdom to the Board for healthy deliberation and sound decision making process.

The Board also needs to address gender diversity by inducting woman director to the Board. While there is already existing provision to have at least one woman director on the Board, SEBI on recommendation of Kotak Committee has amended LODR Regulations for inducting at least one Independent woman director on the Board by top 500 listed Companies as per market capitalisation.

Besides, SEBI has also amended the Regulation to ensure at least 6 directors on the Board of top 1000 Companies with effect from 1st April, 2019.

(a) Composition of the Board

The sanctioned strength of the Board is as follows:

- i. Six full time (Executive) Directors including Chairman-cum-Managing Director.
- ii. Two Part-time Official Directors.
- iii. Eight Part-time Non-official (Independent) Directors.

The composition of the Board is at its full strength as on 31st March, 2019 as per details given below:

Sl. No.	Name of Director	DIN	Date of Appointment
Functional Director			
1.	Dr. Tapan Kumar Chand Chairman-cum-Managing Director	01710900	27.07.2015
2.	Shri V. Balasubramanyam Director (Production)	06965313	01.01.2015



Sl. No.	Name of Director	DIN	Date of Appointment
3.	Shri Basant Kumar Thakur Director(HR)	07557093	04.07.2016
4.	Shri Sanjib Kumar Roy Director (P&T)	06756812	03.02.2017
5.	Shri Pradip Kumar Mishra Director (Commercial)	06445517	23.04.2018
6.	Shri Sridhar Patra# Director (Finance)	06500954	01.09.2018
Part-time Official Director			
7.	Dr. K. Rajeswara Rao	08071005	19.02.2018
8.	Shri Anil Kumar Nayak	08097669	27.03.2018
Part-time Non-official (Independent) Director			
9.	Shri Dipankar Mahanta*	01583516	21.11.2018
10.	Shri S. Sankararaman*	07346454	21.11.2018
11.	Shri Pravat Keshari Nayak*	07346756	21.11.2018
12.	Prof. Damodar Acharya*	06817842	21.11.2018
13.	Shri Maheswar Sahu*	00034051	21.11.2018
14.	Smt. Kiran Ghai Sinha	07726477	03.02.2017
15.	Shri Nagendra Nath Sharma	02888318	06.09.2017
16.	Smt. Achla Sinha	07932932	08.09.2017

Consequent upon superannuation of Shri Krushna Chandra Samal on 31.08.2018, Shri Sridhar Patra has been appointed as Director (Finance) w.e.f. 01.09.2018.

* Shri Dipankar Mahanta, Shri S. Sankararaman, Shri Pravat Keshari Nayak, Prof. Damodar Acharya and Shri Maheswar Sahu were appointed as Part-time Non-Official (Independent) Directors for a period of 3 years by Government of India vide Ministry of Mines letter dated 17.11.2015. On completion of their tenure on 20.11.2018, they were re-appointed by Government of India vide Ministry of Mines letter dated 19th November, 2018 as Part-time Non-Official (Independent) Directors on the Board of NALCO for a period of one year from the date of completion of their first tenure.

Non-executive directors i.e. Part-time Official directors and Part-time Non-official directors combinedly constitute 62.5% of the total Board strength and Part-time non-official (Independent) directors stand-alone constitute 50% of the total Board strength. There are two women independent directors on the Board and they both constitute 12.5% of the total Board strength.

The composition of the Board was in compliance with the requirements under the SEBI (LODR) Regulations throughout the year.

(b) Board meetings and attendance of Directors

- The Board meets at regular interval to discuss and decide the business strategies/policies and review the financial performance of the Company. The Board is mandated to review and consider the agenda items on matters set out in Regulation 17 read with Part A of Schedule II of the LODR Regulations.
- The Board has constituted various Committees, some are statutory and some are non-statutory in nature, for discharging their functions more effectively.



- Secretarial Standards issued by the Institute of Company Secretaries of India (ICSI) are followed for convening the Board meetings, Committee meetings and General meetings.
- Meetings are convened with approval of CMD/Chairman of the Committee by giving at least 7 day's advance notice. Agendas with detailed agenda notes are normally circulated at least a week before the scheduled date of meeting for meaningful and informed discussion in the meeting.
- The meetings of the Board of Directors and Committee meetings are generally held at the Registered Office of the Company.
- Nine Board meetings took place during the year under review. Meeting dates with attendance of Directors in the meetings are given below:

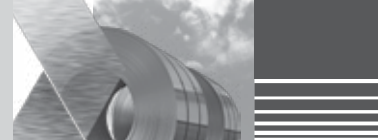
Board Meeting No. & Date	No. of Directors Present					% of attendance to strength
	Board Strength	Functional	Part-time official	Part-time non-official (Independent)	Total Attendance	
306 th -05.05.2018	16	6	2	7	15	93.75
307 th -26.05.2018	16	6	1	6	13	81.25
308 th -24.07.2018	16	6	2	7	15	93.75
309 th -08.08.2018	16	6	1	8	15	93.75
310 th -12.10.2018	16	6	2	7	15	93.75
311 th -12.11.2018	16	6	1	7	14	87.50
312 th -08.02.2019	16	5	2	8	15	93.75
313 th -28.02.2019	16	6	1	8	15	93.75
314 th -01.03.2019	16	6	1	8	15	93.75

— The maximum gap between any two meetings was 87 days.

— Necessary quorum was present in all these meetings.

The table below shows the individual attendance of Directors in the Board meetings held during 2018-19, their attendance in the last Annual General Meeting, directorship in other Companies and membership and chairmanship in the Committees of other Companies:

Name & Designation	Board Meetings		Attendance at 37th AGM held on 29.08.2018	No. of other directorships	Membership in the Committees of other Companies	
	Held during the tenure	Attended			Membership	Chairmanship
Dr. T. K. Chand Chairman-cum-Managing Director	9	9	Yes	Nil	Nil	Nil
Shri V. Balasubramanyam Director (Production)	9	9	Yes	Nil	Nil	Nil
Shri B. K. Thakur Director(HR)	9	9	Yes	Nil	Nil	Nil
Shri S. K. Roy Director(P&T)	9	8	Yes	Nil	Nil	Nil
Shri P. K. Mishra Director(C)	9	9	Yes	Nil	Nil	Nil



Name & Designation	Board Meetings		Attendance at 37th AGM held on 29.08.2018	No. of other directorships	Membership in the Committees of other Companies	
	Held during the tenure	Attended			Membership	Chairmanship
Shri S. Patra* Director(F)	5	5	NA	Nil	Nil	Nil
Dr. K. Rajeswara Rao Part-time Official Director	9	5	No	Nil	Nil	Nil
Shri A.K. Nayak Part-time Official Director	9	8	No	Nil	Nil	Nil
Shri Dipankar Mahanta Independent Director	9	9	No	Nil	Nil	Nil
Shri S. Sankararaman Independent Director	9	9	Yes	Nil	Nil	Nil
Shri P K Nayak Independent Director	9	9	Yes	Nil	Nil	Nil
Prof. Damodar Acharya Independent Director	9	9	No	Nil	Nil	Nil
Shri Maheswar Sahu# Independent Director	9	8	No	9	1	4
Smt. Kiran Ghai Sinha Independent Director	9	7	No	Nil	Nil	Nil
Shri N. N. Sharma Independent Director	9	8	Yes	Nil	Nil	Nil
Smt. Achla Sinha Independent Director	9	7	No	Nil	Nil	Nil

* Inducted as an additional Director w.e.f 01.09.2018.

Shri Maheswar Sahu is appointed as Independent Director in M/s. Adani Gas Ltd and M/s. Yes Bank which are listed entities.

– Other directorships do not include directorships of private limited companies, foreign companies and Section 8 companies.

– The Chairmanship/Membership of Board Committees include only Audit Committee and Stakeholders Relationship Committee.

– There are no inter-se relationships among the Board members.

(c) Non-Executive Directors

- i) Part-time Official Directors and Part-time Non-official (Independent) Directors are the Non-executive Directors forming part of the Board.
- ii) While the Part-time Official Directors are nominated to the Board from the Administrative Ministry, the Part-time Non-official (Independent) Directors are appointed by the President of India and the terms and conditions are fixed by the Administrative Ministry.
- iii) Based on the disclosure made by the Independent Directors at the beginning of every financial year and in the opinion of the Board, the Independent Directors fulfill the conditions specified under the Companies Act, SEBI (LODR) Regulations and are independent of the management.
- iv) Formal letter of appointment is issued to the Independent Directors on their appointment as Director on the Board. The appointment letter inter-alia contains the role, function, duties and responsibilities of Independent Director in the Company. Appointment letters of Independent Directors are available in the Company's website https://nalcoindia.com/wp-content/uploads/2018/12/appt_letter.pdf
- v) During the year under review, no Independent Director has resigned from his/her post.
- vi) Acclimatization programme is conducted for the Independent Directors on their appointment on the Board.



Independent Directors are nominated to attend orientation programmes being conducted by ASSOCHAM, CII, SCOPE and DPE to get themselves updated on changes/developments in the domestic/global scenario. The details of such programmes attended by the Independent Directors are available in the link;

https://nalcoindia.com/wp-content/uploads/2019/02/Familiarisation_Programme_for_Directors.pdf

- vii) None of the Non-executive Directors hold any share in the Company.
- viii) Independent Directors are not entitled for stock option in the Company.
- ix) All Directors are covered under Directors and Officers Insurance (D & O insurance) taken by the Company from M/s. Oriental Insurance Company Ltd.

(d) Chart/matrix setting out the skills/expertise/competence of the Board

NALCO believes that it is the collective effectiveness of the Board that impacts Company's performance and therefore the members of the Board amongst themselves should have a balance of experience, skills, expertise, competencies of perspectives appropriate to the Company.

Given the Company's vision to the sustainably grow multi-fold in Mining, Alumina and Aluminium business along with select diversification in Minerals, Metals & Energy sectors, the Directors possess one or more of the following skills, expertise and competencies:

1. **Strategic Vision/Leadership:** Ability to create, strategic vision for the Business aligning with Company's Missions, Goals and Objectives. Ability to evaluate competitive corporate and business strategies and based thereon, contribute towards progressive refinement of the Company's strategies for fulfilment of its Vision & Mission.
2. **Technology Management:** Skills to take technical leadership in formulating strategic and operational plans for each new project, expansion schemes, techno-economic evaluation and planning for Business Development. Effective decision making in introducing new and efficient technology including technological up-gradation leading to major modification of existing plants for sustainable business growth.
3. **Financial Acumen:** Acumen to formulate policies and procedures for all financial activities like investments budgets and Projects funding expenditures, Fund Management, Treasury Management and Foreign Exchange Management.
4. **Business Acumen:** Ability to develop and implement strategy, policies and plans to promote and protect the Company's commercial interests in line with objectives and target of the Company. Monitoring procurement of equipments/raw materials/fuels/spares as per the requirement of operation as well as project needs of the company.
5. **Corporate Governance:** Ability to comprehend the statutory roles and responsibilities of a Director and of the Board as a whole. Compliance & driving global best practices in Governance.
6. **Project Management:** Ability to collaborate and technical reinforcement for timely achievement of milestones of projects and its cost involved. Effective decision making in introducing new and efficient technology including technological up-gradation leading to major modification of existing plants for sustainable business growth.
7. **Policy Evaluation:** Ability to comprehend the Company's governance philosophy and contribute towards its refinement periodically. Ability to evaluate policies, systems and processes in the context of the Company's businesses with periodical review.
8. **Capacity/Culture Building & Sustainability:** Acumen to evaluate organisational capacity and readiness across relevant parameters and provide guidance on bridging gaps in capacity building. Ability to contribute to the Board's role towards promoting an ethical organisational culture, eliminating conflict of interest and setting & upholding the highest standards of ethics, integrity and organisational conduct.
9. **Stakeholder Value Creation:** Ability to understand processes for shareholder value creation and its contributory elements and critique interventions towards value creation for other stakeholders.
10. **Risk Management & Compliance:** Ability to appreciate business modelling and key risk assessment/management impacting the Company's business and development of its system and control for risk mitigation and compliance management.



(a) Performance evaluation of Board members

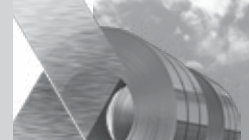
- The manner of formal evaluation of the Board, Committees and individual directors which requires reporting in the Board Report is exempted for Government Companies, if directors are evaluated by the Administrative Ministry.
- The requirement relating to performance evaluation of Board members under the Companies Act, 2013 is also exempted for Government Companies vide circular dt. 05.06.2015 issued by the Ministry of Corporate Affairs (MCA).
- Similar relaxation have also been given by DPE vide OM dt. 20.06.2013 by withdrawing review of the performance of the Chairperson of the company after taking into account the views of all the directors, from the scope of separate meeting of Independent Directors.
- MCA further vide circular dt. 05.07.2017, have exempted evaluation mechanism of non-Independent Directors and chairperson of Government Companies as specified in schedule IV of the Companies Act, 2013.
- There is no such relaxation/exemption to listed Government Companies under SEBI (LODR) Regulations, 2015.
- The performance of the Board is evaluated during the evaluation of the Memorandum of Understanding (MoU) signed with the Administrative Ministry.

II REMUNERATION OF DIRECTORS

- NALCO being a Government Company, the remuneration, benefits and Performance Related Payments (PRP) of Functional Directors are as per extant DPE guidelines. MCA has exempted Government Companies from formulating policy relating to remuneration of Directors, required under Section 178 of the Companies Act, 2013.
- All Functional Directors are members of New Pension Scheme (NPS).
- Government nominee Directors are not entitled for any remuneration/sitting fees as per DPE guidelines.
- Independent Directors were being paid sitting fees of ₹20,000/- for attending every meeting of Board/Committee in which they are members. During the year under review, the fee was enhanced from ₹20,000/- to ₹30,000/- for attending each meeting of Board of Directors and from ₹20,000/- to ₹25,000/- for attending each meeting of Board constituted Committee including separate meeting of Independent Directors. The enhancement in fees is within the statutory limit prescribed under companies act, 2013.
- Company makes necessary arrangements for the Directors to attend the meetings. Out-of-pocket expenses, if any, incurred by the Independent Directors for attending the meetings are reimbursed.
- Functional Directors including Chairman-cum-Managing Director are appointed by the President of India for a period of 5 years from date of assuming charges or till date of superannuation or further orders of the Government of India whichever is earlier.
- Part-time Official Directors are nominated from the Administrative Ministry and they continue office till further orders from the Administrative Ministry.
- Part-time Non-official (Independent) Directors are appointed by the President of India for a tenure of 3 years and the terms and conditions of appointment are fixed by the Administrative Ministry.
- The Company has not issued any stock option during the year 2018-19.
- There is no provision for payment of severance fees to any Director. Notice period is applicable as per extant DPE guidelines and specified in the appointment letter.

Details of remuneration of Functional Directors for the FY 2018-19 are given below:

Name	Remuneration for the year 2018-19 (₹)		
	All elements of remuneration	Other benefits	Total
Dr. T. K. Chand, Chairman-cum-Managing Director	68,97,870	—	68,97,870
Shri K.C. Samal*, Director (Finance)	54,27,998	—	54,27,998
Shri V. Balasubramanyam, Director (Prod.)	59,14,627	—	59,14,627



Name	Remuneration for the year 2018-19 (₹)		
	All elements of remuneration	Other benefits	Total
Shri B. K. Thakur, Director(HR)	44,96,710	—	44,96,710
Shri S. K. Roy, Director(P&T)	47,55,972	—	47,55,972
Shri P. K. Mishra, Director (Commercial)	36,58,158	—	36,58,158
Shri Sridhar Patra [#] , Director (Finance)	26,00,140	—	26,00,140

* Superannuated on 31.08.2018

Assumed office on 01.09.2018

Details of sitting fees paid to the Independent Directors during 2018-19 are given below:

Name	Sitting Fees (₹)*		Total (₹)
	Board Meetings	Committee Meetings	
Shri Dipankar Mahanta	2,20,000	4,05,000	6,25,000
Shri S. Sankararaman	2,20,000	3,35,000	5,55,000
Shri P.K. Nayak	2,20,000	3,10,000	5,30,000
Prof. Damodar Acharya	2,20,000	2,20,000	4,40,000
Shri Maheswar Sahu	2,00,000	2,50,000	4,50,000
Smt. Kiran Ghai Sinha	1,70,000	2,30,000	4,00,000
Shri N. N. Sharma	2,00,000	1,85,000	3,85,000
Smt. Achla Sinha	1,80,000	1,15,000	2,95,000

* TDS was deducted from the amount paid as sitting fees.

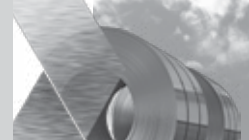
III. VARIOUS COMMITTEES OF THE BOARD

- There are 9 Board level Committees out of which 6 Committees are statutory and 3 Committees are voluntary in nature.
- Voluntary Committees are constituted with a mix of executive directors and non-executive directors to focus on specific areas and to smoothen the decision making processes.
- Secretarial Standards relating to Board meeting are equally applicable to Committee meetings.
- The Terms of Reference of each Committee are approved by the Board.

(A) Audit Committee

- i) The Committee comprises of 4 Independent Directors, 2 Functional Directors and Director (Finance) as invitee. One of the Independent Directors holds chairmanship of the Committee. The composition of the Committee is in line with the requirements under the Companies Act, 2013, SEBI (LODR) Regulations, 2015 and DPE guidelines on Corporate Governance.
- ii) The Committee met 5 times during the year, i.e. on 26.05.2018, 23.07.2018, 08.08.2018, 12.11.2018 and 08.02.2019. The maximum gap between any two Audit Committee meetings was 95 days.
- iii) The members of the Committee and meeting(s) attended by each member as on 31.03.2019 are as follows :

Member of Audit Committee	Category	Position	Meeting	
			held	attended
Shri P.K. Nayak	Independent	Chairman	5	5
Shri D. Mahanta	Independent	Member	5	5
Shri S. Sankararaman	Independent	Member	5	5



Member of Audit Committee	Category	Position	Meeting	
			held	attended
Prof. D. Acharya	Independent	Member	5	5
Shri V. Balasubramanyam, Director (Production)	Functional	Member	5	5
Shri S. K. Roy, Director (P&T)	Functional	Member	5	4
Shri K. C. Samal*, Director (Finance)	Functional	Invitee	3	3
Shri Sridhar Patra#, Director (Finance)	Functional	Invitee	2	2

* Superannuated on 31.08.2018

Assumed office on 01.09.2018

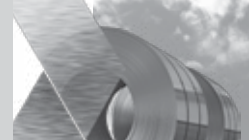
- iv) Head of Internal Audit, representatives of Statutory Auditors and Cost Auditors remain present in the meetings on need basis.
- v) The Company Secretary acts as Secretary to the Audit Committee.
- vi) Chairman of the Audit Committee was present during the last Annual General Meeting.
- vii) The Terms of Reference of the Audit Committee are broadly as follows:

Powers of the Audit Committee

- To investigate any activity within its Terms of Reference.
- To seek information from any employee.
- To obtain outside legal or other professional advice.
- To secure attendance of outsiders with relevant expertise, if it considers necessary.

Role of the Audit Committee inter-alia, includes the following:

- Oversight of the Company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.
- Recommending to the Board, the appointment, reappointment and if required, the replacement or removal of cost auditors, fixation of audit fees and other terms of appointment.
- Approving payment to statutory auditors, including cost auditors for any other services rendered by them.
- Reviewing with the management, annual financial statements and auditors report thereon before submission to the Board for approval, with particular reference to:
 - Matters required to be included in the Directors' Responsibility Statement to be included in the Directors' Report in terms of Section 134(5) of the Companies Act, 2013.
 - Changes, if any, in accounting policies and practices and reasons for the same.
 - Major accounting entries involving estimates based on the exercise of judgment by the management.
 - Significant adjustments made in financial statements arising out of audit findings.
 - Compliance with listing and other legal requirements relating to financial statements.
 - Disclosure of related party transactions.
 - Qualifications in draft audit report
- Reviewing with the management, the quarterly and annual financial statements before submission to the Board for approval.
- Reviewing with the management, the statement of uses/ application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice and the report submitted by the monitoring agency monitoring the utilization of proceeds of a public or rights issue and making appropriate recommendations to the Board to take up steps in this matter.



- Reviewing and monitoring the auditors' independence and performance and effectiveness of audit process.
- Approval or any subsequent modification of transactions of the Company with related parties.
- Scrutiny of inter-corporate loans and investments, if any.
- Valuation of undertakings or assets of the Company, wherever it is necessary.
- Evaluation of internal financial controls and risk management systems.
- Reviewing with the management, the performance of statutory auditors, including cost auditors and internal auditors, adequacy of internal control systems.
- Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure, coverage and frequency of internal audit.
- Discussion with internal auditors of any significant findings and follow-up thereon.
- Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board.
- Discussion with statutory auditors, before the audit commences, about the nature and scope of audit as well as post audit discussion to ascertain any area of concern.
- To look into the reasons for substantial defaults, if any, in the payment to depositors, debenture holders, shareholders (in case of non-payment of declared dividends) and creditors.
- To review the functioning of the Whistle Blower mechanism.
- To review compliances with the provisions of the SEBI (Prohibition of Insider Trading) Regulations, 2015 at least once in a financial year and to verify that the system for internal control are adequate and are operating efficiently.
- Reviewing the utilization of loans and/ or advances from/investment by the holding company in the subsidiary exceeding rupees 100 crore or 10% of the asset size of the subsidiary, whichever is lower including existing loans / advances / investments existing as on the date of coming into force of this provision.
- Carrying out such other functions as may be specifically referred to the Committee by the Company's Board of Directors and/or other Committees of Directors.

Mandatory review of the following information by Audit Committee:

1. The Management Discussion and Analysis of financial condition and results of operations;
2. Statement of significant related party transactions, submitted by management;
3. Management letters/letters of internal control weaknesses issued by the statutory auditors;
4. Internal audit reports relating to internal control weaknesses; and
5. The appointment, removal and terms of remuneration of the internal auditors / chief internal auditor.
6. Statement of deviation :
 - a) Quarterly statement of deviation(s) including report of monitoring agency, if applicable, submitted to Stock Exchanges in terms of Regulation 32(1).
 - b) Annual statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice in terms of Regulation 32(7).

The functions of Audit Committee also include;

- a. To check whether cost controls are adequate and commensurate with size of the operations.
- b. To study the areas where income can be increased and the areas where cost can be reduced.
- c. Management Information System on each of the above areas and give its recommendations to the Board.

B. Nomination and Remuneration Committee

- i) The erstwhile Remuneration Committee, constituted under DPE guidelines on Corporate Governance was rechristened as Nomination and Remuneration Committee in line with the requirements under Section 178 of the Companies Act, 2013 and Regulation 19 of SEBI (LODR) Regulations, 2015.



- ii) The Terms of Reference of the Committee is :
 - a. Approval of the annual bonus/variable pay pool and policy for the distribution across the executives and non-unionized supervisors within the prescribed limit.
 - b. Matters as contained in the Companies Act, 2013 and SEBI (LODR) Regulations, 2015.
- iii) MCA vide notification dt. 05.06.2015 and 05.07.2017 have exempted Government Companies from certain provisions viz. annual evaluation of the Board and of the individual directors, formulation of policy for determining qualification, positive attitudes, independence of directors and recommendation to the Board a policy for remuneration of Directors. However, no such exemptions have been provided by SEBI so far under SEBI (LODR) Regulations.
- iv) The Committee comprises 5 Directors as on 31st March, 2019, i.e. Shri Maheswar Sahu, Shri P K Nayak, Shri S Sankararaman, Prof. Damodar Acharya and Smt Kiran Ghai Sinha. All these five directors are Independent Directors. Besides, Director (HR) and Director (Finance) are invitees to the Committee.
- v) No meeting took place during the year under review.
- vi) Shri Maheswar Sahu, Chairman of Nomination and Remuneration Committee could not attend the 37th Annual General Meeting (AGM) due to some prior engagements and had authorized Shri P. K. Nayak, Independent Director and member of Nomination and Remuneration Committee as his representative to attend the meeting.

B. Stakeholders Relationship Committee

- i) It is a statutory Committee constituted under Section 178 of the Companies Act, 2013 and Regulation 20 of SEBI (LODR) Regulations, 2015.
- ii) The Terms of Reference of the Committee is to addresses investors' grievances pertaining to transfer/transmission of shares, non-receipt of Annual Report, non-receipt of dividends and other related matters.
- iii) The Board has recently amended the Terms of Reference of the Committee which is effective from 1st April, 2019, as prescribed under SEBI(LODR) (Amendment) Regulations, 2018:
 - 1. Resolving the grievances of the security holders of the listed entity including complaints related to transfer/transmission of shares, non-receipt of annual report, non-receipt of declared dividends, issue of new/duplicate certificates, general meetings etc.
 - 2. Review of measures taken for effective exercise of voting rights by shareholders.
 - 3. Review of adherence to the service standards adopted by the listed entity in respect of various services being rendered by the Registrar & Share Transfer Agent.
 - 4. Review of the various measures and initiatives taken by the listed entity for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/annual reports/statutory notices by the shareholders of the company.
- iv) M/s. Karvy Fintech Private Limited has been appointed as Registrar and Share Transfer Agent to consider and resolve all grievances of the shareholders received either directly or through SEBI, Stock Exchanges etc. Efforts are made to ensure that the grievances are redressed to the satisfaction of the investors at the earliest possible time.
- v) Four meetings took place on 26.05.2018, 08.08.2018, 12.11.2018 and 07.02.2019 during the year.



- vi) The composition of the Committee and meeting(s) attended by each member as on 31.03.2019 were as follows:

Name	Category	Position	Meeting	
			held	attended
Shri S. Sankararaman	Independent	Chairman	4	4
Shri Dipankar Mahanta	Independent	Member	4	4
Shri P. K. Nayak	Independent	Member	4	4
Smt. Kiran Ghai Sinha	Independent	Member	4	3
Shri N.N. Sharma	Independent	Member	4	3
Smt. Achla Sinha	Independent	Member	4	3
Shri B. K. Thakur Director (HR)	Functional	Member	4	4
Shri P. K. Mishra Director (Commercial)	Functional	Member	4	4

- vii) Chairman of the Stakeholders Relationship Committee was present during the last Annual General Meeting to answer queries of shareholders.
- viii) Details of complaints received and redressed during the year 2018-19 are as follows:

	Opening Balance	Received during the year	Resolved during the year	Closing Balance
SEBI	Nil	5	5	Nil
Stock Exchange	Nil	0	0	Nil
Individual	Nil	424	424	Nil
TOTAL	Nil	429	429	Nil

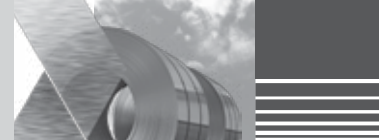
All complaints were resolved within reasonable time frame. No. of complaints received constitute 0.22% of the total no. of shareholders of the Company.

- ix) Break-up of different types of complaints received and resolved during the year under review are given below:

Type of complaints	No. of complaints
Non-receipt of securities	14
Non-receipt of dividend	388
Non-receipt of Annual Report	27
TOTAL	429

- x) During the year under review, in compliance with the SEBI directive, the Company had sent letters to the shareholders at regular intervals requesting them to update their PAN, addresses and Bank particulars in the database for enabling the Company to provide effective services.

Further, Regulation 40 of the SEBI (LODR) Regulations, 2015 has been amended mandating listed companies not to process/effect transfer of physical shares w.e.f. 01.04.2019 except for transmission and transposition cases. Keeping the provisions in view, the Company had advised the shareholders holding shares in physical form to get them converted into demat/electronic form.



D. Risk Management Committee

- i) The Terms of Reference of this Committee now also cover cyber security, as prescribed under SEBI (LODR) (Amendment) Regulations, 2018. The Terms of Reference of the Committee is as follows:
 - Assisting the Board of Directors in overseeing the responsibilities with regard to the identification, evaluation and mitigation of operational, strategic, external environment risks and cyber security.
 - Overall responsibility for monitoring and approving the risk policies and associated practices of the Company.
 - Reviewing and approving risk disclosure statements in any public documents or disclosures.
- ii) The Committee reviews and monitors risk assessment plan, informs the Board periodically about the risk assessed and action required to be taken. Details of risks perceived are also given in the Management Discussion & Analysis Report.
- iii) The Committee met once on 23.07.2018 during the year.
- iv) The composition of the Committee and attendance of each member in the meeting(s) as on 31.03.2019 were as follows:

Name	Category	Position	Meeting	
			held	attended
Prof. Damodar Acharya	Independent	Chairman	1	1
Shri S. Sankararaman	Independent	Member	1	1
Smt. Kiran Ghai Sinha	Independent	Member	1	0
Shri K. C. Samal, Director (Finance)*	Functional	Member	1	1
Shri V. Balasubramanyam, Director(Production)	Functional	Member	1	1
Shri P. K. Mishra, Director (Commercial)	Functional	Member	1	1

* superannuated on 31.08.2018.

Note: No meeting has taken place after Shri Sridhar Patra joined as Director (Finance) w.e.f. 01.09.2019 after superannuation of Shri K. C. Samal on 31.08.2018.

E. CSR & Sustainability Development Committee

- i) This Committee is a statutory Committee in compliance with the provisions under the Companies Act, 2013 and Regulation 34(2)(f) of the SEBI (LODR) Regulations, 2015.
- ii) The Terms of Reference of the Committee is as follows:
 - a. Overseeing peripheral development activities being under taken by the Company through the respective Rehabilitation and Periphery Development Advisory Committees (RPDAC) and proposed to be taken under MMDR Act.
 - b. Nalco Foundation.
 - c. Environment Protection & Pollution controls.
- iii) The Committee met four times on 04.05.2018, 23.07.2018, 12.11.2018 and 07.02.2019 during the year.
- iv) The composition of the Committee and meeting(s) attended by each member as on 31.03.2019 were as follows:

Name	Category	Position	Meeting	
			held	attended
Shri D. Mahanta	Independent	Chairman	4	4
Shri S. Sankararaman	Independent	Member	4	4



Name	Category	Position	Meeting	
			held	attended
Shri Maheswar Sahu	Independent	Member	4	4
Smt. Kiran Ghai Sinha	Independent	Member	4	3
Shri N. N. Sharma	Independent	Member	4	4
Shri K. C. Samal, Director (Finance)*	Functional	Member	2	2
Shri V. Balasubramanyam, Director (Production)	Functional	Member	4	4
Shri B. K. Thakur, Director (HR)	Functional	Member	4	4
Shri Sridhar Patra, Director (Finance)#	Functional	Member	2	2

* Superannuated on 31.08.2018,

inducted as Director (Finance) w.e.f. 01.09.2018.

F. Technology Committee

- i) Technology Committee was constituted in compliance with the requirements under the DPE guidelines.
- ii) The Committee monitors and pays special attention to the assessment of the Company's efforts to develop technology and acquiring and assimilating new technologies necessary to make it competitive and to its own R&D efforts for maintaining a sustained strength in the technological field and review specific consumption norms pertaining to Smelter, Refinery etc.
- iii) The Committee comprises 2 Independent Directors i.e. Prof. Damodar Acharya and Shri Maheswar Sahu and 4 functional Directors, i.e. Director (Production), Director (P&T), Director (Commercial) and Director (Finance).
- iv) Prof. Damodar Acharya, Independent Director is the Chairman of the Committee.
- v) No meeting took place during the year.

G. Human Resources Committee

- i) The policy decision on human resource management of the Company is vested with the Committee for their recommendation to the Board.
- ii) The Terms of Reference of the Committee is to study and recommend to the Board for approval, proposals in the following areas:
 - a. Framing of rules and regulations and changes therein relating to recruitment, transfer, promotion, deputation and other conditions of service in respect of below Board level employees.
 - b. Wage structure and scales of pay of the non-executives and any changes therein.
 - c. Organization chart including manpower planning.
 - d. Any other reference made by the Board from time to time.
- iii) The Committee met thrice on 04.05.2018, 12.11.2018 and 28.02.2019 during the year.



- iv) The composition of the Committee and attendance of each member in the meeting(s) as on 31.03.2019 are as follows:

Name	Category	Position	Meeting held	Meeting attended
Shri Maheswar Sahu	Independent	Chairman	3	3
Shri D. Mahanta	Independent	Member	3	3
Smt. Kiran Ghai Sinha	Independent	Member	3	3
Shri K. C. Samal, Director (Finance)*	Functional	Member	1	1
Shri B. K. Thakur, Director (HR)	Functional	Member	3	3
Shri S. K. Roy, Director (P&T)	Functional	Member	3	3
Shri S. Patra, Director (Finance)#	Functional	Member	2	2

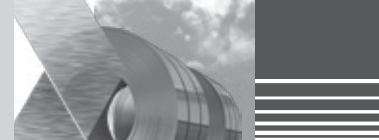
* Superannuated on 31.08.2018,

inducted as Director (Finance) w.e.f. 01.09.2018.

H. Ethics & Corporate Governance Committee

- i. This Committee looks into the ethical standard and good governance being practised in the Company.
- ii. The Terms of Reference of the Committee include:
 - a. Practices of Corporate Governance at all levels and to suggest remedial measures, wherever necessary.
 - b. Provision of correct inputs to the media so as to preserve and protect the Company's image and standing.
 - c. Dissemination of factually correct information to the investors, institutions and public at large.
 - d. Interaction with existing and prospective FIIs and rating agencies, etc.
 - e. Establishing oversight on important corporate communication on behalf of the Company with the assistance of consultants / advisors, if necessary.
 - f. Institution of standardized channels of internal communications across the Company to facilitate a high level of disciplined participation.
 - g. Compliance of the following, formulated in terms of SEBI & DPE guidelines:
 - Code of Conduct for Senior Management
 - Insider Trading Regulations
 - Related Party Transactions
 - Vigilance Related Issues
 - Whistle Blower Policy
- iii. The Committee met once on 23.07.2018 during the year.
- iv. The composition of the Committee and attendance of each member in the meeting(s) as on 31.03.2019 is as follows:

Name	Category	Position	Meeting held	Meeting attended
Shri Dipankar Mahanta	Independent	Chairman	1	1
Shri P. K. Nayak	Independent	Member	1	1
Smt. Kiran Ghai Sinha	Independent	Member	1	0
Smt. Achla Sinha	Independent	Member	1	1
Shri B. K. Thakur, Director (HR)	Functional	Member	1	1
Shri S. K. Roy, Director (P&T)	Functional	Member	1	1
Shri P. K. Mishra, Director (Commercial)	Functional	Member	1	1



I. Committee of Directors for Projects and New Ventures

- i) This Committee looks into the project related activities and recommend investment in new projects.
- ii) The Terms of Reference of the Committee is to examine and make recommendation to the Board on new projects/capital expenditure on Joint Ventures:
 - a) Appraisal and approval of the procedures and formalities in respect of various stages of new projects including preparation of DPR.
 - b) To study and recommend to the Board, proposals for investment in new projects in India and abroad, exceeding ₹10 crore each.
 - c) Review the status of capital projects, costing over ₹100 crore each.
- iii) The Committee met thrice on 04.05.2018, 08.08.2018 and 08.02.2019 during the year.
- iv) The composition of the Committee and attendance of each member in the meeting(s) as on 31.03.2019 are as follows:

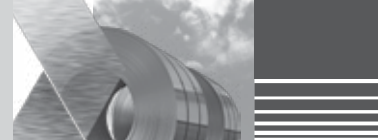
Name	Category	Position	Meeting	
			held	attended
Dr. T. K. Chand	Functional	Chairman	3	3
Shri P. K. Nayak	Independent	Member	3	3
Prof. D. Acharya	Independent	Member	3	3
Shri M. Sahu	Independent	Member	3	3
Shri A. K. Nayak	Government Nominee	Member	3	2
Shri K. C. Samal, Director (Finance)*	Functional	Member	2	2
Shri V. Balasubramanyam, Director (Production)	Functional	Member	3	3
Shri B. K. Thakur, Director (HR)	Functional	Member	3	3
Shri S. K. Roy, Director (P&T)	Functional	Member	3	2
Shri P. K. Mishra, Director (Commercial)	Functional	Member	3	3
Shri S. Patra, Director (Finance)#	Functional	Member	1	1

* Superannuated on 31.08.2018.

Inducted as Director (Finance) w.e.f. 01.09.2018.

J. Separate meeting of Independent Directors

- Separate meeting of Independent Directors is a requirement under the Companies Act, 2013 as well as SEBI (LODR) Regulations, 2015.
- Ministry of Corporate Affairs (MCA) have exempted certain areas viz. review of performance of Chairperson, non-independent directors and the Board as a whole from the scope of the meeting of Independent Directors for Government Companies.
- The Committee assess the quality, quantity and timeliness of flow of information between the company management and the Board that is necessary for the Board to effectively and reasonably perform their duties.
- During the year, one meeting was held on 22nd March, 2019. All eight Independent Directors attended the meeting.
- The Company Secretary facilitated convening and holding of the meeting on the request of the Independent Directors.
- Minutes of the meeting was placed in the subsequent Board meeting for information of the Board.



K. Other Committees

Besides the above Committees, the following Committees have also been constituted with only functional directors to take care of certain regular activities with the Terms of Reference approved by the Board:

- a. Investment Committee
- b. Committee of Directors for Sales
- c. Committee of Directors for Procurements
- d. Share Transfer Committee

IV. GENERAL BODY MEETINGS

i) Details of last three Annual General Meetings held :

Financial Year	AGM Date	Time	Special Resolution, if any	Venue
2015-16	30.09.2016	11.00AM	No	NALCO Bhawan, P/1, Nayapalli Bhubaneswar- 751 013
2016-17	23.09.2017	11.00AM	No	
2017-18	29.08.2018	11.00AM	No	

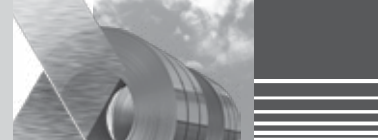
- ii) No Extra-ordinary General Meeting has taken place during last 3 years. However, the Company had passed special resolution through postal ballot for buyback of shares during 2016-17.
- iii) E-voting facility was provided to the Shareholders during the last Annual General Meeting (AGM) held on 29th August, 2018. Members were provided with Insta-poll facility at the venue of the AGM, who could not exercise their vote through e-voting process.
- iv) During the Annual General Meeting of the previous year, Company provided web check-in facility to the members to enable speedy and hassle free entry to the venue of the meeting.
- v) No special resolution is proposed to be conducted through postal ballot in this Annual General Meeting.

V. MEANS OF COMMUNICATION

The Company believes in sharing of material information and disclosure of results in time, as a measure of good corporate governance practice.

- i. Unaudited financial results for the first three quarters and audited financial results for the fourth quarter and full year of the Company were announced within scheduled time as per SEBI (LODR) Regulations, 2015.
- ii. The results were disseminated to the Stock Exchanges through NSE Electronic Application Processing System (NEAPS) and BSE Listing Centre within half an hour from conclusion of the Board meetings where the results were approved by the Board. Simultaneously, the results were uploaded in the Company's website www.nalcoindia.com.
- iii. Extract of the results were published in English and Odia newspapers as per details given below:

Description of results	Date of meeting	Newspapers	Publication date
1 st qtr- (Apr-June '18)	08.08.2018	Dharitri (Odia), Business Line (Eng)	09.08.2018 & 10.08.2018
2 nd qtr- (July-Sept '18)	12.11.2018	Samaja (Odia), Financial Express (Eng)	13.11.2018
3 rd qtr- (Oct- Dec '18)	08.02.2019	Sambad (Odia), Business Standard (Eng)	09.02.2019
4 th qtr (Jan-Mar '19 and year 2018-19)	30.05.2019	Prameya (Odia), Economic Times (Eng)	31.05.2019



- iv) Institutional shareholders are communicated through analysts briefing, individual discussions, con call and also participation in investor conferences from time-to-time. Presentation materials, if any, made to Institutional Investors/Analyst are sent to the Stock Exchanges and uploaded on Company's website www.nalcoindia.com
- v) The Company has adopted the e-communication practice to communicate to its shareholders. All kinds of letters/intimations/reports are sent to the registered e-mail ids of the shareholders who have registered their e-mail ids in the database. Shareholders who have not registered their e-mail ids are encouraged to register their e-mail ids for instant and better communication.
- vi) The Annual Report and other communique of the Company are hosted in the website in a user-friendly and downloadable form.
- vii) On-line access facilities has been provided in the "Investors' service" page in the website for shareholders to ascertain status of encashment of their dividend as well as other related information from time to time.

VI. GENERAL SHAREHOLDER INFORMATION

i) Company Registration Details

Corporate Identity Number (CIN)	:	L27203OR1981GOI000920
Company's PAN	:	AAACN7449M
Company's GST	:	21AAACN7449M1Z9
Date of Registration	:	7 th January, 1981
Financial Year	:	1 st April - 31 st March
Registered Office of the Company	:	NALCO Bhawan, P/1,Nayapalli, Bhubaneswar-751 013, Odisha.

ii) Annual General Meeting for the financial year 2018-19.

Day and Date	:	18.09. 2019
Time	:	11.00 A.M.
Venue	:	NALCO Bhawan, P/1, Nayapalli, Bhubaneswar-751 013

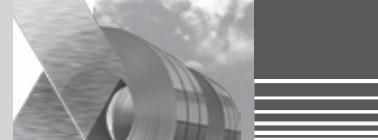
iii) Financial Calendar for 2019-20:

Events	Tentative Date
Unaudited Financial results for the first three quarters	Within 45 days of closure of respective quarter
Audited Financial results for the year including 4 th quarter results	Within 60 days from date of closure of the Financial Year.
Annual General Meeting for the year ending March 31, 2020	By September , 2020

iv) Dividend Policy

The Company has formulated a Dividend Distribution Policy and the same is available in the Company's website in the following link: <https://nalcoindia.com/wp-content/uploads/2019/01/Dividend-Policy.pdf>

As per the recent guidelines issued by Department of Investment and Public Asset Management (DIPAM), every CPSE would pay a minimum annual dividend of 30% of PAT or 5% of net-worth whichever is higher subject to maximum dividend permitted under the extant legal provisions.



v) **Payment of Dividend**

- Dividend for FY 2018-19 is payable on the diluted paid-up capital of ₹932.81 crore subsequent to buyback of shares that took place in December, 2018.
- Interim dividend for FY 2018-19 @ ₹4.50 per equity share (90% on face value of ₹5 each), declared by the Board was paid to all shareholders on 28th March, 2019.
- Final dividend for FY 2018-19 @ ₹1.25 per equity share (25% on face value of ₹5 each) recommended by the Board, will be paid to all shareholders within 30 days of the Annual General Meeting subject to the approval of shareholders.
- The total dividend pay-out for the year 2018-19 considering the final dividend works out to ₹1072.73 crores against ₹1101.77 crore paid for 2017-18.
- The total dividend pay-out including the proposed final dividend for the financial year 2018-19 works out to 61.92% of the Profit After Tax (PAT) and 10.32% of the net worth. This excludes the Dividend Distribution Tax.
- The total dividend pay-out including proposed final dividend and Dividend Distribution Tax for 2018-19 works out to ₹1293.24 crore which constitute 74.65% of the PAT for 2018-19.
- The total dividend of 115% for 2018-19 is the highest ever dividend in percentage terms declared by the Company since inception.

vi) **Dividend history for past 5 years**

Year	Dividend per share (₹)	Payment date	Total Dividend (₹ in crores)	% of dividend to PAT
2013-14	(I)- ₹1.10 (F)- ₹0.40	(I)-25.03.2014 (F)-15.10.2014	386.59	60.18
2014-15	(I)- ₹0.50 (F)- ₹1.25	(I)-30.03.2015 (F)-19.10.2015	451.02	34.12
2015-16	(I)- ₹1.25 (F)- ₹0.75	(I)-31.03.2016 (F)-25.10.2016	467.13	63.90
2016-17	(I)- ₹2.80 (F)- Nil	(I)-23.03.2017	541.22	80.96
2017-18	(I)- ₹4.70 (F)- ₹1.00	(I)- 28.02.2018 (F)-24.09.2018	1,101.77	82.07

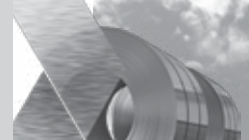
Interim (I), Final (F)

vii) **Listing Details**

The listing details of NALCO shares are as follows:

Particulars	Stock Exchanges where shares are listed	
	BSE Limited	National Stock Exchange of India Ltd.
Address	Phiroze Jeejeebhoy Towers, Dalal Street, MUMBAI - 400 001	Exchange Plaza, Bandra-Kurla Complex, Bandra East, MUMBAI - 400 051
Scrip code	532234	NATIONALUM
Traded from	19.10.1992	28.04.1999
Stock code (ISIN)	INE 139A01034	INE 139A01034
Payment of Listing Fees for 2019-20	29.04.2019	24.04.2019

Annual Custody/Issuer fee for the year 2019-20 has been paid by the Company to NSDL and CDSL.

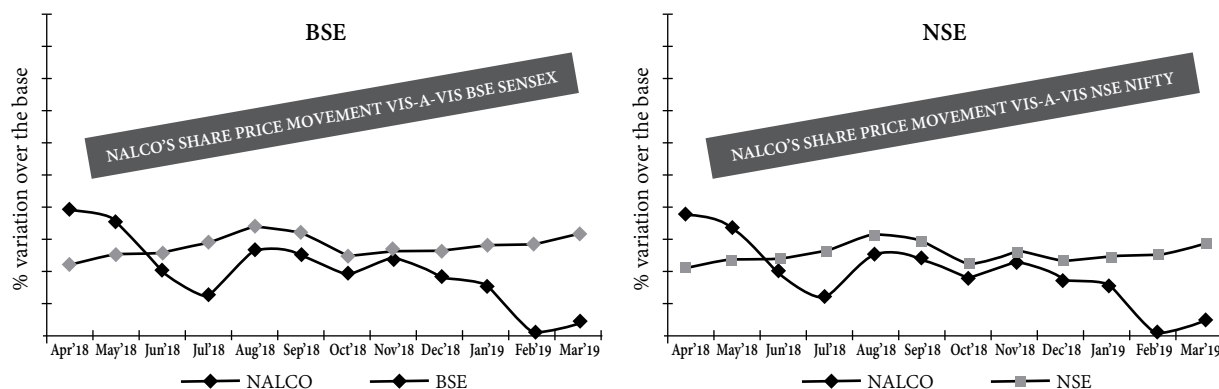


viii) Market Price Data for Financial year 2018-19

MONTH	SHARE PRICE (BSE) (Amount in ₹)			SHARE PRICE (NSE) (Amount in ₹)			MARKET CAPITALISATION (₹ in Crore)	
	L	H	Avg. Turnover	L	H	Avg. Turnover	NSE	BSE
April, 2018	66.20	90.10	21,19,273	66.20	90.20	161,21,426	14,802.64	14,783.56
May	70.00	81.45	10,64,465	70.00	81.50	70,25,038	14,528.85	14,539.24
June	57.55	74.00	10,97,618	57.60	74.00	85,44,099	13,166.46	13,161.23
July	56.55	65.00	7,57,064	56.55	64.85	106,89,732	11,765.29	11,762.95
August	61.25	78.50	9,90,015	61.15	78.45	126,59,093	13,580.20	13,598.11
September	60.30	77.40	13,17,070	60.20	77.45	110,80,902	13,420.43	13,427.59
October	57.85	72.00	10,39,414	57.70	72.15	117,14,268	12,827.28	12,831.37
November	64.30	72.00	5,01,884	64.30	72.00	59,60,355	13,084.57	13,070.26
December	59.95	68.70	4,76,723	59.90	68.80	58,75,026	11,926.70	11,921.00
January,2019	59.10	65.95	2,81,343	58.85	65.95	38,20,050	11,579.07	11,579.20
February	46.25	60.00	10,84,355	46.20	60.00	205,98,827	9,805.03	9,790.28
March	51.30	59.50	13,63,683	51.20	58.40	181,54,829	10,183.62	10,186.15

L=Lowest, H=Highest (Source: Websites of BSE &NSE)

ix) Performance in comparison to broad - based Indices



x) Registrar and Share Transfer Agents

There is a steady increase in shareholderbase in the company. To ensure efficient and effective services to the shareholders the share registry activities has been outsourced to M/s. Karvy Fintech Private Limited (KARVY). M/s. KARVY carries out share related activities like transfer and transmission of shares, transposition of shares, issue of duplicate share certificates, deletion of name, change of address, bank particulars, issue of DD in lieu of expired dividend warrants, reconciliation of dividend accounts with banks, taking care of IEPF related activities, registration of nominees, dematerialization/ rematerialisation of shares etc. The contact details of M/s. KARVY is as follows:

Karvy Fintech Private Limited,

Unit: National Aluminium Company Ltd.

Karvy Selenium Tower B, Plot No.31-32, Gachibowli,

Financial District, Nanakramguda, Hyderabad, Telangana-500032

Tel.No.040-67161500, Toll Free No.18003454001,

Email: einward.ris@karvy.com



xi) **Share transfer system**

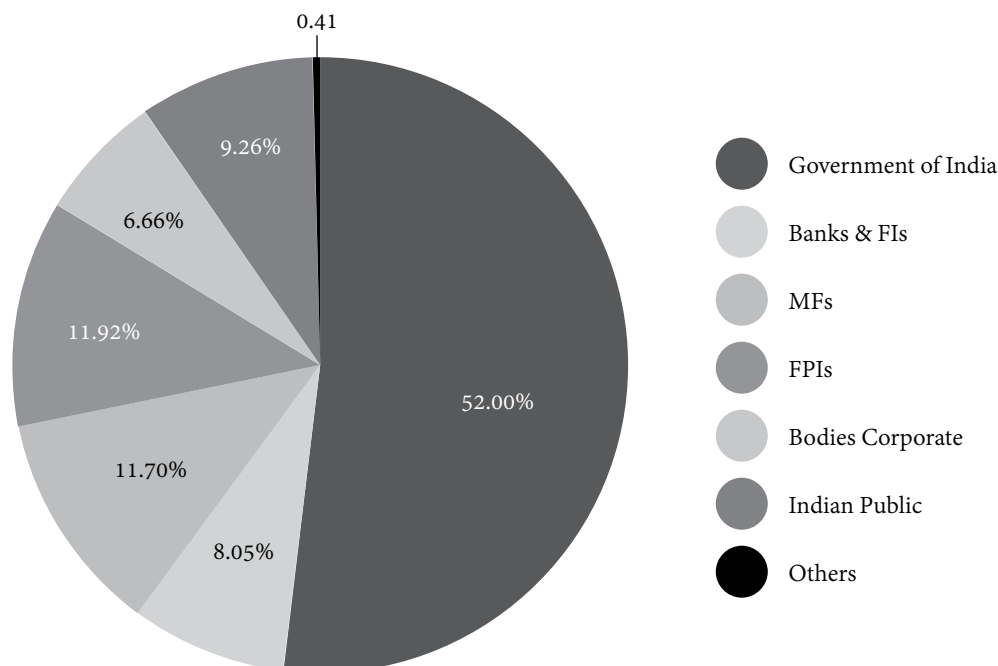
Company Secretary has been authorized by the Board to approve all requests/cases relating to transfer/ transmission and dematerialization of shares. However, cases pertaining to issue of new share certificates in case of torn/ mutilated/ defaced/ lost/ rematerialisation are approved by the Share Transfer Committee.

Half yearly compliance certificate as required under Regulation 7(3) of SEBI (LODR) Regulations, 2015, duly signed by the Company Secretary & Compliance Officer and Share Transfer Agent have been submitted to the Stock Exchanges. Besides, pursuant to Regulation 40(10) of SEBI (LODR) Regulations, 2015, certificate from M/s. Deba Mohapatra & Co., Practicing Company Secretary on half yearly basis confirming that all certificates had been issued within thirty days of the date of lodgment for transfer, sub-division, consolidation, renewal, exchange or endorsement of calls/ allotment monies had been submitted to Stock Exchanges within stipulated time.

xi) **Shareholding pattern as on 31.03.2019**

Sl. No.	Category	No. of Shareholders	No. of shares	%age of shareholding
1.	Promoters (Government of India)	1	97,00,81,517	52.00
2.	Banks/ Financial Institutions	40	15,02,17,875	8.05
3.	Mutual Funds	77	21,83,11,450	11.70
4.	Insurance Companies	2	1,600	Negligible
6.	Foreign Portfolio Investor	209	22,23,82,412	11.92
6.	Bodies Corporate	1,644	12,41,94,446	6.66
7.	Indian Public	1,89,094	17,27,85,994	9.26
8.	Others	3,529	76,42,204	0.41
TOTAL		1,94,596	186,56,17,498	100.00

Category-wise shareholding





Distribution of shareholding as on 31.03.2019

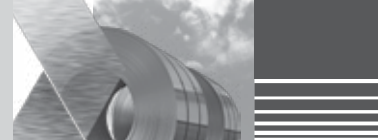
Number of shares	No. of Shareholders	% of shareholders	No. of shares	% of share capital
1-200	1,10,862	56.98	96,24,304	0.51
201-500	38,498	19.78	1,44,88,747	0.77
501-1000	20,169	10.36	1,67,20,443	0.90
1001-50000	24,499	12.59	10,45,98,408	5.61
50001-100000	223	0.11	1,58,35,391	0.85
100001 and above	345	0.18	170,43,50,205	91.36
TOTAL	1,94,596	100.00	186,56,17,498	100.00

Promoter's holding has changed in the following manner during the year under review:

Name of promoter	No. of shares (Beginning of the Year)	% of holding	Decrease during the year	Date	Mode	Share balance	% of holding
President of India	116,37,17,107	60.20	698,88,827	20.06.2018 to 22.06.2018	Transfer of shares to Bharat 22 ETF	109,38,28,280	56.59
			3,47,60,440	07.12.2018	Surrendered in buyback of shares	105,90,67,840	56.77
			8,89,86,323	21.02.2019	Transfer of shares to Bharat 22 ETF	97,00,81,517	52.00

Top 10 equity shareholders besides the promoter of the Company as on 31.03.2019

Sr. No.	Name of shareholder	No. of shares	% of holding
1.	Life Insurance Corporation of India	9,34,35,272	5.01
2.	Bharat 22 ETF	6,91,17,330	3.70
3.	HDFC Life Insurance Company Limited	2,47,56,542	1.33
4.	UTI-MID Cap Fund	1,98,56,305	1.06
5.	Hindalco Industries Ltd	1,83,85,327	0.99
6.	Bajaj Allianz Life Insurance Company Limited	1,79,28,229	0.96
7.	Renuka Investments & Finance Limited	1,64,18,964	0.88
8.	The New India Assurance Company Limited	1,37,87,744	0.74
9.	ICICI Prudential Value-Fund –Series 19	1,33,88,562	0.72
10.	Renukeswar Investments & Finance Limited	1,28,14,264	0.69
	TOTAL	29,98,88,539	16.08



xii) **Dematerialisation / Rematerialisation of listed shares & liquidity**

The shares of the Company are in compulsory dematerialised segment and are admitted with both the Depositories i.e. National Securities Depository Ltd. (NSDL) and Central Depository Services (India) Limited (CDSL).

Secretarial Audit Report for Reconciliation of the Share Capital of the Company obtained from Practicing Company Secretary has been submitted within statutory period to Stock Exchanges on quarterly basis.

Total no. of shares held in physical and in dematerialization mode as on 31.03.2019:

	No. of Shares	% to total shares	No. of shareholders
Physical	19,70,592	0.11	2,777
Demat (Electronic)			
– with NSDL	174,57,52,565	93.58	1,05,913
– with CDSL	11,78,94,341	6.32	85,906
Total	186,56,17,498	100.00	1,94,596

During the year, 573 dematerialization requests involving 2,47,766 shares have been confirmed. No rematerialisation request has been received during the year.

xiii) **Outstanding GDRs/ADRs/Warrants or any Convertible Instruments, Conversion Date and likely impact on equity**

No GDRs/ADRs/Warrants or any Convertible instruments has been issued by the Company.

xiv) **Equity Shares in Suspense Account**

No equity shares are lying in suspense account in terms of Regulation 34(3) and Schedule V, Part F of SEBI (LODR) Regulations.

xv) **Transfer of unpaid/unclaimed dividend to IEPF**

In accordance with the provisions under the Companies Act, 2013, an amount of ₹6,10,874/- pertaining to unclaimed final dividend for financial year 2010-11 have been transferred to Investor Education and Protection Fund, during the financial year 2018-19.

Shareholders can retrieve data relating to unpaid/unclaimed dividend from the website in the following link:

<https://kosmic.karvy.com/IEPF/IEPFInfo.aspx>

xvi) **Transfer of shares to IEPF**

In terms of Section 124(6) of the Companies Act, 2013 and IEPF Authority (Accounting, Audit, Transfer and Refund) Rules, 2016, as amended from time to time, the shares in respect of which the dividend has not been paid or claimed for a period of seven years or more, are required to be transferred to Investor Education and Protection Fund (IEPF) Authority account.

During the year, 45,999 shares of 184 shareholders were transferred to the demat account of IEPF Authority, opened with NSDL. Till the year ended 31st March, 2019, the Company has transferred 1,95,278 shares of 681 shareholders in compliance with the provisions of the Act. The detailed information of the shares transferred to IEPF is available in the following link:

<https://nalcoindia.com/wp-content/uploads/2019/06/shares-2-dt-19-6-2019.pdf>

Shares and/or dividend transferred to IEPF can be claimed back from IEPF Authority by submitting application in Form IEPF-5 along with fee specified by the IEPF Authority. The procedure for claiming the shares/dividend from IEPF Authority and Form IEPF-5 is provided in the link https://nalcoindia.com/wp-content/uploads/2019/01/Form_IEPF_5.pdf



xvii) **Commodity price risk or foreign exchange risk and hedging risk**

The Company does not have exposure on commodity hedging and hence the disclosure pursuant to SEBI Circular dated November 15, 2018 is treated as Nil. However, Nil report as per prescribed SEBI format is given below:

Commodity Name	Exposure in INR towards the particular commodity	Exposure in Quantity terms towards the particular commodity	% of such exposure hedged through commodity derivatives				Total
			Domestic Market		International Market		
			OTC	Exchange	OTC	Exchange	
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

xviii) **List of credit ratings obtained by the entity along with any revision thereto**

During the year, M/s India Ratings has affirmed NALCO's rating, instrument wise as follows:

Instrument Type	Rating	Outlook
Short-Term Bank Facilities	IND A1+	Stable
Long-Term Bank Facilities	IND AAA	Stable

The above ratings have been reaffirmed by the rating agency with their rating action publication of 13.03.2019.

VII. OTHER DISCLOSURES

- a) The Company has formulated a Policy on Related Party Transactions which is available in the following web link: <https://nalcoindia.com/wp-content/uploads/2018/12/NEW-RPT-NALCO.pdf>

Related parties and related party transactions are disclosed in note no. 39 of both standalone financial statements and consolidated financial statements of the Company for the financial year 2018-19. There were no material transactions with any related party during the financial year. The related party transactions in the prescribed Form AOC -2 forms part of the Directors' Report.

- b) The Company has complied with all the requirements of SEBI (LODR) Regulations, 2015, the Companies Act, 2013 and DPE Guidelines on Corporate Governance. The Company has not received any structure and no penalty was imposed either by SEBI or the Stock Exchanges or any other Statutory Authority for non-compliance of any matter related to the capital markets during last three years.
- c) As a measure of vigil mechanism, the Board had approved 'Whistle Blower Policy' and 'Fraud Prevention Policy' for directors and employees to report to the management concerns about unethical behaviour, actual or suspected fraud or violation of the company's code of conduct or ethics policy. The policy also safeguards against victimization of employees, who avail the mechanism.

It is also affirmed that no personnel of the company had been denied access to the Chairman, Audit Committee. Both the policies are available in Company's website in the following link:

<https://nalcoindia.com/wp-content/uploads/2019/06/Whistle-Blower-Policy-NALCO-26-6-2019.pdf> and

<https://nalcoindia.com/wp-content/uploads/2018/12/Nalcofraudpreventionpolicy.pdf>

- d) The Company does not have any subsidiary as on date. Hence, the Company has not framed any policy for determining material subsidiary.
- e) The Company has a Currency Hedging Policy in place at present which is reviewed considering changes in the regulatory provision, if any and market dynamics. However, the Company does have any hedging policy on sales.
- f) The Company has not raised funds through preferential allotment or qualified Institutional Placement during the year under review.



- g) The Company has obtained a Certificate from M/s. Deba Mohaptra & Co., Practising Company Secretaries, confirming that none of the Directors on the Board of the Company have been debarred or disqualified from being appointed or continuing as Directors of the Companies either by Securities and Exchange Board of India or the Ministry of Corporate Affairs or any other Statutory Authorities. The said certificate forms part of this report.
- h) During the year, there is no such instance where the Board has not accepted any recommendation of any Committee which is mandatorily required.
- i) The Company has paid ₹90 Lakhs during the year towards fees for all services rendered by the Statutory Auditors.
- j) During the year, no case was reported under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.
- k) The web links for different policies have been provided under respective heads.
- l) Compliance certificate obtained from the Statutory Auditors of the Company regarding compliances of conditions of corporate governance forms part of this report.

m) Insider Trading Code

The Board has laid down a robust Code of Practices and Procedures for Fair Disclosure of Unpublished Price Sensitive Information in line with the requirements under the SEBI (Prohibition of Insider Trading) Regulations, 2015.

The objective of the code is to ensure that no insider of the Company derives any benefit or assist others to derive any benefit on basis of any unpublished price sensitive information he is possessing, before it is made public.

Company Secretary is the Compliance Officer for this code.

The Board has also approved code of Conduct to regulate, monitor and report trading by its employees and other connected persons.

Insiders are entitled to formulate trading plan subject to certain conditions as enumerated in the Insider Trading Code and approval of the Compliance Officer. The trading plan is to be implemented mandatorily.

Designated Persons and their immediate relatives are not allowed to trade in securities when the Trading Window is closed. Permission of Compliance Officer is required to deal in securities beyond limits specified in the code. All Directors/ Designated Employees are required to disclose their transaction to the Stock Exchanges where Company's shares are listed within stipulated time when value of such transaction exceeds the threshold limit prescribed under the code.

The code is displayed on the Company's website at

https://nalcoindia.com/wp-content/uploads/2019/06/NALCO_Code-of-Conduct_new-25-06-2019-1.pdf

n) Code of Conduct

The company has devised a Model Code of Business Conduct and Ethics ('the Code'), applicable to all the Board Members and the Senior Management (one level below the Board of Directors) of the Company. The Code is available in Company's website in the following link: <https://nalcoindia.com/wp-content/uploads/2018/12/CodeofConduct.pdf>

All Directors on their induction to the Board are provided with copy of the Code which they acknowledge receipt of the same. Further, all the members of the Board and senior management personnel affirm the code on annual basis at the beginning of the financial year.

Declaration by the Chairman-cum-Managing Director as required under Schedule V of SEBI (LODR) Regulations, 2015

DECLARATION

The members of the Board and Senior Management Personnel have affirmed compliance of the Code of Conduct for Board members and senior management personnel for the financial year ended on March 31, 2019.

Sd/-

(Dr. T. K. Chand)

Chairman-cum-Managing Director



o) **CEO/CFO Certification**

The CEO/CFO certificate under Regulation 17(8) of SEBI (LODR) Regulations, 2015, duly signed by Dr. Tapan Kumar Chand, Chairman-cum-Managing Director and Shri Sridhar Patra, Director (Finance) was placed before the meeting of the Board of Directors held on 30.05.2019.

p) **Disclosure under DPE guidelines**

- i. No expenditure has been debited in the books of accounts not related to business.
- ii. No expenditure is incurred which are personal in nature and incurred for the Board of Directors and top management.
- iii. Details of administrative expenditure and office expenses as a percentage of total expenses vis-à-vis financial expenses and reasons for increase are as follows: (₹ in Crore)

Particulars	2018-19	2017-18
Administrative and office expenses	118.86	109.90
Total expenses	9,085.27	8,703.21
Administrative and office expenses as a % of total expenses	1.31	1.26
Financial expenses	2.38	1.95

- iv. The Company is submitting self-appraisal reports on compliance of the guidelines on Corporate Governance, prescribed by the Dept. of Public Enterprises (DPE) on quarterly basis. The Company is rated 'Excellent' as per the self-appraisal report for the financial year 2018-19. The self-appraisal report for 2018-19 can be accessed in the website at <https://nalcoindia.com/wp-content/uploads/2019/04/Selfevaluation-report-1.pdf>
- v. The Company has complied with the presidential directives issued during the year and during last three years.

VIII. NON-MANDATORY REQUIREMENTS

The status of compliance with discretionary requirements under Regulation 27(1) read with Part E of Schedule II of SEBI (LODR) Regulations, 2015 are as under:

- a. The Company is headed by an Executive Chairman.
- b. The Company has been getting unqualified audit report from Statutory Auditors and C&AG for last several years which indicate a regime of unqualified financial statements.
- c. The Internal Auditors report to the chief of internal audit and in turn the chief of internal audit reports to the Audit Committee of the Board.

IX. PLANT LOCATIONS OF THE COMPANY

Registered & Corporate Office :

NALCO Bhawan, Plot No. P/1, Nayapalli,
Bhubaneswar – 751013 (Odisha)

Smelter Plant

Nalco Nagar,
Angul - 759 145, (Odisha)

Mines & Refinery

Mines & Refinery Complex,
Damanjodi - 763 008, Dist.-Koraput (Odisha)

Captive Power Plant

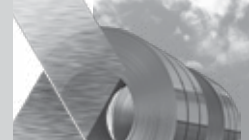
Angul - 759 122
(Odisha)

Port Facilities

Opposite Ore Handling Complex
Port Area, Visakhapatnam – 530 035
(Andhra Pradesh)

Jaisalmer 47.6 MW Wind Power Plant

National Aluminium Company Limited
Village - Ludarva, Kahela, Khadero-Ki-Dhani, Tawariya,
Chatrel Division/Taluk/District - Jaisalmer, Rajasthan – 345001



Gandikota 50.4 MW Wind Power Plant

National Aluminium Company Limited
Village - Gandikota, Division - Prodattur, Taluka - Jammalmadugu,
District - Kadapa, Andhra Pradesh

Sangli 50.4 MW Wind Power Plant

National Aluminium Company Ltd.
Village-Mendhigiri, Taluk-Jath, Dist- Sangli, Maharashtra- 416404

Jaisalmer 50 MW Wind Power Plant

National Aluminium Company Limited
Village - Devikot, Tehsil-Fatehgarh, Division/Taluk/District - Jaisalmer
Rajasthan- 245009

Kayathar 25.5 MW Wind Power Plant

National Aluminium Company Limited
Village- Onamakulam, Tehsil- Kayathar, District- Tuticorin,
Tamil Nadu - 628303

PORT FACILITIES

Visakhapatnam

Opp. Ore Handling Complex, Port Area, Visakhapatnam - 530 035
Andhra Pradesh

Paradip (Port Office)

'V' Point, Badapadia, Paradip - 751 142

REGIONAL OFFICES

Eastern Region

1st Floor, J K Millennium Centre, 46-D, Chowringhee Road,
Kolkata - 700 071

Western Region

215, T.V. Industrial Estate, S.K. Ahire Marg, Worli, Mumbai - 400 030

Northern Region

Core - 4, 5th Floor, South Tower, District Centre, Scope Minar,
Laxmi Nagar, Delhi - 110 092

Southern Region

3E, Century Plaza, 560, Anna Salai, Teynampet, Chennai-600 018

BRANCH OFFICE

Bengaluru

Ground Floor, Jal Bhavan, No. 5 & 6, 1st Stage, 1st Phase, BTM Layout,
Bannerghatta Main Road, Bengaluru - 560 029

STOCK YARDS

Bhiwandi

M/s. National Aluminium Company Limited
C/o. NSIC Limited, Godown No. 42/57, Indian Corp. Compound, Mankoli
Naka, Mumbai Nasik Road, Thane, Maharashtra, Bhiwandi - 421 302.

Kolkata

M/s. National Aluminium Company Limited
C/o. Balmer Lawrie & Company Limited, WH, 1-Sonapur Road,
Kolkata - 700 088, West Bengal,

Jaipur

M/s. National Aluminium Company Limited
C/o. Om Prakash Agarwal, Khasra 9/2/3, 9/2/4 & 16/12, Gram Nimesa,
Near Bindyaka Industrial Area, Sirsi Road, Jaipur - 302012, Rajasthan.

Visakhapatnam

M/s. National Aluminium Company Limited
NALCO Port Facilities, Port Area, Visakhapatnam - 530 035,
Andhra Pradesh,

Baddi

M/s. National Aluminium Company Limited
C/o. NSIC Limited, Village : Dharampur, P.O. : Baddi, Tehsil : Nalagarh,
Dist. : Solan - 173205, Himachal Pradesh

Chennai

M/s. National Aluminium Company Limited
C/o. NSIC Ltd., Plot No. A12, CMDA Truck Terminal, Ponniamanmedu Post,
Madhavaram, Chennai - 600 110.

Vadodara

M/s. National Aluminium Company Limited
C/o. Central Warehousing Corporation, Near Ranoli Flyover, Ranoli,
Karachiya, Vadodara, Gujarat - 391350.

New Delhi

M/s. National Aluminium Company Limited
C/o. Supreme Road Transport Pvt. Ltd., Khasra 46/15/1, Village Tikri Kalan,
Netaji Subash Vihar, New Delhi 110041

X. ADDRESS FOR CORRESPONDENCE

Compliance Officer

Company Secretary
National Aluminium Company Ltd
NALCO Bhawan, P/1, Nayapalli
Bhubaneswar- 751013
E-mail: company_secretary@nalcoindia.co.in

Registrar and Share Transfer Agent

M/s. Karvy Fintech Private Limited.
Unit: National Aluminium Company Limited
Karvy Selenium Tower B, Plot No.31-32,
Gachibowli, Financial District, Nanakramguda,
Hyderabad-500032, Telangana
Tel. No. 040-67161500, Toll Free No.18003454001,
Email: einward.ris@karvy.com

CERTIFICATE OF NON-DISQUALIFICATION OF DIRECTORS

(Pursuant to Regulation 34(3) and Schedule V, Para C Clause (10) (i) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015)

To,
The Members of
National Aluminium Co Ltd
Nalco Bhawan, Plot No P/1,
Nayapalli, Bhubaneswar -751013, Odisha

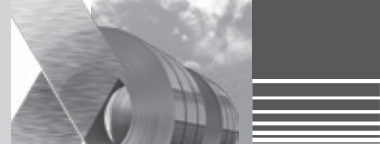
We have examined the relevant registers, records, forms, returns, and disclosures received from the Directors of NATIONAL ALUMINIUM COMPANY LIMITED having CIN- L27203OR1981GOI000920 and having its Registered Office at NALCO BHAWAN, Plot No P/1, Nayapalli, Bhubaneswar -751013, Odisha (hereinafter referred to as 'the Company'), produced before us by the Company for the purpose of issuing this certificate, in accordance with the regulation 34(3) read with Para-C, Sub-clause 10(i) of Schedule V the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.

In our opinion and to the best of our information and according to the verifications (including Directors Identification Number (DIN) status at the portal www.mca.gov.in) as considered necessary and explanations furnished to us by the Company & its officers, we hereby certify that none of the Directors on the Board of the Company as stated below for the Financial Year ended 31st March, 2019 have been debarred or disqualified from being appointed or continuing as Directors of the companies by Securities and Exchange Board of India, Ministry of Corporate Affairs or any such other Statutory Authority.

Sr. No.	Name of Director	DIN	Date of appointment in Company
1.	Dr. Tapan Kumar Chand	01710900	27.07.2015
2.	Shri. V. Balasubramanyam	06965313	01.01.2015
3.	Shri. Basant Kumar Thakur	07557093	04.07.2016
4.	Shri. Sanjib Kumar Roy	06756812	03.02.2017
5.	Shri. Pradip Kumar Mishra	06445517	23.04.2018
6.	Shri. Sridhar Patra	06500954	01.09.2018
7.	Dr. K. Rajeswara Rao	08071005	19.02.2018
8.	Shri. Anil Kumar Nayak	08097669	27.03.2018
9.	Shri. Dipankar Mahanta*	01583516	21.11.2018
10.	Shri. S. Sankararaman*	07346454	21.11.2018
11.	Shri. Pravat Keshari Nayak*	07346756	21.11.2018
12.	Prof. Damodar Acharya*	06817842	21.11.2018
13.	Shri. Maheswar Sahu*	00034051	21.11.2018
14.	Smt. Kiran Ghai Sinha	07726477	03.02.2017
15.	Shri. Nagendra Nath Sharma	02888318	06.09.2017
16.	Smt. Achla Sinha	07932932	08.09.2017

* Re-appointed for a further period of one year w.e.f. 21.11.2018 after completion of 1st term of three years on 20.11.2018.

CERTIFICATE OF NON-DISQUALIFICATION OF DIRECTORS



Ensuring the eligibility for the appointment/ continuity of every Director on the Board is the responsibility of the management of the Company. Our responsibility is to express an opinion on these based on our verification. This certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

**For Deba Mohapatra & Co.
(Company Secretaries)**

CS Debadatta Mohapatra, FCS
Sr. Partner
M. No. F5474, CP No. 4583

Place : Bhubaneswar
Date : 25.06.2019

INDEPENDENT AUDITORS' CERTIFICATE ON CORPORATE GOVERNANCE

To,
The Members,
National Aluminium Company Limited
Bhubaneswar

1. We have examined the compliance of conditions of Corporate Governance by National Aluminum Company Limited (“the Company”) for the year ended March 31, 2019, as stipulated in Regulations 17 to 27, clause (b) to (i) of Regulation 46(2) and paragraphs C and D of Schedule V of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (‘SEBI Listing Regulations’).

Management’s Responsibility

2. The compliance of conditions of Corporate Governance is the responsibility of the Management. This responsibility includes the design, implementation and maintenance of internal control and procedures to ensure the compliance with the conditions of the Corporate Governance stipulated in the SEBI Listing Regulations.

Auditor’s Responsibility

3. Our responsibility is limited to examining the procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of the Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.
4. We have examined the books of account and other relevant records and documents maintained by the Company for the purpose of providing reasonable assurance on the compliance of the conditions of the Corporate Governance requirements by the Company.
5. We conducted our examination of the relevant records of the Company in accordance with the guidance note on Reports or Certificates for special purpose (Revised 2016) issued by the Institute of Chartered Accountants of India. The Guidance Note 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 (SQ) 1, Quality Control for Firms that perform Audits and Reviews of Historical Financial information, and other Assurance and related service engagements.

Opinion

7. Based on our examination of the relevant records and in our opinion and to the best of our information and according to the explanations provided to us, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in Regulations 17 to 27, clause (b) to (1) of Regulation 46(2) and paragraphs C and D of Schedule V of the SEBI Listing Regulations, as applicable, during the year ended March 31, 2019.
8. We further state that such compliance is neither an assurance as to the future viability of the Company nor as to the efficiency of effectiveness with which the Management has conducted the affairs of the Company.

Restrictions on use

9. The certificate is addressed and provided to the members of the Company solely for the purpose of complying with the requirement of the SEBI Listing Regulations, and it 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 for any other purpose or to any other person to whom this report is shown or into whose hands it may come without our prior consent in writing.

For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

(CA B.K. Sarawagi)
Partner
Membership No.054894
UDIN: 19054894AAAAAC1228

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820
UDIN: 19057820AAAAAL8470

Place : Bhubaneswar
Date : 11 July, 2019

Form No. AOC-2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Companies Act, 2013 and Rule 8(2) of the Companies (Accounts) Rules, 2014)

Form for disclosure of particulars of contracts / arrangements entered into by the company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arm's length transactions under third proviso thereto:

1. **Details of contracts or arrangements or transactions not at arm's length basis:**
 - (a) Name(s) of the related party and nature of relationship : NIL.
 - (b) Nature of contracts/arrangements/transactions : Not Applicable.
 - (c) Duration of the contracts / arrangements/transactions : Not Applicable.
 - (d) Salient terms of the contracts or arrangements or transactions including the value, if any : Not Applicable.
 - (e) Justification for entering into such contracts or arrangements or transactions : Not Applicable.
 - (f) Date(s) of approval by the Board : Not Applicable.
 - (g) Amount paid as advances, if any : Not Applicable.
 - (h) Date on which the special resolution was passed in general meeting as required under first proviso to section 188 : Not Applicable.

2. **Details of material contracts or arrangement or transactions at arm's length basis:**
 - (a) Name(s) of the related party and nature of relationship : NIL.
 - (b) Nature of contracts / arrangements / transactions: : Not Applicable.
 - (c) Duration of the contracts / arrangements / transactions : Not Applicable.
 - (d) Salient terms of the contracts or arrangements or transactions including the value, if any : Not Applicable.
 - (e) Date(s) of approval by the Board, if any : Not Applicable.
 - (f) Amount paid as advances, if any : Not Applicable.

For and on behalf of the Board of Directors

Sd/-

(Dr. TAPAN KUMAR CHAND)

CHAIRMAN-CUM-MANAGING DIRECTOR

FORM NO. MGT.9
EXTRACT OF ANNUAL RETURN
as on the financial year ended on 31.03.2019

[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:

- i) CIN:- L27203OR1981GOI000920
- ii) Registration Date: 7th January 1981
- iii) Name of the Company: NATIONAL ALUMINIUM COMPANY LTD
- iv) Category / Sub-Category of the Company: Public Sector Company Limited by Shares
- v) Address of the Registered office and contact details:

NALCO BHAWAN, PLOT NO P/1, NAYAPALLI,
 BHUBANESWAR, ODISHA-751013, INDIA

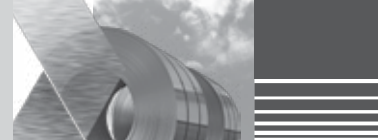
- vi) Whether listed company: Yes
- vii) Name, Address and Contact details of Registrar and Transfer Agent, if any:

M/s. Karvy Fintech Private Limited. ,
 Karvy Selenium Tower B, Plot No.31-32, Gachibowli,
 Financial District, Nanakramguda, Hyderabad-500032.
 Telangana , Tel. No. 040-67161500, Fax No. 040-23420814,
 Toll Free No.18003454001
 Email: einward.ris@karvy.com
 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:-

Sl. No.	Name and Description of main products/services	NIC Code of the Product/service	% to total turnover of the company
1	Alumina	201	37.50
2	Aluminium	242	57.70
3	Power	351	1.07



III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

SL. NO.	NAME AND ADDRESS OF THE COMPANY	CIN/GLN	HOLDING/ SUBSIDIARY/ ASSOCIATE	% of shares held	Applicable Section
1	NPCIL-NALCO Power Company Ltd. 16 th Floor, Centre-1, Cuffe Parade, Colaba, Mumbai-400005	U40300MH2012GOI227632	Associate	26	2(6)
2	Angul Aluminium Park Pvt. Ltd. IDCO Tower, Janpath, Bhubaneswar-751022	U27203OR2010PTC012284	Associate	49	2(6)
3	GACL-NALCO Alkalis & Chemicals Pvt. Ltd. GACL Corporate Building, P.O. Petrochemicals, Vadodra, Gujarat-391346	U24100GJ2015PTC085247	Associate	40	2(6)

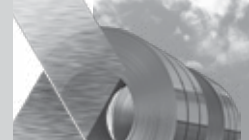
IV. SHARE HOLDING PATTERN (Equity Share Capital Breakup as percentage of Total Equity)

i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year (As on 31 st March 2018)				No. of Shares held at the end of the year (As on 31 st March 2019)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A. Promoters									
(1) Indian	—	—	—	—	—	—	—	—	—
a) Individual/ HUF	—	—	—	—	—	—	—	—	—
b) Central Govt.	1,16,37,17,107	—	1,16,37,17,107	60.20	970,081,517	—	970,081,517	52	-8.20
c) State Govt. (s)	—	—	—	—	—	—	—	—	—
d) Bodies Corp.	—	—	—	—	—	—	—	—	—
e) Banks/FI	—	—	—	—	—	—	—	—	—
f) Any Other..	—	—	—	—	—	—	—	—	—
Sub-total (A) (1):-	1,16,37,17,107	—	1,16,37,17,107	60.20	970,081,517	—	970,081,517	52	-8.20
(2) Foreign	—	—	—	—	—	—	—	—	—
a) NRIs-Individuals	—	—	—	—	—	—	—	—	—
b) Other - Individuals	—	—	—	—	—	—	—	—	—
c) Bodies Corp.	—	—	—	—	—	—	—	—	—
d) Banks / FI	—	—	—	—	—	—	—	—	—
e) Any Other...	—	—	—	—	—	—	—	—	—
Sub-total (A) (2):-	—	—	—	—	—	—	—	—	—
Total shareholding of Promoter (A) = (A)(1)+(A)(2)	1,16,37,17,107	—	1,16,37,17,107	60.20	970,081,517	—	970,081,517	52	-8.20

EXTRACT OF ANNUAL RETURN

Category of Shareholders	No. of Shares held at the beginning of the year (As on 31 st March 2018)				No. of Shares held at the end of the year (As on 31 st March 2019)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
B. Public Shareholding									
1. Institutions									
a) Mutual Funds	18,99,07,852	88,600	18,99,96,452	9.83	21,82,61,850	86,600	21,83,48,450	11.70	1.87
b) Banks/FI	22,00,71,816	—	22,00,71,816	11.39	14,97,89,962	0	14,97,89,962	8.03	-3.36
c) Central Govt.	—	—	—	—	—	—	—	—	—
d) State Govt.(s)	—	—	—	—	—	—	—	—	—
e) Venture Capital Funds	—	—	—	—	—	—	—	—	—
f) Insurance Companies	—	1,600	1,600	—	—	1,600	1,600	—	—
g) FIIs	12,38,46,814	26,800	12,38,73,614	6.41	22,23,55,936	26,800	22,23,82,736	11.92	5.51
h) Foreign Venture Capital Funds	—	—	—	—	—	—	—	—	—
i) Others (specify)	—	—	—	—	—	—	—	—	—
Sub-total (B)(1):-	53,38,26,482	1,17,000	53,39,43,482	27.62	59,04,07,748	1,15,000	59,05,22,748	31.65	4.03
2. Non-Institutions									
a) Bodies Corp.									
i) Indian	12,66,71,092	14,200	12,66,85,292	6.55	12,41,82,646	11,800	12,41,94,446	6.66	0.10
ii) Overseas	—	—	—	—	—	—	—	—	—
b) Individuals									
i) Individual shareholders holding nominal share capital up to ₹1 lakh	7,41,45,598	13,30,858	7,54,76,456	3.90	11,43,16,912	10,58,792	11,53,75,704	6.18	2.28
ii) Individual shareholders holding nominal share capital in excess of ₹1 lakh	2,38,02,771	—	2,38,02,771	1.23	4,65,03,104	0	4,65,03,104	2.49	1.26
c) Others (specify)	85,18,776	7,85,000	93,03,776	0.48	1,81,54,979	7,85,000	1,89,39,979	1.02	0.54
Sub-total (B)(2):-	23,31,38,237	21,30,058	23,52,68,295	12.17	30,31,57,641	18,55,592	30,50,13,233	16.35	4.18
Total Public Shareholding (B) = (B)(1) + (B)(2)	76,69,64,719	22,47,058	76,92,11,777	39.80	89,35,65,389	19,70,592	89,55,35,981	48.00	-8.21
C. Shares held by Custodian for GDRs & ADRs	—	—	—	—	—	—	—	—	—
Grand Total (A+B+C)	1,93,06,81,826	22,47,058	1,93,29,28,884	100	1,86,36,46,906	19,70,592	1,86,56,17,498	100	



(ii) Shareholding of Promoters

Sl. No.	Shareholder's Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% change in shareholding during the year
		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	
1.	THE PRESIDENT OF INDIA	1,163,717,107	60.20	—	970081517	52	—	-8.20

(iii) Change in Promoters' Shareholding (please specify, if there is no change)

Sl. No.		Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
	<i>At the beginning of the year</i>	1,163,717,107	60.20	—	—
		6,98,88,827	3.62	1093828280	56.59
		3,47,60,440	1.86	1059067840	56.77
		8,89,86,323	4.77	970081517	52
	<i>At the end of the year</i>	—	—	970081517	52

(iv) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs):

Sl. No.	For Each of the Top 10 Shareholders	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	LIFE INSURANCE CORPORATION OF INDIA	158431120	8.2	93435272	5.01
2	BHARAT 22 ETF	47768312	2.47	69117330	3.70
3	HDFC LIFE INSURANCE COMPANY LIMITED	14636302	0.76	24756542	1.33
4	UTI-MID CAP FUND	16464258	0.85	19856305	1.06
5	HINDALCO INDUSTRIES LIMITED	18385327	0.95	18385327	0.99
6	BAJAJ ALLIANZ LIFE INSURANCE COMPANY LTD.	14350874	0.74	17928229	0.96
7	RENUKA INVESTMENTS & FINANCE LIMITED	16418964	0.85	16418964	0.88
8	THE NEW INDIA ASSURANCE COMPANY LIMITED	11839876	0.61	13787744	0.74
9	ICICI PRUDENTIAL VALUE FUND - SERIES 19	—	—	13388562	0.72
10	RENUKESHWAR INVESTMENT AND FINANCE LTD.	12814264	0.66	12814264	0.68
11	GOVERNMENT PENSION GLOBAL FUND	28529841	1.48	—	—
12	RELIANCE CAPITAL TRUSTEE COMPANY LIMITED A/C RELIANCE GROWTH FUND	21084563	1.09	—	—

The shares of the Company are traded on a daily basis and hence the date wise increase / decrease in shareholding is not indicated.

(v) Shareholding of Directors and Key Managerial Personnel:

Sl. No.	For Each of the Directors and KMP	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	Dr. T. K. Chand, CMD	—	—	—	—
2	Shri V. Balasubramanyam, D(P)	3016	—	3016	—
3	Shri B.K.Thakur, D(HR)	—	—	—	—
4	Shri Sanjib Kumar Roy, D(P&T)	8675	—	8675	—
5	Shri P.K. Mishra, D(C)	—	—	—	—
6	Shri Sridhar Patra, D(F)	—	—	—	—
7	Shri N. K. Mohanty, Company Secretary	3016	—	5000	—

V. INDEBTEDNESS

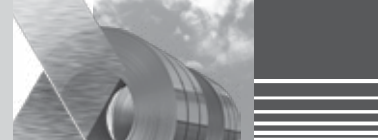
Indebtedness of the Company including interest outstanding/accrued but not due for payment

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>
ii) Interest due but not paid				
iii) Interest accrued but not due				
Total (i+ii+iii)	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>
Change in Indebtedness during the financial year				
• Addition	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>
• Reduction				
Net Change	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>
Indebtedness at the end of the financial year				
i) Principal Amount	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>
ii) Interest due but not paid				
iii) Interest accrued but not due				
Total (i+ii+iii)	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>	<i>Nil</i>

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and/or Manager:

Sl. No.	Particulars of Remuneration	Name of MD/WTD/ Manager							Total Amount
	NAME	Dr. Tapan Kumar Chand	Shri K C Samal (Upto 31.08.2018)	Shri Sridhar Patra (W.e.f. 01.09.2018)	Shri V Balasubramanyam	Shri B K Thakur	Shri S K Roy	Shri P K Mishra (w.e.f. 23.04.2018)	
	DESIGNATION	CMD	Director (Finance)	Director (Finance)	Director (Production)	Director (HR)	Director (P & T)	Director (C)	
1.	Gross salary								
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	64,39,460	52,79,533	22,88,078	55,08,827	44,96,710	47,55,972	34,40,715	32,209,295
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	4,58,410	1,48,465	3,12,062	4,05,800	—	—	2,17,443	15,42,180
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	—	—	—	—	—	—	—	—
2.	Stock Option	—	—	—	—	—	—	—	—
3.	Sweat Equity	—	—	—	—	—	—	—	—
4.	Commission — as % of profit — others, specify...	—	—	—	—	—	—	—	—
5.	Others, please specify	—	—	—	—	—	—	—	—
	Total (A)	68,97,870	54,27,998	26,00,140	59,14,627	44,96,710	47,55,972	36,58,158	33,751,475
	Ceiling as per the Act								



B. Remuneration to other directors:

Sl. No.	Particulars of Remuneration	Name of Directors								Total Amount
		Shri Dipankar Mahanta	Shri S. Sankararaman	Shri P. K. Nayak	Prof. D. Acharya	Shri Maheswar Sahu	Smt. Kiran Ghai Sinha	Shri N N Sharma	Smt. Achla Sinha	
1.	Independent Directors									
	• Fee for attending board committee meetings	6,25,000	5,55,000	5,30,000	4,40,000	4,50,000	4,00,000	3,85,000	2,95,000	36,80,000
	• Commission	—	—	—	—	—	—	—	—	—
	• Others, please specify	—	—	—	—	—	—	—	—	—
	Total (1)	6,25,000	5,55,000	5,30,000	4,40,000	4,50,000	4,00,000	3,85,000	2,95,000	36,80,000
2.	Other Non-Executive Directors									
	• Fee for attending board committee meetings	—	—	—	—	—	—	—	—	—
	• Commission	—	—	—	—	—	—	—	—	—
	• Others, please specify	—	—	—	—	—	—	—	—	—
	Total (2)	—	—	—	—	—	—	—	—	—
	Total (B) = (1 + 2)	6,25,000	5,55,000	5,30,000	4,40,000	4,50,000	4,00,000	3,85,000	2,95,000	36,80,000
	Total Managerial Remuneration									
	Overall Ceiling as per the Act									

C. REMUNERATION TO KEY MANAGERIAL PERSONNEL OTHER THAN MD/MANAGER/WTD

Sl. No.	Particulars of Remuneration	Key Managerial Personnel			
		CEO	Company Secretary	CFO	Total
			Shri N K Mohanty		
1.	Gross salary	—	41,00,959	—	41,00,959
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961				
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	—	38,676	—	38,676
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	—	—	—	—
2.	Stock Option	—	—	—	—
3.	Sweat Equity	—	—	—	—
4.	Commission — as % of profit — others, specify...	—	—	—	—
5.	Others, please specify	—	—	—	—
	Total	—	41,39,635	—	41,39,635

VII. PENALTIES/PUNISHMENT/COMPOUNDING OF OFFENCES

Type	Section of the Companies Act	Brief Description	Details of Penalty/ Punishment/ Compounding fees imposed	Authority [RD/NCLT/ COURT]	Appeal made, if any (give Details)
A. COMPANY					
Penalty			NIL		
Punishment					
Compounding					
B. DIRECTORS					
Penalty			NIL		
Punishment					
Compounding					
C. OTHER OFFICERS IN DEFAULT					
Penalty			NIL		
Punishment					
Compounding					

FORM NO. MR-3
SECRETARIAL AUDIT REPORT
FOR THE FINANCIAL YEAR 2018-19

[Pursuant to section 204(1) of the Companies Act, 2013 and Rule No.9 of the Companies
(Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To
The Members
National Aluminium Company Limited
NALCO Bhawan, Plot No. P/1, Nayapalli
Bhubaneswar – 751013 (Odisha)

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **M/s. National Aluminium Company Limited** (hereinafter called 'the Company') for the financial year ended **31st March, 2019**. Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conduct/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 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 31st March, 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 31st March, 2019, according to the provisions of:

- (i) The Companies Act, 2013 (the Act), and Rules made there under;
- (ii) The Securities Contracts(Regulation) Act, 1956 ('SCRA') and the Rules made there under;
- (iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed there under;
- (iv) Foreign Exchange Management Act, 1999 and the rules and regulations made there under to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;
- (v) The following Agreement, Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992('SEBI Act'):-
 - a. The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended;
 - b. The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011, as amended;
 - c. The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, as amended;

- d. The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018;
(Not applicable during the year under review)
 - e. The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014;
(Not applicable during the year under review)
 - f. The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008;
(Not applicable during the year under review)
 - g. The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009;
(Not applicable during the year under review)
 - h. The Securities and Exchange Board of India (Buyback of Securities) Regulations, 2018;
- (vii) The other laws as may be applicable specifically to the Company are:
- a. The Mines Act, 1952;
 - b. Mines & Minerals (Development & Regulation) Act, 1957, as amended;
 - c. The Explosives Act, 1984;
 - d. The Environment Protection Act, 1986;
 - e. The Forest Conservation Act, 1980;
 - f. The Water (Prevention & Control of Pollution Act), 1974;
 - g. The Air (Prevention and Control of Pollution) Act, 1981;
 - h. Indian Boilers Act, 1923.

We have also examined compliance with the applicable clauses of the following:

- (i) Secretarial Standards issued by The Institute of Company Secretaries of India (ICSI).
- (ii) The Uniform Listing Agreements entered into by the Company with the National Stock Exchange of India Limited and BSE Limited.

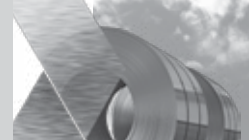
During the period under review, the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. as mentioned above.

BOARD COMPOSITION:

During the financial year under review, the Board of Directors of the Company consisted of the following Directors:

LIST OF DIRECTORS DURING THE FINANCIAL YEAR

Sl. No.	Name of the Directors	Positions Held	Date of Appointment	Date of Cessation
WHOLE-TIME DIRECTORS				
1.	Dr. Tapan Kumar Chand	Chairman-cum-Managing Director	27.07.2015	—
2.	Shri Krushna Chandra Samal	Director (Finance)	03.01.2014	31.08.2018
3.	Shri Venkatesan Balasubramanyam	Director (Production)	01.01.2015	—
4.	Shri Basant Kumar Thakur	Director (HR)	04.07.2016	—
5.	Shri Sanjib Kumar Roy	Director (P & T)	03.02.2017	—
6.	Shri Pradip Kumar Mishra	Director (C)	23.04.2018	—
7.	Shri Sridhar Patra	Director (Finance)	01.09.2018	—



LIST OF DIRECTORS DURING THE FINANCIAL YEAR

Sl. No.	Name of the Directors	Positions Held	Date of Appointment	Date of Cessation
---------	-----------------------	----------------	---------------------	-------------------

PART-TIME OFFICIAL DIRECTORS

1.	Dr. K. Rajeswara Rao	Director	19.02.2018	—
2.	Shri Anil Kumar Nayak	Director	27.03.2018	—

PART-TIME NON-OFFICIAL (INDEPENDENT) DIRECTORS

1.	Shri Dipankar Mahanta	Director	21.11.2018	—
2.	Shri S. Sankararaman	Director	21.11.2018	—
3.	Shri Pravat Keshari Nayak	Director	21.11.2018	—
4.	Prof. Damodar Acharya	Director	21.11.2018	—
5.	Shri Maheswar Sahu	Director	21.11.2018	—
6.	Ms. Kiran Ghai Sinha	Director	03.02.2017	—
7.	Shri Nagendra Nath Sharma	Director	06.09.2017	—
8.	Ms. Achla Sinha	Director	08.09.2017	—

At the beginning of the year, there were five (5) Whole time Directors (Executive Directors), two (2) Part-time official Directors and Eight (8) Part – time Non-official (Independent) Directors on the Board of the Company.

Shri Krushna Chandra Samal, Director (Finance) Superannuated on 31.08.2018.

Shri Pradip Kumar Mishra has been appointed as Director (C) w.e.f 23.04.2018.

Shri Sridhar Patra has been appointed as Director (Finance) w.e.f. 01.09.2018 vide Order No. 2(3)/2017-Met-I dated 2nd July, 2018 of Ministry of Mines, Government of India.

Shri Dipankar Mahanta, Shri S. Sankararaman, Shri Pravat Keshari Nayak, Prof. Damodar Acharya, Shri Maheswar Sahu were appointed as Part-time Non-Official (Independent) Directors for a period of 3 years by Govt. of India vide Ministry of Mines Letter No. 2(1)/2014-Met I dated 17.11.2015. On completion of their tenure on 20.11.2018, they were re-appointed as Part-time Non-Official (Independent) Directors on the Board of NALCO for a period of one year from the date of completion of their tenure i.e. 20.11.2018 or until further orders, whichever is earlier.

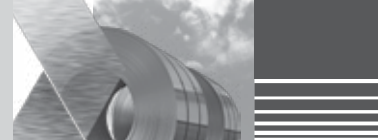
Hence, the Company had six (6) Whole- time Directors, two (2) Part-time Official Directors and eight (8) Part-time Non-official (Independent) Directors on the Board as on 31st March, 2019.

The Composition of the Board was in compliance with the provisions of Section 149(4) of the Companies Act, 2013, Regulation 17(1) (b) of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 and DPE guidelines on Corporate Governance for the Financial Year 2018-19.

BOARD MEETING:

During the financial year under review, Nine (9) meetings of the Board of Directors i.e. from 306th to 314th were held on 05.05.2018, 26.05.2018, 24.07.2018, 08.08.2018, 12.10.2018, 12.11.2018, 08.02.2019, 28.02.2019 & 01.03.2019 respectively. Adequate notice was given to all Directors for the said meetings. Agenda and detailed notes on agenda were sent in advance and the Company has a system existing, for seeking and obtaining further information and clarifications on the agenda items placed before the meetings for the meaningful participation at the meetings.

All decisions at the Board Meetings were carried out unanimously and recorded in the minutes book of the meeting.

**SEPARATE MEETING OF THE INDEPENDENT DIRECTORS:**

As per the provisions of Section 149(8) read with Clause VII of Schedule IV of the Companies Act, 2013, a separate meeting (5th meeting) of Independent Directors of the Company was held on 22.03.2019.

STATUTORY COMMITTEES OF THE BOARD:**(i) Audit Committee:**

The Audit Committee of the Board of Directors of the Company consists of the following members:

- Shri Pravat Keshari Nayak, Independent Director -Chairman
- Shri Dipankar Mahanta, Independent Director -Member
- Shri S. Sankararaman, Independent Director -Member
- Prof. Damodar Acharya, Independent Director-Member
- Shri V. Balasubramanyam, Director (Production) - Member
- Shri Sanjib Kumar Roy, Director (P&T) -Member

Director (Finance) is a permanent invitee to the Committee.

During the financial year, Five (5) meetings of the Audit Committee i.e. from 114th to 118th were held on 26.05.2018, 23.07.2018, 08.08.2018, 12.11.2018 and 08.02.2019.

Adequate Notice for the Audit Committee Meetings was sent to all the Members of the Committee.

Agenda and detailed notes on agenda were sent in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

(ii) Nomination and Remuneration Committee:

The Nomination and Remuneration Committee of the Board of Directors of the Company consists of the following members:

- Shri Maheswar Sahu, Independent Director –Chairman
- Shri S. Sankararaman, Independent Director - Member
- Shri Pravat Keshari Nayak, Independent Director - Member
- Prof. Damodar Acharya, Independent Director –Member
- Ms. Kiran Ghai Sinha, Independent Director – Member

Director (Finance) and Director (HR) are invitees to the meetings.

During the financial year, no meeting of the Nomination and Remuneration Committee was held.

(iii) Stakeholders Relationship Committee:

The Stakeholders Relationship Committee of the Board of Directors of the Company consists of the following members:

- Shri S. Sankararaman, Independent Director - Chairman
- Shri Dipankar Mahanta, Independent Director – Member
- Shri Pravat Keshari Nayak, Independent Director –Member
- Ms. Kiran Ghai Sinha, Independent Director – Member
- Shri Nagendra Nath Sharma, Independent Director – Member
- Ms. Achla Sinha, Independent Director – Member
- Shri B. K. Thakur, Director (HR)–Member
- Shri P. K. Mishra, Director (Commercial) – Member



During the financial year, four (4) Meetings of the Stakeholders Relationship Committee i.e. from 14th to 17th were held on 26.05.2018, 08.08.2018, 12.11.2018 & 07.02.2019.

Adequate Notice for the Stakeholders Relationship Committee Meetings was sent to all the Members of the Committee.

Agenda and detailed notes on agenda were sent to all the Members of the Committee well in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

(iv) **CSR & Sustainability Development Committee:**

The CSR & Sustainability Development Committee of the Board of Directors of the Company consists of the following members:

- Shri Dipankar Mahanta, Independent Director- Chairman
- Shri S. Sankararaman, Independent Director- Member
- Shri Maheswar Sahu, Independent Director- Member
- Ms. Kiran Ghai Sinha, Independent Director – Member
- Shri Nagendra Nath Sharma, Independent Director – Member
- Shri V. Balasubramanyam, Director (Production) - Member
- Shri. B. K. Thakur, Director (HR) –Member
- Shri S. Patra, Director (Finance) -Member

Shri K. C. Samal, Director (Finance) superannuated on 31.08.2018 and Shri S. Patra, Director (Finance) was inducted as a member of the Committee w.e.f. 01.09.2018.

During the financial year, four (4) meetings of the CSR & Sustainability Development Committee i.e. from 13th to 16th were held on 04.05.2018, 23.07.2018, 12.11.2018 & 07.02.2019.

Adequate Notice for the CSR & Sustainable Development Committee Meetings were sent to all the Members of the Committee.

Agenda and detailed notes on agenda were sent to all the Members of the Committee well in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

(v) **Risk Management Committee:**

The Risk Management Committee of the Board of Directors of the Company consists of the following members:

- Prof. Damodar Acharya, Independent Director- Chairman
- Shri S. Sankararaman, Independent Director –Member
- Ms. Kiran Ghai Sinha, Independent Director - Member
- Shri V. Balasubramanyam, Director (Production) –Member
- Shri P. K. Mishra, Director (Commercial) – Member
- Shri S. Patra, Director (Finance) -Member

Shri K. C. Samal, Director (Finance) superannuated on 31.08.2018 and Shri S. Patra, Director (Finance) was inducted as a member of the Committee w.e.f. 01.09.2018.

During the financial year, one (1) meeting of the Risk Management Committee i.e. 10th meeting was held on 23.07.2018.

Adequate Notice for the Risk Management Committee Meeting was sent to all the Members of the Committee.



Agenda and detailed notes on agenda were sent to all the Members of the Committee well in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

OTHER COMMITTEES CONSTITUTED UNDER DPE GUIDELINES:

(i) Technology Committee:

The Technology Committee of the Company comprised of the following Directors:

1. Prof. Damodar Acharya, Independent Director – Chairman
2. Shri Maheswar Sahu, Independent Director – Member
3. Shri V. Balasubramanyam, Director (Production) –Member
4. Shri S.K. Roy, Director (P & T) –Member
5. Shri P. K. Mishra, Director (Commercial) – Member
6. Shri Sridhar Patra, Director (Finance) –Member

Shri K. C. Samal, Director (Finance) superannuated on 31.08.2018 and Shri S. Patra, Director (Finance) was inducted as a member of the Committee w.e.f. 01.09.2018.

During the financial year under review, no meeting of the Technology Committee was held.

(ii) Human Resource (HR) Committee:

The Human Resource (HR) Committee of the Company comprised of the following Directors:

1. Shri Maheswar Sahu, Independent Director – Chairman
2. Shri Dipankar Mahanta, Independent Director – Member
3. Ms. Kiran Ghai Sinha, Independent Director – Member
4. Shri. B. K. Thakur, Director (HR) –Member
5. Shri S.K. Roy, Director (P & T) –Member
6. Shri Sridhar Patra, Director (Finance) -Member

Shri K. C. Samal, Director (Finance) superannuated on 31.08.2018 and Shri Sridhar Patra Director (Finance) was inducted as a member of the Committee w.e.f. 01.09.2018.

During the financial year, three (3) meetings of the Human Resource (HR) Committee i.e. from 39th to 41st were held on 04.05.2018, 12.11.2018 & 28.02.2019.

Adequate Notice for the Human Resource (HR) Committee Meeting was sent to all the Members of the Committee.

Agenda and detailed notes on agenda were sent to all the Members of the Committee well in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

(iii) Committee of Directors (COD) for Projects & New Ventures:

The COD for Projects and New Ventures Committee of the Company comprised of the following Directors:

1. Dr. Tapan Kumar Chand, CMD–Chairman
2. Shri Pravat Keshari Nayak, Independent Director –Member



3. Prof. Damodar Acharya, Independent Director – Member
4. Shri Maheswar Sahu, Independent Director – Member
5. Shri Anil Kumar Nayak, Joint Secretary, Ministry of Mines, Director – Member
6. Shri V. Balasubramanyam, Director (Production) –Member
7. Shri. B. K. Thakur, Director (HR) –Member
8. Shri S. K. Roy, Director (P & T) –Member
9. Shri P. K. Mishra, Director (Commercial) – Member
10. Shri S. Patra, Director (Finance) –Member

Shri K. C. Samal, Director (Finance) superannuated on 31.08.2018 and Shri S. Patra, Director (Finance) was inducted as a member of the Committee w.e.f. 01.09.2018.

During the financial year, three (3) Committee meetings of Director for Projects & New Ventures i.e. from 18th, 19th & 20th were held on 04.05.2018, 08.08.2018 and 08.02.2019.

Adequate Notice for the Committee meetings of Director for Projects & New Ventures was sent to all the Members of the Committee.

Agenda and detailed notes on agenda were sent to all the Members of the Committee well in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

(iv) Ethics and Corporate Governance Committee:

The Ethics and Corporate Governance Committee of the Company comprised of the following Directors:

1. Shri Dipankar Mahanta, Independent Director –Chairman
2. Shri Pravat Keshari Nayak, Independent Director –Member
3. Ms. Kiran Ghai Sinha, Independent Director –Member
4. Ms. Achla Sinha, Independent Director –Member
5. Shri. B. K. Thakur, Director (HR) –Member
6. Shri S.K. Roy, Director (P & T) –Member
7. Shri P. K Mishra, Director (Commercial) – Member

During the financial year, one (1) meeting of the Ethics and Corporate Governance Committee i.e. 10th was held on 23.07.2018.

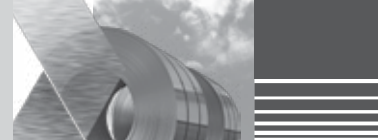
Adequate Notice for the Committee meetings of Ethics and Corporate Governance was sent to all the Members of the Committee.

Agenda and detailed notes on agenda were sent to all the Members of the Committee well in advance 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 the Committee Meetings were carried out unanimously and recorded in the minutes book of the Committee.

Registrar and Share Transfer Agent:

The Company has outsourced its share registry activities to the RTA M/s. Karvy Fintech Private Limited, Hyderabad (formerly known as M/s. Karvy Computershare Private Limited). During the year under review, the company has renewed the agreement with the RTA for rendering the services for one year till 31.12.2019 after expiry of the earlier period of three years.

**Redressal of Investors Grievances:**

All complaints/grievances relating to share transfers, transmissions, dematerialisation, rematerialisation of shares, issue of duplicate share certificates, payment of dividend etc. were attended and resolved within the prescribed time limit.

During the financial year under review, 429 complaints i.e. 424 Investor complaints & 5 SEBI complaints were received by the Company and all of them were resolved within the prescribed time limit.

In compliance with SEBI circular dt. 20.04.2018, Company had sent the 3 reminder letters dt. 15.06.2018, 20.08.2018 & 20.11.2018 seeking PAN and Bank details of the shareholders whose PAN and Bank details were not updated in the database.

Further, in compliance with SEBI directive, 3 nos. of letters were sent at reasonable intervals to shareholders for dematerialising their physical shares on or before 01.04.2019.

During the year under review, NALCO had opened a demat account in compliance with the Companies (Prospectus and Allotment of Securities) Third Amendment Rules, 2018 to hold the investment in securities in demat form for the purpose of holding its shares in JV Companies.

Compliance of applicable Laws:

We 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.

Maintenance of Statutory Records:

All Statutory Registers, records and other registers as prescribed under various provisions of the Companies Act, 2013, the Depositories Act, 1996 and the rules made there under were kept and maintained by the Company properly with all necessary entries made therein. Provisions of these Acts were duly complied with during the period under report.

Filing of Statutory Returns:

All provisions of the Act and other statutes were duly complied with regard to filing of various e-forms and returns with the Registrar of Companies within the prescribed time limit with payment of requisite/prescribed fees.

All documents/intimations under various Statutes/Listing Regulations/ Business Rules were also regularly filed with the Stock Exchanges and Depositories (NSDL and CDSL) within the prescribed due dates.

Buy-back of Share

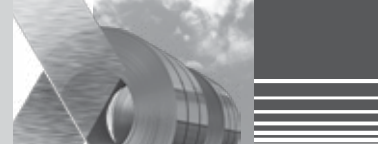
During the Year under review, the Board of Directors in their 310th Meeting held on 12th October, 2018 had approved the buy-back upto 6,73,11,386 fully paid-up equity shares of face value of ₹5/- each (representing 3.48% of the total no. of equity shares in the paid-up share capital of the company) at a price of ₹ 75/- per equity share each payable in cash for an aggregate consideration not exceeding ₹5,04,83,53,950/-. The buyback process was completed within 56 days from the date of approval of the Board of Directors, in compliance with the provisions of the Companies Act, 2013 and SEBI Buyback Regulations, 2018.

The shares bought back were extinguished on 07.12.2018. Post buyback, the paid-up share capital of the Company stood at ₹932.80 crores from ₹966.46 crores. The shareholding of Govt. of India post buyback stood as 56.77% from 56.59% of total paid-up share capital.

Payment of Dividend:

The shareholders approved payment of final dividend for 2017-18 @ 20% i. e. Re.1/- per equity share of face value of ₹5/- each in the 37th Annual General Meeting held on 29.08.2018 and the said dividend was paid to all eligible shareholders within the statutory time period.

Further, the Board of Directors in its 314th Meeting of Board of Directors held on 01.03.2019 declared interim dividend for 2018-19 @ ₹4.50 per share i.e. 90% on the paid-up equity share capital of the Company and the said dividend was paid to all eligible shareholders within the statutory time period.



All the provisions of the Companies Act, 2013 and SEBI Regulations relating to the declaration and payment of dividend to the shareholders have been complied with, by the Company.

Transfer of unpaid/unclaimed dividend to IEPF

In accordance with the provisions under the Companies Act, 2013, an amount of ₹6,10,874/- pertaining to unclaimed final dividend for the financial year 2010-11 have been transferred to the Investor Education & Protection Fund (IEPF) during the year on 21.11.2018.

Transfer of shares to IEPF

Pursuant to Section 124(6) of the Act read with Rule 6 of IEPF Rules, the Company is required to transfer shares in respect of which dividend has not been paid/claimed for 7 (seven) consecutive years or more to the Demat Account of IEPF Authority.

During the year, the Company sent individual notices and advertised in the newspapers intimating shareholders who had not claimed/encashed their dividend for seven consecutive years or more. Thereafter, the Company transferred corresponding 45,999 number of shares (184 cases) pertaining to 2010-11 final dividend to the demat account of the IEPF Authority.

During the financial year under review, the following events took place which have a major bearing on the affairs of the Company:

- 1) The President of India transferred 6,98,88,827 number of equity shares constituting 3.61% of the paid-up capital of the Company to the Bharat 22 ETF during 20th June, 2018 to 22nd June, 2018, managed by ICICI Prudential Mutual Fund as part of its disinvestment programme. Subsequent to the disinvestment, the Govt's holding has come down from 60.20% to 56.59%.
- 2) Again during the year under review, The President of India through Administrative Ministry has transferred 8,89,86,323 nos. of equity shares to the Bharat 22 ETF on 21st Feb, 2019. Subsequent to the transfer, the GOI holding in NALCO reduced from 56.77% to 51.998%.

We further report that on the basis of documents and explanations provided by the Management of the Company, adequate systems and processes commensurate with its size and operations exist in the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

For Deba Mohapatra & Co.

Company Secretaries

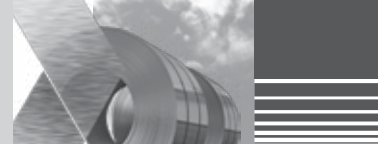
CS Debadatta Mohapatra, FCS

Partner

CP No. 4583, FCS No. 5474

Place : Bhubaneswar

Date : 13.05.2019



(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
The Members
National Aluminium Company Limited
NALCO Bhawan, Plot No. P/1, Nayapalli
Bhubaneswar – 751013 (Odisha)

Our report of even date is to be read along with this letter.

1. Maintenance of secretarial records 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 verifications were done on test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, followed by the Company 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. Wherever 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 the management. Our examination was limited to the verification of procedures on 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 Deba Mohapatra & Co.
Company Secretaries

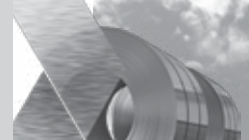
CS Debadatta Mohapatra, FCS
Partner

CP No. 4583, FCS No. 5474

Place : Bhubaneswar

Date : 13.05.2019

INDEPENDENT AUDITOR'S REPORT



To the Members of

National Aluminium Company Limited

Report on the Audit of the Standalone Financial Statements

Opinion

We have audited the standalone financial statements of **National Aluminium Company Limited** ("the Company"), which comprise the balance sheet as at March 31, 2019, and the statement of profit and loss (including other comprehensive income), statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as the "financial statements").

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid 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 Indian Accounting Standards (Ind AS) prescribed under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015 as amended and the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2019, profit, total comprehensive income, changes in equity and its cash flows for the year ended on that date.

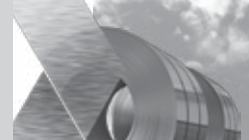
Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) 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 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 opinion.

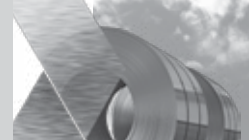
Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The key audit matters that we have identified in the current year are as follows:

Key Audit Matter	How the matter was addressed in our audit
1. Carrying value of property, plant and equipment including intangible assets and capital work-in- progress	
<p>Property, plant and equipment totalling ₹7109.37 crore (2017-18 : ₹7019.38) as disclosed in Note 5 capital work-in-progress (Note 6) ₹843.91 crore (2017-18 : ₹825.83 crore) and intangible assets (Note 7) totalling ₹176.41 crore (2017- 18 : ₹120.08 crore) represent significant balances recorded in the statement of financial position. The Company describes the significant accounting policies in respect of property, plant and equipment, capital work-in-progress and intangible assets in Note 3.4, 3.5 & 3.6.</p> <p>The evaluation of the recoverable amount of these assets requires significant judgement in determining the key assumptions supporting the expected future cash flows of the business and the utilisation of the relevant assets.</p> <p>There are a number of areas where management judgement impacts the carrying value of property, plant and equipment, intangible assets and their respective depreciation profiles. These include the decision to capitalise or expense costs; the asset life review including the impact of changes in the Company's strategy; and the timeliness of the transfer from assets in the course of construction.</p>	<p>We evaluated the assumptions made by management in the determination of residual values and useful lives to ensure that these are consistent with the principles of Ind AS 16 <i>Property, Plant and Equipment</i> and Ind AS 38 <i>Intangible Assets</i>.</p> <p>We assessed whether useful lives and residual values were reasonable by challenging management's judgements through comparing the useful lives and residual values prescribed in Schedule II to the Companies Act 2013.</p> <p>We compared the useful lives of each class of asset in the current year to the prior year to determine whether there were any significant changes in the useful lives of assets, and considered the reasonableness of changes based on our knowledge of the business and the industry.</p> <p>We assessed whether indicators of impairment existed as at 31 March 2019 based on our knowledge of the business and the industry;</p> <p>We tested the controls in place over the property, plant and equipment and intangible assets, evaluated the appropriateness of capitalisation policies, performed tests of details on costs capitalised and assessed the timeliness of the transfer of assets in the course of construction and the application of the asset life.</p> <p>In performing these substantive procedures, we assessed the judgements made by management including the nature of underlying costs capitalised; the appropriateness of asset lives applied in the calculation of depreciation and amortisation; and in assessing the need for accelerated depreciation/ amortisation, if required, in the context of impairment.</p> <p>We found management's assessment in determining the carrying value of the property, plant and equipment and intangible assets to be reasonable.</p>



Key Audit Matter	How the matter was addressed in our audit
2. Valuation of Inventory	
<p>As described in Note 3.10 (Significant Accounting Policies) and Note 15 (Inventories), the Company carries inventory at the lower of cost and net realisable value and as at 31st March 2019 held inventories of ₹1210.01 crore (2017-18 : ₹1194.08 crore).</p> <p>The Company provides for obsolescence based on period for which an items remains as non-moving. This methodology relies upon assumptions made in determining appropriate provisioning to apply to inventory balances.</p>	<p>We obtained a detailed understanding and evaluated the design and implementation of controls that the Company has established in relation to inventory valuation.</p> <p>We obtained assurance over the appropriateness of management's control over transfer of finished product from one unit to be used as raw material in other unit and estimating year end actual level of in process stock compared to standard level to be maintained for ensuring continuity of production process and used data analytics to identify unusual inventory usage characteristics.</p> <p>We critically assessed the Company's inventory provisioning policy, with specific consideration given to aged inventory and their movement status;</p> <p>We have verified the value of a sample of inventory items to confirm whether they are held at the lower of cost and net realisable value.</p> <p>We agree with the value of inventory as determined by the management.</p>
3. Valuation of employees' defined benefit obligations and other long-term benefits	
<p>The Company has recognised long-term employee benefit liabilities of ₹380.20 crore (2017-18 : ₹304.76 crore) and defined benefit obligations (net of plan asset against funded gratuity obligation) of ₹225.13 crore (2017-18 : ₹424.19 crore) and described them in Note 3.16 (Significant Accounting Policies) and Notes 22 & 31 (long-term and post-employment benefits).</p> <p>The valuation of employee benefit obligations is dependent on market conditions and assumptions made. The key audit matter specifically relates to the following key assumptions: discount rate, inflation expectations and life expectancy assumptions. The setting of these assumptions is complex and requires the exercise of significant management judgement with the support of third party actuary.</p>	<p>In testing the valuation, we have examined the reports of external actuarial specialists to review the key actuarial assumptions used, both financial and demographic, and considered the methodology utilised to derive these assumptions. Furthermore, we have examined the sensitivity analysis on the key assumptions in valuing the defined benefit obligations.</p> <p>We are satisfied that the methodology and assumptions applied in relation to determining the liabilities are acceptable.</p>
4. Ascertainment, disclosure and provisioning in respect of contingent liabilities	
<p>As described in Note 4.2.5 (Critical accounting judgments and key sources of estimation uncertainty) the Company disclosed in Note 25 contingent liabilities of ₹2771.59 crore (2017-18 : ₹2552.08 crore).</p> <p>The Company has material uncertain tax matters, both direct and indirect, under dispute involving aggregate demand of ₹1814.14 crore (2017-18 : ₹1526.41 crore) which require significant judgment to determine the possible outcome of these disputes.</p> <p>Additionally, the Company has other ongoing legal matters relating to various claims by the Government of Odisha or other agencies constituted by the State Government and by contractors/ suppliers involving an aggregate demand of ₹957.45 crore (2017-18 : ₹1025.67 crore) which require application of management judgement in order to determine the likely outcome.</p>	<p>We obtained a detailed understanding and evaluated the design and implementation of controls that the Company has established in relation to disclosure and provisioning of contingent liabilities in accordance to Ind AS 37 <i>Provisions, Contingent Liability and Contingent Assets</i>.</p> <p>Regarding direct and indirect tax contingent liabilities, we undertook following principal audit procedures:</p> <ul style="list-style-type: none"> — Assessment of the process and relevant controls implemented to identify tax litigations and pending administrative proceedings. — Assessment of assumptions used in the evaluation of potential tax risks performed by the tax department of the Company considering the legal precedence and other rulings in similar cases. — Discussion with the management regarding the status of the most significant disputes and inspection of the key relevant documentation. — Analysis of opinion received from tax experts where available. — Review of the adequacy of the disclosures in the notes to the financial statements.

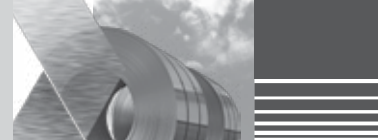


Key Audit Matter	How the matter was addressed in our audit
	<p>In assessing the potential exposures of the Company in respect of other contingent liabilities, we have:</p> <ul style="list-style-type: none"> — assessed the design and implementation of controls in relation to the monitoring of known exposures; — referred Board and other meeting minutes to identify areas subject to Company consideration; — consulted with the Company's internal legal advisors in understanding ongoing and potential legal matters impacting the Company; — reviewed available legal opinions from experts; and — reviewed the proposed accounting and disclosure of actual and potential legal liabilities. <p>We concur that the accounting and disclosures in relation to the ongoing legal matters are appropriate.</p>
<p>5. Advances and deposits in respect of tax matters under litigation continuing as assets</p>	
<p>As at March 31, 2019, other assets (Note 14) includes recoverable claims of direct and indirect tax deposits (net of provision) including GST, VAT and Cenvat credits amounting to ₹597.61 crore (2017-18 : ₹581.95 crore) which are pending adjustment/adjudication.</p> <p>Significant judgement is required in assessing the nature of these exposures and their accounting and disclosure requirements.</p>	<p>Our audit procedure was to obtain from management details of completed tax assessments and demands and appeal orders of the appellate authority. We involved our internal experts to challenge the management's underlying assumptions in estimating the tax liability and the possible outcome of the disputes. Our internal experts also considered legal precedence and other rulings in evaluating management's position on these uncertain tax positions. Additionally, we have considered opinions of legal and tax experts, wherever available, to review the nature of the amounts recoverable, the sustainability and the likelihood of recoverability upon final resolution.</p> <p>We are in agreement with the management's determination of the claim amount considered recoverable.</p>
<p>6. Valuation of deferred tax assets and liabilities</p>	
<p>The Company has disclosed in Note 23 deferred tax liability (net of deferred tax asset) as on March 31, 2019 ₹1130.67 crore (2017-18 : ₹1151.45 crore).</p> <p>The Company operates in activities which involves application of multiple income tax provisions. The assessment of the valuation of deferred tax assets/ liability, resulting from timing differences, and provisions for uncertain tax positions is significant to our audit as the calculations are complex and depend on sensitive and judgmental assumptions. These include, amongst others, long-term future profitability and local fiscal regulations and developments.</p>	<p>Our audit procedures included, among others, ascertaining the completeness and accuracy of the deferred tax assets/liabilities and recognizing uncertain tax positions. We challenged and tested the Management's assessment of the recoverability of the deferred tax assets, and the probability of future cash outflows in respect deferred tax liabilities identified by the Company. We also assessed the applicable local fiscal regulations and developments, in particular those related to changes in the statutory income tax rate and of the statutes of limitation, as these are key assumptions underlying the valuation of the deferred tax assets/liabilities. We analysed the tax positions and evaluated the assumptions and methodologies used by the Company. In addition, we also focused on the adequacy of the Company's disclosures as per Ind AS 12 <i>Income Taxes</i> on deferred tax assets/liabilities and assumptions used.</p> <p>We are satisfied that the methodology and assumptions applied in relation to determining the deferred tax assets and liabilities are acceptable.</p>

Other Information

The Company's Board of Directors is responsible for the other information. The other information comprises the information contained in Directors' Report including Annual Report on CSR Activities, Management Discussion & Analysis Report, Business Responsibility Report, Report on Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and outgo, Report on Corporate Governance annexed thereto and other information contained in the Annual Report, but does not include the financial statements and our report thereon. These reports are expected to be made available to us after the date of this auditors' report.

Our opinion on the financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.



In connection with our audit of the financial statements, our responsibility is to read the other information identified above when it becomes available 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.

When we read the other information, if we conclude that there is material misstatement therein, we are required to communicate the matter to those charged with governance.

Management's Responsibility for the 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 and presentation of these financial statements that give a true and fair view of the financial position, financial performance (changes in equity) and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Accounting Standards (Ind AS) specified under section 133 of the Act. 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 implementation and maintenance of accounting policies; making judgments and estimates that are reasonable and prudent; and 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 financial statement that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the 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 Board of Directors are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the 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 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 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. 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 financial statements, including the disclosures, and whether the financial statements represent the underlying transactions 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 financial statements of the current period 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.

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 "A" to this report a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.
2. In compliance to directions of the Comptroller and Auditor General of India u/s.143(5) of the Act, we give in Annexure "B" to this report a statement on the matters specified therein.
3. 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, and the Cash Flow Statement dealt with by this Report are in agreement with the books of account.
 - (d) In our opinion, the aforesaid financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014.
 - (e) Section 164(2) of the Act regarding disqualification of directors is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Government of India.
 - (f) With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in Annexure "C".
 - (g) 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, in our opinion and to the best of our information and according to the explanations given to us:
 - i. The Company has pending litigations, the liabilities in respect of which is either provided for or disclosed as contingent liabilities – Refer Note 25 to the financial statements. The impact of these pending litigations on the financial position of the Company is subject to their judicial outcome;
 - 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 Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi
Date : 30.05.2019

ANNEXURE – “A”

ANNEXURE TO THE INDEPENDENT AUDITOR’S REPORT ON STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2019 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred to in paragraph 1 under the heading of “Report on Other Legal and Regulatory Requirements” of our Report of even date)

- i) (a) The Company is maintaining proper records showing full particulars, including quantitative details and situation of its property, plant and equipment including intangible assets.
- (b) All movable assets of the Company are physically verified by the management every year. The frequency of verification, in our opinion, is reasonable. No material discrepancies were noticed on such verification conducted during the year;
Non-movable assets have been physically verified by the management at an interval of three years, which, in our opinion, is reasonable having regard to the size and nature of assets of the Company;
No material discrepancies between book records and physical assets have been noticed;
- (c) According to the information and explanations given to us and on the basis of our examination of the records of the Company the title deeds of immovable properties are held in the name of the Company. Out of 8047.05 acres of freehold land and 10558.29 acres of leasehold land held by the Company, title/lease deeds are not yet executed in respect of 64.78 acres of freehold and 1624.18 acres of leasehold land respectively. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land. Registration formalities in respect of office space for 6459 sft. in Kolkata is also not completed.
- ii) Inventories, except stocks relating to expansion project, stocks lying with third parties and stocks-in-transit, have been physically verified during the year by firms of Chartered Accountants appointed by the management for this purpose. The frequency of verification is reasonable. The discrepancies noticed on physical verification between physical stocks and book records in case of shortages have been properly dealt with in the books of accounts while excesses have been ignored;
- iii) The Company has not granted any loans, secured or unsecured, to companies, firms, limited liability partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013. Consequently, clauses (iii) (a), (b) & (c) of paragraph 3 of the Order are not applicable;
- iv) Section 185 of the Act regarding loans to directors is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Govt. of India. In our opinion and according to the information and explanations given to us, the Company has complied with the provisions of section 186 of the Act with respect to the loans and investments made.
- v) The Company has not accepted any deposits from the public.
- vi) We have broadly reviewed the books and records maintained by the Company as specified by the Central Government for the maintenance of cost records under section 148(1) of the Companies Act, 2013 in respect of manufacturing activities and are of the opinion that prima facie, the prescribed accounts and records have been made and maintained. We have, however, not made a detailed examination of the records with a view to determine whether they are accurate and complete.
- vii) (a) According to the information and explanations given to us and on the basis of our examination of the records of the Company, in our opinion, the Company is generally regular in depositing undisputed statutory dues including provident fund, employees’ state insurance, income tax, goods and service tax, duty of customs, cess, electricity duty and other material statutory dues with the appropriate authorities and there are no undisputed statutory dues as at 31st March, 2019 outstanding for a period of more than six months from the date they became payable.
- (b) According to the information and explanations given to us, following statutory dues have not been deposited by the Company on account of disputes:

Name of the Statute	Nature of Dues	Amount disputed (₹ in crore)	Amount deposited (₹ in Crore)	Forum where disputes are pending
Odisha Sales Tax Act, 1947, Central Sales Tax Act 1957 & Odisha Value Added Tax Act, 2004	OST/CST & VAT	121.61	24.00	Commissioner
		173.10	54.99	Tribunal
		81.81	3.86	High Court
		376.52	82.85	
Odisha Entry Tax Act, 1999	Entry Tax	21.23	5.57	Commissioner
		154.93	58.88	Tribunal
		45.65	5.16	High Court
		221.81	69.61	

Name of the Statute	Nature of Dues	Amount disputed (₹ in crore)	Amount deposited (₹ in Crore)	Forum where disputes are pending
Central Excise Act, 1944	Excise Duty	9.61	0.41	Commissioner
		11.14	0.86	Tribunal
		397.58	0.10	High Court
		418.33	1.37	
Finance Act, 1994	Service tax	15.56	2.84	Commissioner
		6.36	0.25	Tribunal
		21.92	3.09	
Customs Act, 1962	Custom Duty	0.09	0.05	Commissioner
		1.34	0.24	Tribunal
		101.33	1.66	High Court
		102.76	1.95	
Income Tax Act, 1961	Income Tax	50.56	—	Commissioner
		671.11	538.98	Tribunal
		39.95	58.16	High Court
		761.62	597.14	
Indian Stamp (Odisha Amendment) Act, 2013	Stamp duty	191.72	—	High Court
Motor Vehicles Act, 1988	Road Tax	2.65	—	Commissioner
		2.65	—	
	Total:	2097.33	756.01	

- viii) Except bill discounting arrangement with banks, the Company does not have any loans or borrowings from any financial institution, banks, government or debenture holders. The Company has not defaulted in repayment of the loans obtained under the bill discounting facility.
- ix) The Company did not raise any money by way of initial public offer or further public offer (including debt instruments) and term loans during the year.
- x) According to the information and explanations given to us, no fraud by the Company or any material fraud on the Company by its officers or employees has been noticed or reported during the year.
- xi) Section 197 of the Act regarding managerial remuneration is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 issued by the Ministry of Corporate Affairs, Govt. of India.
- xii) In our opinion and according to the information and explanations given to us, the Company is not a nidhi company.
- xiii) According to the information and explanations given to us and based on our examination of the records of the Company, transactions with the related parties are in compliance with sections 177 and 188 of the Companies Act, 2013 where applicable and details of such transactions have been disclosed in the financial statements as required by the applicable accounting standards.
- xiv) According to the information and explanations given to us and based on our examination of the records, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year.
- xv) According to the information and explanations given to us and based on our examination of the records, the Company has not entered into any non-cash transactions with any director or persons connected with him.
- xvi) The Company is not required to be registered under section 45-IA of the Reserve Bank of India Act 1934.

For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi
Date : 30.05.2019

ANNEXURE–“B”

ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2019 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred to in paragraph 2 under the heading of “Report on Other Legal and Regulatory Requirements” of our Report of even date)

Report on the directions under section 143(5) of the Companies Act, 2013 by the Comptroller & Auditor General of India

According to the information and explanations given to us by the management and on the basis of our examination of books and records of the Company, we report that:

1. The Company has SAP system in place to process all the accounting transactions through IT system. AS there is no processing of accounting transactions outside IT system, comment on the integrity of the accounts and financial implications of accounting transactions processed outside IT system does not arise.
2. The Company has not obtained any loan and as such question of restructuring of loan by the lender does not arise.
3. During the year no fund has been received by the Company from Central/State agencies for any scheme and hence accounting of receipt of fund and utilization thereof as per terms and conditions does not arise.

For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi

Date : 30.05.2019



ANNEXURE-“C”

ANNEXURE TO THE INDEPENDENT AUDITOR’S REPORT OF EVEN DATE ON THE STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2019 OF NATIONAL ALUMINIUM COMPANY 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 NATIONAL ALUMINIUM COMPANY LIMITED (“the Company”) as of March 31, 2019 in conjunction with our audit of the standalone 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 in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). 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 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.

Auditors’ Responsibility

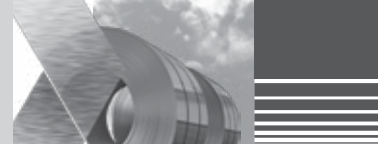
Our responsibility is to express an opinion on the Company’s internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the “Guidance Note”) and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both 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 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 system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, 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 judgment, including the assessment of the risks of material misstatement of 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 Company’s internal financial controls system over financial reporting.

Meaning of Internal Financial Controls Over Financial Reporting

A company’s internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal financial control over financial reporting 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 authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.



ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE STANDALONE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2019 OF NATIONAL ALUMINIUM COMPANY LIMITED

Inherent Limitations of Internal Financial Controls Over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, 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 to future periods are subject to the risk that the internal financial control over financial reporting 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, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting 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 the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

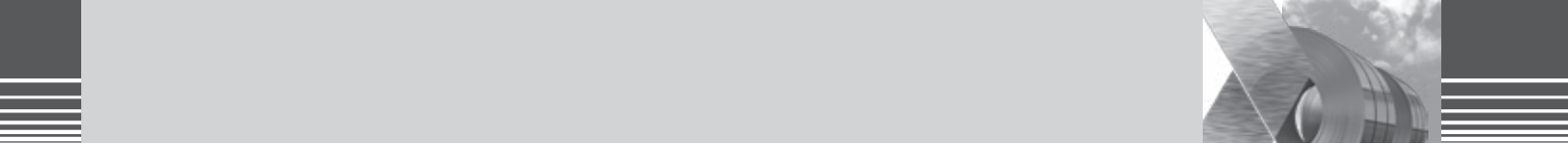
For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi
Date : 30.05.2019



**COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA
UNDER SECTION 143(6)(b) OF THE COMPANIES ACT, 2013 ON
THE FINANCIAL STATEMENTS OF NATIONAL ALUMINIUM COMPANY LIMITED
FOR THE YEAR ENDED 31 MARCH 2019**

The preparation of financial statements of National Aluminium Company Limited for the year ended 31 March 2019 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the company. The statutory auditors appointed by the Comptroller and Auditor General of India under section 139(5) of the Act is responsible for expressing opinion on these financial statements under section 143 of the Act based on independent audit in accordance with the standards on auditing prescribed under section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 30 May 2019.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit of the financial statements of National Aluminium Company Limited for the year ended 31 March 2019 under section 143(6)(a) of the Act. This supplementary audit has been carried out independently without access to the working papers of the statutory auditor and is limited primarily to inquiries of the statutory auditor and company personnel and a selective examination of some of the accounting records.

On the basis of my supplementary audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditors' Report under Section 143(6)(b) of the Act.

**For and on the behalf of the
Comptroller & Auditor General of India**

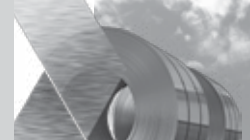
(Suparna Deb)

Director General of Commercial Audit
& Ex-officio Member, Audit Board-I,
Kolkata

Place: Kolkata
Date: 26 Jun 2019

BALANCE SHEET

as at March 31, 2019



Particulars	Notes	Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
Assets			
(1) Non-current assets			
(a) Property, plant and equipment	5	7,109.37	7,019.38
(b) Capital work-in-progress	6	843.91	825.83
(c) Intangible assets	7	176.41	120.08
(d) Intangible assets under development	8	38.80	89.39
(e) Financial assets			
(i) Investments	9	175.78	117.61
(ii) Trade receivables	10	—	—
(iii) Loans	11	74.74	74.96
(iv) Other financial assets	12	10.37	13.14
(f) Other non-current assets	14	1,116.88	843.93
Total non-current assets		9,546.26	9,104.32
(2) Current assets			
(a) Inventories	15	1,210.01	1,194.08
(b) Financial assets			
(i) Investments	9	80.81	592.96
(ii) Trade receivables	10	240.52	258.13
(iii) Cash and cash equivalents	16	171.60	25.35
(iv) Bank balances other than (iii) above	16	3,324.75	2,743.60
(v) Loans	11	25.75	29.29
(vi) Other financial assets	12	1.23	152.55
(c) Current tax assets (Net)	13	51.26	33.66
(d) Other current assets	14	494.77	479.86
Total current assets		5,600.70	5,509.48
Total assets		15,146.96	14,613.80
Equity and liabilities			
(1) Equity			
(a) Equity share capital	17	932.81	966.46
(b) Other equity	18	9,551.70	9,538.35
Total equity		10,484.51	10,504.81
Liabilities			
(2) Non-current liabilities			
(a) Financial liabilities			
(i) Trade payables			
(a) Dues of micro and small enterprises	20	—	—
(b) Dues of creditros other than micro and small enterprises	20	21.14	15.63
(ii) Other financial liabilities	21	6.70	2.85
(b) Provisions	22	530.93	436.09
(c) Deferred tax liabilities (Net)	23	1,130.67	1,151.45
(d) Other non-current liabilities	24	67.89	62.04
Total non-current liabilities		1,757.33	1,668.06
(3) Current liabilities			
(a) Financial liabilities			
(i) Borrowings	19	66.79	44.99
(ii) Trade payables			
(a) Dues of micro and small enterprises	20	2.22	4.53
(b) Dues of creditros other than micro and small enterprises	20	1,283.55	957.21
(iii) Other financial liabilities	21	410.86	512.87
(b) Other current liabilities	24	976.19	545.45
(c) Provisions	22	165.51	375.88
Total current liabilities		2,905.12	2,440.93
Total liabilities		4,662.45	4,108.99
Total equity and liabilities		15,146.96	14,613.80

See accompanying notes (1-40) to the financial statements

For and on behalf of Board of Directors

(CS. N K Mohanty)
(Company Secretary)

(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E

For Patro & Co.
Chartered Accountants
FRN-310100E

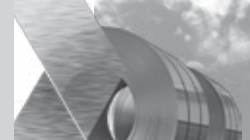
Place: New Delhi
Date : May 30, 2019

(CA Dr. B S Kundu)
Partner (M No.:051221)

(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

STATEMENT OF PROFIT AND LOSS

for the period ended March 31, 2019



		Amount in ₹ Crore	
	Notes	Year ended 31.03.2019	Year ended 31.03.2018
I Revenue from operations	27	11,499.32	9,618.31
II Other Income	28	325.87	299.65
III Total Income (I + II)		11,825.19	9,917.96
IV EXPENSES			
(a) Cost of raw materials consumed	29	1,919.68	1,465.31
(b) Cost of power and fuel consumed	29	2,927.12	2,747.92
(c) Changes in inventories of finished goods and work-in-progress	30	(5.08)	47.43
(d) Employee benefits expenses	31	2,072.28	2,261.20
(e) Finance costs	32	2.38	1.95
(f) Depreciation and amortisation expenses	5 & 7	476.10	480.40
(g) Excise duty		—	108.86
(h) Other expenses	33	1,692.79	1,590.14
Total expenses (IV)		9,085.27	8,703.21
V Profit/(loss) before exceptional items and tax (III - IV)		2,739.92	1,214.75
VI Exceptional Items	34	—	(824.08)
VII Profit/(loss) before tax (V - VI)		2,739.92	2,038.83
VIII Tax Expense			
(1) Current tax	35	1,024.65	793.18
(i) Current tax		998.36	521.99
(ii) Current tax relating to previous years		26.29	271.19
(2) Deferred tax	35	(17.13)	(96.76)
IX Profit/(loss) for the period (VII - VIII)		1,732.40	1,342.41
X Other comprehensive income			
(i) Items that will not be reclassified to profit or loss			
- Remeasurement gains / (losses) on defined benefit plans		0.06	52.66
(ii) Income tax relating to items that will not be reclassified to profit or loss	35	0.21	2.63
Other comprehensive income for the period (net of tax) (X)		(0.15)	50.03
XI Total comprehensive income for the period (IX+X) (comprising profit/(loss) and other comprehensive income for the period)		1,732.25	1,392.44
XII Earnings per equity share:			
(1) Basic (in ₹)	37	9.06	6.94
(2) Diluted (in ₹)	37	9.06	6.94

See accompanying notes (1-40) to the financial statements

For and on behalf of Board of Directors

(CS. N K Mohanty)
(Company Secretary)

(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E
(CA Dr. B S Kundu)
Partner (M No.:051221)

For Patro & Co.
Chartered Accountants
FRN-310100E
(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

Place: New Delhi
Date : May 30, 2019

STATEMENT OF CHANGES IN EQUITY for the period ended March 31, 2019

Amount in ₹ Crore

A. Equity share capital

Balance as at 31.03.2017	966.46
Changes in equity share capital during the year	—
Balance as at 31.03.2018	966.46
Buy-back of equity shares	(33.65)
Balance as at 31.03.2019	932.81

B. Other equity

Amount in ₹ Crore

Other equity	Reserves and surplus			Total
	Capital redemption reserve	General reserve	Retained earnings	
Balance as at 31.03.2017	322.16	8,620.41	296.76	9,239.33
Profit for the year	—	—	1,342.41	1,342.41
Other comprehensive income (net of taxes)	—	—	50.03	50.03
Total comprehensive income for the year	—	—	1,392.44	1,392.44
Interim dividend for the year			(908.48)	(908.48)
Tax on interim dividend for the year			(184.94)	(184.94)
Balance as at 31.03.2018	322.16	8,620.41	595.78	9,538.35
Profit for the year	—	—	1,732.40	1,732.40
Other comprehensive income (net of taxes)	—	—	(0.15)	(0.15)
Total comprehensive income for the year	—	—	1,732.25	1,732.25
Premium on Buy-back of equity shares		(471.18)	—	(471.18)
Expenses on Buy-back of equity shares (net of tax benefit)		(2.60)	—	(2.60)
Transfer of general reserve to Capital redemption reserve	33.65	(33.65)	—	—
Final dividend for previous year	—	—	(193.29)	(193.29)
Tax on final dividend for previous year			(39.73)	(39.73)
Interim dividend for the year			(839.53)	(839.53)
Tax on interim dividend for the year			(172.57)	(172.57)
Balance as at 31.03.2019	355.81	8,112.98	1,082.91	9,551.70

(CS. N K Mohanty)
(Company Secretary)

For and on behalf of Board of Directors

(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E

(CA Dr. B S Kundu)
Partner (M No.:051221)

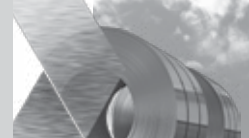
Place : New Delhi
Date : May 30, 2019

For Patro & Co.
Chartered Accountants
FRN-310100E

(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

CASH FLOW STATEMENT

for the year ended March 31, 2019



	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
A. Cash flows from operating activities		
Profit for the period	1,732.40	1,342.41
Adjustments for:		
Income tax expense recognised in profit or loss	1,007.52	696.42
Finance costs recognised in profit or loss	2.38	1.95
Interest income recognised in profit or loss	(237.14)	(184.79)
Dividend income recognised in profit or loss	(30.61)	(33.65)
Net (gain) / loss on sale of non-current investments	—	(13.91)
Net (gain) / loss on disposal of property, plant and equipment	7.50	(0.44)
Net (gain) / loss arising on financial assets mandatorily measured at fair value through profit or loss	2.16	(2.96)
Impairment loss recognised on other assets	(3.51)	13.43
Inventories of stores, spares written off	12.52	15.98
Depreciation and amortisation of non-current assets	476.10	480.40
Amortisation of lease premium	75.52	1.87
Net foreign exchange (gain)/loss	(8.62)	2.55
Operating profit before working capital changes	3,036.22	2,319.26
Movements in working capital:		
(Increase) / decrease in inventories	(28.37)	(54.62)
(Increase) / decrease in trade receivables	17.61	(73.88)
(Increase) / decrease in loans and other financial asset	157.85	14.62
(Increase) / decrease in other assets	6.08	98.89
Increase / (decrease) in trade payables	338.16	110.75
Increase / (decrease) in other financial liabilities	(4.73)	6.25
Increase / (decrease) in other liabilities	30.00	(766.01)
Increase / (decrease) in provisions	(123.08)	417.56
Cash (used in) / generated from operations	3,429.74	2,072.82
Income taxes paid	(1,020.89)	(482.49)
Net cash flow from operating activities	2,408.85	1,590.33
B. Cash flows from investing activities		
Payments to acquire financial assets	(48.00)	(420.00)
Proceeds from sale of financial assets	560.98	1,065.03
Payments to acquire equity in joint ventures and associates	(58.20)	(78.05)
Investment in term deposits with banks	(385.77)	(326.27)
Dividends received from other investments	30.61	33.65
Interest received from banks and others	237.14	184.79
Payments for property, plant and equipment (including capital advances)	(749.49)	(790.78)
Proceeds from disposal of property, plant and equipment	8.56	11.82
Payments for other intangible assets	(18.49)	(46.57)
Payment for acquiring leasehold assets	(109.19)	(123.07)
Net cash flow from investing activities	(531.85)	(490.16)
C. Cash flows from financing activities		
Payments for buy-back of equity shares	(504.83)	—
Payments for share buy-back costs (net of tax)	(2.60)	—
Proceeds from short term borrowings	21.80	(6.10)
Finance cost paid	(0.00)	(0.13)
Dividends paid on equity shares	(1,032.82)	(908.48)
Tax on dividends paid on equity shares	(212.30)	(184.94)
Net cash flow from financing activities	(1,730.75)	(1,099.65)
Net increase or (decrease) in cash or cash equivalents	146.25	0.52
Cash and cash equivalents at the beginning of the year	25.35	24.83
Cash and cash equivalents at the end of the year [refer note 16.A]	171.60	25.35

Note: Figures in the brackets are cash outflow/income as the case may be.

(CS. N K Mohanty)
Company Secretary

For and on behalf of Board of Directors
(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

In terms of our attached report of even date.

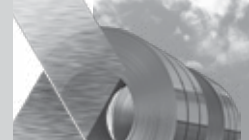
For Guha Nandi & Co.
Chartered Accountants
FRN-302039E

(CA Dr. B S Kundu)
Partner (M No.:051221)

Place : New Delhi
Date : May 30, 2019

For Patro & Co.
Chartered Accountants
FRN-310100E

(CA Ambika Prasad Mohanty)
Partner (M No.:057820)



Note No.1 Corporate Background

National Aluminium Company Limited is a Navaratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Government of India, incorporated under the relevant provisions of the Companies Act and is listed in the stock exchanges in India. The Company is engaged in the business of manufacturing and selling of Alumina and Aluminium. The Company is operating a 22.75 lakh TPA Alumina Refinery plant located at Damanjodi in Koraput district of Odisha and 4.60 lakh TPA Aluminium Smelter located at Angul, Odisha. The Company has a captive bauxite mines adjacent to refinery plant to feed the bauxite requirement of Alumina Refinery and also a 1200 MW captive thermal power plant adjacent to Smelter plant to meet the power requirement of Smelter. Besides, the Company is also operating four wind power plants with total capacity of 198.40 MW located in the state of Andhra Pradesh (Gandikota), Rajasthan (Jaisalmer & Devikot) and Maharashtra (Sangli) to harness the renewable energy and to comply with its Renewable Purchase Obligation.

Note No.2 Statement of Compliance:

All the Indian Accounting Standards issued and notified by the Ministry of Corporate Affairs under the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and are applicable for the year and relevant to the Company have been taken into consideration and complied with without any exception while preparing the standalone financial statements of the Company.

Note No.3 Significant Accounting Policies:

3.1 Basis of preparation

The financial statements of the Company have been prepared in accordance with Ind AS and relevant provisions of the Companies Act, 2013.

The financial statements have been prepared on historical cost basis, except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below.

All assets and liabilities have been classified as current or non-current as per Company's operating cycle and other criteria set out in Schedule-III of the Companies Act 2013. Based upon the nature of business, the Company has ascertained a 12 month operating cycle for the purpose of current or non-current classification of assets and liabilities.

3.2 Use of estimates:

These financial statements have been prepared using estimates and assumptions, wherever necessary, in conformity with the recognition and measurement principles of Ind AS.

Estimates and underlying assumptions are reviewed on an ongoing basis and revisions, if any, in such estimates are accounted for in the year of revision.

Key sources of estimation uncertainty, which may cause a material adjustment to the carrying amounts of assets and liabilities are stated in Note No.4.

3.3 Investments in associates and joint ventures

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.

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 joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Investment in associate and joint ventures are measured at cost in accordance with Ind AS 109 – Financial Instruments.

Investment in associate and joint ventures are subject to impairment wherever there is indication of negative reserve in the accounts of JV Companies. However, such impairment is limited to the value of investment.

3.4 Property, Plant and Equipment

Property, plant and equipment, other than freehold lands, held for use in the production and/or supply of goods or services, or for administrative purposes, are stated at cost, less accumulated depreciation and accumulated impairment losses. Freehold lands, unless impaired, are stated at cost.



3.4.1 Initial Measurement

The initial cost comprises purchase price, non-refundable purchase taxes, other expenditure directly attributable to bringing the assets to its location and condition necessary for it to be capable of operating in the manner intended by the management, borrowing cost, if any, incurred, and the initial estimates of the present value of any asset restoration obligation or obligatory decommissioning and dismantling costs.

Expenditure incurred on development of freehold land is capitalized as part of the cost of the land.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads and directly attributable borrowing costs, if any.

Spare parts having unit value of more than Rs.5 lakh, held for use in the production and/or supply of goods or services and are expected to be used during more than one period are recognised as Property, Plant and Equipment. Spares of critical nature and irregular in use, which can be identified to a particular equipment and having unit value more than Rs.1 lakh is also recognised as Property, Plant and Equipment.

3.4.2 Subsequent expenditure

Expenditure on major inspection/maintenance or repairs including cost of replacing the parts of assets and overhaul costs where it is probable that future economic benefits associated with the expenditure will be available to the Company over a period of more than one year, are capitalised and the carrying amount of the identifiable parts so replaced is derecognised.

3.4.3 Capital work-in-progress

Assets in the course of construction are included under capital work in progress and are carried at cost, less any recognised impairment loss. Such capital work in progress, on completion, is transferred to the appropriate category of property, plant and equipment.

Expenses for assessment of new potential projects incurred till investment decisions are charged to revenue. Expenditure incurred for projects after investment decisions are accounted for under capital work in progress and capitalized subsequently.

Any costs directly attributable to acquisition/ construction of property, plant and equipment till it is brought to the location and condition necessary for it to be capable of operating in the manner as intended by the management form part of capital work-in-progress

3.4.4 Depreciation and amortisation

Depreciation on assets are provided on a straight-line basis over their useful life, either as prescribed under Schedule II of the Companies Act, 2013 or, wherever considered necessary, determined on the basis of technical estimations carried out by the Management not exceeding the prescribed useful life as per Schedule II to the Companies Act, 2013

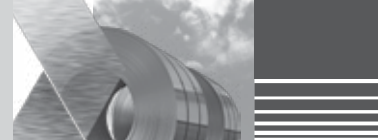
Component of an item of property, Plant and Equipment with a cost that is significant in relation to the total cost of that item, is depreciated separately if its useful life differs from that of the asset. The Company has chosen a benchmark of Rs.1 Crore as significant value for identification of a separate component except 'Pot Relining' which is considered as a component of each 'Electrolytic Pot' due to its inherent nature and useful life.

The residual value of plant and machinery, vehicles, mobile equipment and earth moving equipment, railway facilities, rolling stock, and residential quarters are maintained at 5% of the original cost and for all other assets, the residual value is considered as Nil.

The estimated useful lives are reviewed at each year end and the effect of change, if any, is accounted for prospectively.

For the purpose of depreciation of assets, useful lives of -

- (a) immovable property, plant and equipment at bauxite mines is up to the lease period of the mines.
- (b) captive thermal power generation plant namely Captive Power Plant (CPP) is considered to be 30 years;
- (c) Steam Power Plant (SPP) is considered to be 25 years.
- (d) Red Mud Ponds and Ash Ponds at alumina Refinery and Ash Ponds at CPP are based on their estimated remaining useful lives evaluated on the basis of technical estimates made periodically;
- (e) assets laid on leasehold land excluding assets of Bauxite mines are considered to be lower of balance lease period or the useful life of the asset.



Assets laid on land not owned by the Company are depreciated over the useful life from the date on which the asset is capable of operating in the manner intended by the management unless a longer / shorter life can be justified.

Individual Assets costing Rs.10,000/- or less are depreciated fully in the year in which they are put to use.

Property, plant and equipment other than mentioned above are subject to the following useful lives.

Sl. No.	Particulars of asset category (Property, Plant & Equipment)	Range of useful life in years
1	Buildings	30 - 60
2	Plant and machinery	15 - 40
3	Vehicles	08 - 10
4	Furniture and fixtures	08 - 10
5	Computer equipment	06

3.4.5 De-recognition of assets

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the use of the asset. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

3.4.6 Stripping costs:

Stripping costs of surface mining is recognised as an asset when they represent significantly improved access to ore, provided all the following conditions are met:

- (a) it is probable that the future economic benefit associated with the stripping activity will be realised;
- (b) the component of the ore body for which access has been improved can be identified; and
- (c) the costs relating to the stripping activity associated with the improved access can be reliably measured.

The stripping cost incurred during the production phase is added to the existing “stripping cost asset” to the extent the current period stripping ratio exceeds the planned stripping ratio.

The “stripping cost asset” is subsequently depreciated on a unit of production basis over the life of the identified component of the ore body that become more accessible as a result of the stripping activity and is then stated at cost less accumulated depreciation and impairment loss, if any.

3.5 Intangible Assets

3.5.1 Intangible assets acquired separately

Intangible assets acquired are reported at cost less accumulated amortisation and impairment loss, if any. Intangible assets having finite useful life are amortised over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each annual reporting period, and the effect of any changes in estimate is accounted for on a prospective basis.

3.5.2 Internally-generated intangible assets – research and development expenditure

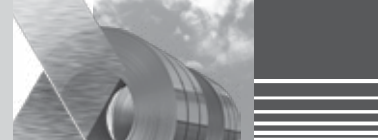
Expenditure on research activities, except capital expenditure considered as Property, plant and equipment, is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development is recognised if and only if all the conditions stipulated in “Ind AS 38 – Intangible Asset” are met.

3.5.3 Mining Rights

The costs of mining rights include amounts paid towards Net Present Value (NPV) including related payments and upfront money as determined by the regulatory authorities.

Cost of mining rights are amortised over the total estimated remaining commercial reserves of mining property and are subject to impairment loss.



3.5.4 Mines Development Expenses

Expenditure incurred for mines development prior to commercial production i.e., primary development expenditure other than land, buildings, plant and equipment is capitalised until the mining property is capable of commercial production.

3.5.5 User Rights

Amount of expenditure incurred in a cluster project, having future economic benefits with exclusive use of co-beneficiaries but without physical control on the assets, are capitalised as user rights.

3.5.6 Software

Operating software acquired separately (RDBMS, Sybase, ERP/SAP) are capitalised as software.

3.5.7 License and Franchise

Amount of expenditure incurred for obtaining license for use of technology is capitalised under the head "License and Franchise".

3.5.8 De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from its use. Gains or losses arising from disposal/de-recognition are recognised in the statement of profit and loss.

3.5.9 Amortisation

The basis of amortisation of intangible assets is as follows:

- (a) Licenses in the nature of technical know-how for processing plants which are available for the useful life of the respective processing plants are amortised over a period of ten years.
- (b) Software classified as intangible assets carries a useful life of 3 years and are amortised over that period.
- (c) Mining Rights and Mines Development Expenses are amortised over the period of availability of reserves.
- (d) User Right for cluster projects is amortised over the useful life of the asset from the date of commissioning.

3.6 Impairment of tangible and intangible assets

At the end of each reporting period the carrying amounts of tangible and intangible assets are reviewed to determine whether there is any indication that the assets have suffered an impairment loss. If any such indication exists, the recoverable amount (i.e. higher of the fair value less cost to sell and the value-in-use) of the asset is estimated to determine the extent of impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of the cash-generating unit (CGU) to which the asset belongs is estimated. If the estimated recoverable amount of the CGU is less than its carrying amount, the carrying amount of the CGU is reduced to its recoverable amount and the difference between the carrying amount and recoverable amount is recognised as impairment loss in the statement of profit or loss.

3.7 Functional & Foreign Currencies

Items included in the financial statements are measured using the currency of the primary economic environment i.e. Indian Rupee in which the Company operates.

In preparing the financial statements, transactions in foreign currencies i.e. currencies other than the entity's functional currency are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date.

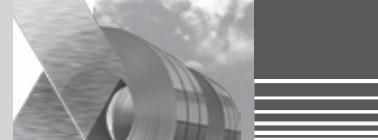
Exchange differences on monetary items are recognised in the statement of profit and loss in the period in which they arise.

3.8 Provisions and contingencies

3.8.1 Provisions

Provisions are recognised when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.



Where a provision is measured using the estimated cash outflows to settle the present obligation, its carrying amount is the present value of those cash outflows.

3.8.2 Restoration, rehabilitation and decommissioning

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine and other manufacturing facilities. The Company has recognised the obligated restoration, rehabilitation and decommissioning liability as per statutory mandate.

Net present value of such costs are provided for and a corresponding amount is capitalised at the commencement of each project. These costs are charged to the statement of profit or loss over the life of the asset by way of depreciation and unwinding of the discounted liability. 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 in lives of operations, new disturbance and revisions of 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 and other cost in the statement of profit or loss.

3.8.3 Environmental liabilities

Environmental liabilities are recognised when the Company becomes obliged, legally or constructively to rectify environmental damage or perform remedial work.

3.8.4 Legal Obligations

Provision is recognised once it has been established that the Company has a present obligation based on consideration of the information which becomes available up to the date of reporting.

3.8.5 Contingent Liabilities

Contingent liabilities are possible obligations that arises from past events, the existence of which would be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company or a present obligation but payment is not probable or the amount cannot be measured reliably. Contingent liabilities are disclosed in the financial statements unless the possibility of any outflow in settlement is remote.

3.8.6 Contingent Assets

Contingent assets are not recognised in the financial statement, but are disclosed where inflow of economic benefits is probable.

3.9 Leases

At the inception of a lease, the lease arrangement is classified as either a finance lease or an operating lease, based on the substance of the lease arrangement.

3.9.1 Assets taken on finance lease

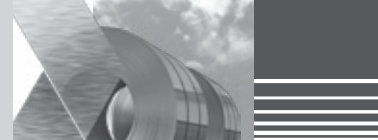
Financial leases are those that transfer substantially all the risks and rewards incidental to ownership of the asset to the lessee.

Finance leases are capitalised at the commencement of lease, at the lower of the fair value of the property or the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income over the period of the lease.

3.9.2 Assets taken on operating lease

Leases other than finance leases are operating leases, and the leased assets are not recognised as property, plant and equipment. Instead, upfront lease payments, if any, made under operating leases are apportioned and recognised in the statement of profit and loss over the term of the lease. Rent and maintenance charges paid for assets/facilities taken on operating leases are charged to revenue in the period in which they arise.



3.10 Inventories

Inventory of raw material, including bulk material such as coal and fuel oil are valued at the lower of cost net of tax credit wherever applicable and net realisable value.

Stores and spares other than those meeting the criteria for recognition as Property, Plant and Equipment are valued at cost net of tax credit wherever applicable.

Stores and spares (other than major spares considered as Property, Plant and Equipment) held but not issued for more than 5 years are valued at 5% of the cost.

Materials and other supplies held for use in the production (other than considered as non-moving) are not written down below cost, if the finished products in which they will be incorporated are expected to be sold at or above cost.

Cost of raw materials, stores and spares as stated above are determined on moving weighted average price.

Inventories of finished goods, semi-finished goods, intermediary products and work in process including process scrap are valued at lower of cost and net realisable value. Cost is generally determined at moving weighted average price of materials, appropriate share of labour and related overheads. Net realisable value is the estimated selling price in the ordinary course of business available on the reporting date less estimated cost necessary to make the sale.

Inventory of scraps internally generated are valued at net realisable value.

3.11 Trade receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the outstanding is due for payment within a period 12 months or less from the reporting date, they are classified as current assets otherwise as non-current assets.

Trade receivables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

3.12 Financial Instruments

Financial assets and liabilities are recognised when the Company becomes a party to the contractual provisions of the instrument. Except for trade receivables and payables, financial assets and liabilities are initially measured at fair value. Transaction cost that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value measured on initial recognition of financial asset or financial liabilities.

3.12.1 Financial assets

a. Cash or Cash Equivalent:

The Company considers all short-term bank deposits having a maturity period of three months or less as cash & cash equivalent. Term deposits in Bank with a maturity period of more than 3 months are considered as other Bank Balance.

b. Financial assets at amortised cost:

Financial assets, including trade receivables where it contains significant financing component, are classified as subsequently measured at amortised costs and are measured accordingly using effective interest method if the financial assets are held within a business model whose objective is to hold these assets in order to collect contractual cash flows and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

c. Financial assets at Fair value through Other Comprehensive Income (OCI)

Financial assets are classified as subsequently measured at fair value through other comprehensive income if these financial assets are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

d. Financial assets at Fair value through Profit or loss

Financial assets are classified as subsequently measured at fair value through profit or loss unless it is classified as



subsequently measured at amortised cost or at fair value through other comprehensive income. Transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognised in the statement of profit or loss.

3.12.2 Financial liabilities

Trade payables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

Financial liabilities, including trade payables where it contains significant financing component, are subsequently measured at amortised cost using effective interest method.

3.12.3 De-recognition of financial assets

Financial assets are derecognised only when the contractual rights to the cash flows from the asset expires, or when substantially all the risks and rewards of ownership of the assets are transferred to another entity.

3.12.4 Impairment of financial assets

At each reporting date, assessment is made whether the credit risk on a financial instrument has increased significantly or not since initial recognition.

If the credit risk on a financial instrument has not increased significantly since initial recognition, the loss allowance is measured for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on that financial instrument has increased significantly since initial recognition, the loss allowance is measured for a financial instrument at an amount equal to the lifetime expected credit losses.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the statement of profit and loss.

3.12.5 De-recognition of financial liability

Financial liabilities are derecognised when, and only when, the obligations are discharged, cancelled or expired.

In the case of retention for liquidated damages, if on finalization/closure of contract, liquidated damage is leviable, the amount retained is written back and recognized as income except capital contracts where liquidated damage is directly attributable to escalation/increase in the cost of the asset. In such case, the retention amount is adjusted against cost of the asset.

3.12.6 Off-setting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet, when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business.

3.13 Derivatives

Derivative instruments such as forward foreign exchange contracts are recognised at fair value at the date the derivative contracts are entered into and are re-measured at the end of each reporting period. The resulting gain or loss is recognised in statement of profit or loss immediately.

3.14 Borrowing cost

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use. All other borrowing cost is recognised in profit or loss in the period in which they are incurred.

3.15 Accounting for government grants

Government grants are recognised when there is reasonable assurance that the conditions attached to them will be complied and that the grants will be received.

Government grants related to assets whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognised in the balance sheet by setting up the grant as deferred income and are transferred to profit or loss on a systematic basis over the useful life of the related assets.



Government grants related to income are recognised as income on a systematic basis over the periods necessary to match them with the costs for which they are intended to compensate.

3.16 Employee Benefits

3.16.1 Short-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, short term compensated absences etc. in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid.

3.16.2 Post-employment and long term employee benefits

3.16.3 Defined contribution plans

A defined contribution plan is plan under which fixed contributions are paid to a separate entity. Contributions to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them for such contributions.

3.16.4 Defined benefit plans

For defined benefit plans, the cost of providing benefits is determined through actuarial valuation using the Projected Unit Credit Method, carried out at each balance sheet date. Re-measurement gains and losses of the net defined benefit liability are recognised immediately in other comprehensive income. The service cost, net of interest on the net defined benefit liability, is treated as an expense.

Past service cost is recognised as an expense when the plan amendment or curtailment occurs or when any related restructuring costs or termination benefits are recognised.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined-benefit obligation as reduced by the fair value of plan assets.

3.16.5 Other long-term employee benefits

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the statement of profit and loss in the period in which they arise. These obligations are valued annually by independent actuaries.

3.17 Revenue recognition

The company earns revenue primarily from sale of product like alumina, aluminium, and sale of power. Revenue is recognised when the company satisfies a performance obligation by transferring promised goods to a customer.

3.17.1 Sales of Goods

Revenue from ex-factory/ ex-stockyard sales are recognised upon handing over of goods at the factory/ stock yard along with commercial invoice with due statutory compliance. Sales on FOB basis are recognised on preparation of shipping bill and handing over of goods to the shipper. In case of sale on CIF basis, revenue is recognised on placing the goods on board at the port of shipment and getting the shipping document prepared as per the incoterm.

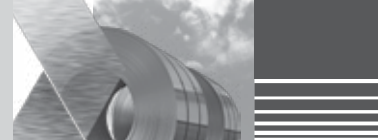
3.17.2 Sale of Energy

Sale of wind power is recognised on the basis of energy transmitted to DISCOMs at the price notified by respective authorities.

Sale of power from captive power plant is considered on the basis of quantity injected to state GRID excluding wheeling to Refinery but including inadvertent energy injection, at the price notified by appropriate authority.

Revenue from sale of energy is recognised if -

- (a) the amount of revenue can be measured reliably;
- (b) It is probable that the economic benefits associated with the transaction will flow to the Company;
- (c) recovery of the consideration is assured reasonably.



3.17.3 Income from dividend and interest

3.17.4 Dividend

Dividend income from investments is recognised when the right to receive the dividend is established.

3.17.5 Interest

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time proportion basis, by reference to the principal outstanding and effective interest rate.

3.17.6 Income from Incentives from Government Agencies

Incentives from government agencies in the nature of duty draw back and Merchandise Export Incentive Scheme (MEIS) on exports and incentives on generation of renewable sources of energy are recognised as per the relevant statute on compliance of the conditions provided thereunder.

3.18 Income Taxes

Tax expense represents the sum of current tax and deferred tax.

3.18.1 Current taxes

Current tax expense is based on taxable profit for the year as per the Income Tax Act, 1961. Current tax liabilities (assets) for the current and prior period are measured at amounts expected to be paid (or recovered) using the tax rates and tax laws that have been enacted or substantively enacted by the end of reporting period and includes any adjustment to tax payable in respect of previous years.

3.18.2 Deferred taxes

Deferred tax expense or income is recognised on temporary difference between the carrying amount of assets and liabilities in the financial statements and the corresponding tax base used in computation of taxable profits.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. Tax relating to items recognised directly in other comprehensive income forms part of the statement of comprehensive income.

The carrying amount of deferred tax asset is reviewed at the end of each reporting period and adjusted to the extent it has become probable that sufficient taxable profits will be available to allow the asset to be recovered.

3.19 Exceptional items

Exceptional items are items of income and expenses within profit or loss from ordinary activities but of such size, nature or incidence whose disclosure is felt necessary for better explanation of the financial performance achieved by the Company.

3.20 Cash flow statement

Cash flow statement is prepared in accordance with indirect method prescribed in Ind AS 7 'Statement of Cash Flows'.

3.21 Restatement of material error / omissions

Errors and omissions is construed to be material for restating the opening balances of assets and liabilities and equity if the sum total effect of earlier period income / expenses exceeds Rs.50 crore.

Note No. 4 : Critical accounting judgments and key sources of estimation uncertainty

The preparation of the financial statements requires the management to make complex and/or subjective judgements, estimates and assumptions about matters that are inherently uncertain. These estimates and assumptions affect the reported amounts of assets and liabilities as well as disclosure of contingent liabilities and assets at the date of the financial statements and also revenues and expenses during the reported period.

The estimates and associated assumptions are based on past experience and other factors that are considered to be relevant. Actual results may differ from these estimates.



The 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.

4.1 Critical accounting judgments:

Apart from those involving estimations that the management have made in the process of applying the Company's accounting policies that have the most significant effect on the amounts recognised in the financial statements, management has decided that reporting of Company's financial assets at amortised cost would be appropriate in the light of its business model and have confirmed the Company's positive intention and ability to hold these financial assets to collect contractual cash flows.

4.2 Key sources of estimation uncertainty:

The following are the key assumptions concerning the future, and other key sources of estimation of uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

4.2.1 Impairment

Investments in Associates and other investments, loans and advances, property, plant and equipment and intangible assets are reviewed for impairment whenever events and changes in circumstances indicate that the carrying value may not be fully recoverable or atleast annually.

Future cash flow estimates of Cash Generating Units which are used to calculate the asset's fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, reserves and resources, operating rehabilitations and restoration costs and capital expenditure.

4.2.2 Useful lives of property, plant and equipment

The Company reviews the useful life of property, plant and equipment at the end of each reporting period. This reassessment may result in change in depreciation expense in future periods.

4.2.3 Assessment of Mining Reserve:

Changes in the estimation of mineral reserves where useful lives of assets are limited to the life of the project, which in turn is limited to the life of the probable and economic feasibility of reserve, could impact the useful lives of the assets for charging depreciation. Bauxite reserves at Mines is estimated by experts in extraction, geology and reserve determination and based on approved mining plan submitted to Indian Bureau of Mines (IBM).

4.2.4 Obligation for post-employment benefit Liability

Liability for post-employment benefit and long term employee benefit is based on valuation by the actuary which is in turn based on realistic actuarial assumptions.

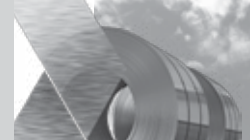
4.2.5 Provisions & Contingent Liabilities:

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations is the best estimate of the consideration required to settle the related liability, including any interest charges, taking into account the risks and uncertainties surrounding the obligation. The Company assess its liabilities and contingent liabilities based upon the best information available, relevant tax and other laws, contingencies involved and other appropriate requirements.

4.2.6 Fair value measurements and valuation processes:

For financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.



5. Property, plant and equipment

	As at 31.03.2019		As at 31.03.2018	
Carrying amount of:				
Freehold land	86.41	84.33		
Buildings	578.17	591.68		
Plant and equipment	6,346.37	6,245.74		
Furniture and fixtures	9.63	8.91		
Office equipments	24.21	23.64		
Vehicles	16.63	13.06		
Railway sidings	47.95	52.02		
	7,109.37	7,019.38		

	Freehold land	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
Cost or deemed cost								
Balance as at 31.03.2017	84.33	638.51	7,078.92	12.03	15.51	14.44	53.68	7,897.42
Additions	—	63.78	372.57	3.97	20.54	6.75	10.67	478.28
Disposals	—	(0.03)	(33.06)	—	(0.04)	(0.03)	—	(33.16)
Balance as at 31.03.2018	84.33	702.26	7,418.43	16.00	36.01	21.16	64.35	8,342.54
Additions	2.08	20.97	531.58	3.43	8.40	6.60	(0.16)	572.90
Disposals	—	(0.08)	(28.12)	(0.04)	(0.02)	(0.44)	(0.03)	(28.73)
Balance as at 31.03.2019	86.41	723.15	7,921.89	19.39	44.39	27.32	64.16	8,886.71
Accumulated depreciation and impairment								
Balance as at 31.03.2017	—	73.88	778.23	4.38	8.19	5.51	8.60	878.79
Depreciation Expense	—	36.73	416.18	2.71	4.21	2.59	3.73	466.15
Disposals	—	(0.03)	(21.72)	—	(0.03)	—	—	(21.78)
Balance as at 31.03.2018	—	110.58	1,172.69	7.09	12.37	8.10	12.33	1,323.16
Depreciation Expense	—	34.42	415.25	2.69	7.83	2.77	3.89	466.85
Disposals	—	(0.02)	(12.42)	(0.02)	(0.02)	(0.18)	(0.01)	(12.67)
Balance as at 31.03.2019	—	144.98	1,575.52	9.76	20.18	10.69	16.21	1,777.34
Carrying amount								
Balance as at 31.03.2017	84.33	564.63	6,300.69	7.65	7.32	8.93	45.08	7,018.63
Additions	—	63.78	372.57	3.97	20.54	6.75	10.67	478.28
Disposals	—	—	(11.34)	—	(0.01)	(0.03)	—	(11.38)
Depreciation Expense	—	36.73	416.18	2.71	4.21	2.59	3.73	466.15
Balance as at 31.03.2018	84.33	591.68	6,245.74	8.91	23.64	13.06	52.02	7,019.38
Additions	2.08	20.97	531.58	3.43	8.40	6.60	(0.16)	572.90
Disposals	—	(0.06)	(15.70)	(0.02)	—	(0.26)	(0.02)	(16.06)
Depreciation Expense	—	34.42	415.25	2.69	7.83	2.77	3.89	466.85
Balance as at 31.03.2019	86.41	578.17	6,346.37	9.63	24.21	16.63	47.95	7,109.37

Notes:

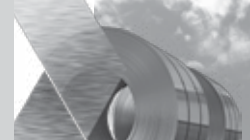
- Title deeds have been executed for freehold land acquired through Govt. of Odisha, except for land measuring 64.78 acres. The Company is in the process of conversion of freehold land for Industrial use and has taken-up matter with Revenue Authorities.
- Registration formalities in respect of office space (building) of 6,459 Sq.ft at Kolkata purchased from Kolkata Municipal Development Authority with a carrying amount of ₹5.50 crore is under progress.
- Ind AS 116 will replace the existing leases standard Ind AS 17 Leases. Ind AS 116 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. It introduces a single, on-balance sheet lease accounting model for lessees. The Company being a lessee, substantially holding leasehold land, shall recognise right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. The Company will adopt Ind AS 116 from reporting period beginning April 1, 2019.

6. Capital work-in-progress (CWIP)

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Capital work-in-progress (CWIP)	809.59	702.91
Construction materials including in transit	34.32	124.16
	843.91	827.07
Less: Provision for impairment	—	(1.24)
Total Capital Work-in-progress	843.91	825.83

- The amount of capital work in progress includes an amount of ₹41.16 crore (previous year ₹43.98 crore) towards infrastructural development expenditure attributable to Coal Mines Division.



7. Intangible assets

Amount in ₹ Crore

Carrying amount of:

User right
Computer software
Mining rights [refer note 8.1]
Licenses

As at 31.03.2019	As at 31.03.2018
72.51	9.99
2.24	2.08
99.13	103.58
2.53	4.43
176.41	120.08

Amount in ₹ Crore

	User right	Computer software	Mining rights	Licenses	Total intangible assets
Cost or deemed cost					
Balance as at 31.03.2017	15.43	4.66	121.11	10.25	151.45
Additions	—	2.32	6.21	—	8.53
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.03.2018	15.43	6.98	126.97	10.25	159.63
Additions	64.36	1.35	3.37	—	69.08
Disposals	—	—	—	—	—
Balance as at 31.03.2019	79.79	8.33	130.34	10.25	228.71
Accumulated depreciation and impairment					
Balance as at 31.03.2017	3.62	2.98	15.17	3.88	25.65
Depreciation Expense	1.82	1.92	8.57	1.94	14.25
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.03.2018	5.44	4.90	23.39	5.82	39.55
Depreciation Expense	1.84	1.19	7.82	1.90	12.75
Disposals	—	—	—	—	—
Balance as at 31.03.2019	7.28	6.09	31.21	7.72	52.30
Carrying amount					
Balance as at 31.03.2017	11.81	1.68	105.94	6.37	125.80
Additions/Adjustments	—	2.32	6.21	—	8.53
Disposals	—	—	(0.35)	—	(0.35)
Depreciation Expense	1.82	1.92	8.57	1.94	14.25
Balance as at 31.03.2018	9.99	2.08	103.58	4.43	120.08
Additions	64.36	1.35	3.37	—	69.08
Disposals	—	—	—	—	—
Depreciation Expense	1.84	1.19	7.82	1.90	12.75
Balance as at 31.03.2019	72.51	2.24	99.13	2.53	176.41

Notes:

7.1 The Company is operating its mining activities at Panchpatmali bauxite mines based on lease granted by Government of Odisha. In connection with lease renewal, the Company has paid NPV and related payments which is capitalized as intangible assets under Mining Rights and amortized on straight line basis as per the Accounting Policy of the Company.

7.2 The Company constructed 220 KV sub-station at Laxmipur in October 2013 jointly with two other parties on cost sharing basis. Since the land on which the asset was built did not belong to the Company the shared cost of ₹17.98 crore was taken as an intangible asset under user-rights. Although the Company was unable to derive benefit out of the asset pending completion of 220 KV Transmission Line from Laxmipur to Damanjodi and Switchyard at Damanjodi, the asset was depreciated assuming a maximum life of 10 years in terms of earlier accounting standard. Construction of the transmission line and switchyard has been completed during the year and put to use along with the sub-station at Laxmipur. The Company has adopted life for amortisation of the transmission line and the switchyard for a period of 30 years as per life of power transmission system specified in schedule II of Companies Act 2013. Accordingly, the life of the sub-station has been revised to 30 years so as to amortise the carrying amount of the asset over the remaining life of the asset.

The power transmission line (220 KV) from the substation at Laxmipur to the termination switchyard at Damanjodi, which has been transferred to M/s. Odisha Power Transmission Co. Ltd. (OPTCL) for operation and maintenance, has been included in user right.

8. Intangible assets under development

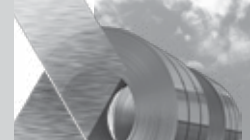
Amount in ₹ Crore

Mining right
User rights

As at 31.03.2019	As at 31.03.2018
38.8	39.49
—	49.90
38.80	89.39

Note:

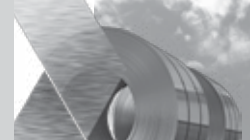
8.1 Mining right under development constitutes amount paid to statutory authorities towards allotment of coal blocks, NPV and wild life management plan of coal blocks and related jobs.



9. Investments

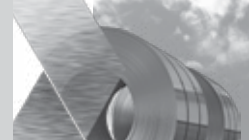
Amount in ₹ Crore

		As at 31.03.2019	As at 31.03.2018
A. Non-current			
A.1 Investments in equity instruments			
A.1.1 Investment in associates			
Unquoted investments			
NPCIL-NALCO Power Company Limited (26,000 shares of ₹ 10 each fully paid up)		—	0.03
Total investment in associates		—	0.03
Details of associates			
Details of each of the Company's associates at the end of the period are as follows:			
Name of the associate	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
NPCIL-NALCO Power Company Limited	Development of nuclear power, Kakrapara, Gujarat	0%	26%
Note: The Board of Nuclear Power Corporation of India Limited (NPCIL) and the Board of National Aluminium Company Limited (NALCO) had passed resolution in their respective meeting held on Mar 20, 2017 and Mar 2, 2017 to liquidate the associate Company. Subsequently, based on approval of the Board of NPCIL-NALCO Power Company Limited, in its meeting held on 14.03.2019 and approval of shareholders in Extraordinary General Meeting held on 22.03.2019 application for striking the name of the Company u/s 248 of the Companies Act, 2013 has been filed on 29.03.2019. The approved statement of accounts of NPCIL-NALCO Power Company Limited shows neither any assets nor any liabilities as on 14.03.2019. In view of the above, the investment amount of ₹2,60,000 (equity contribution) has been written off during the year.			
A.1.2 Investment in joint ventures			
Unquoted investments			
Angul Aluminium Park Private Limited (As at 31.03.2019 : 1,62,23,900 shares of ₹ 10 each fully paid up, as at 31.03.2018: 1,62,23,900 shares of ₹ 10 each fully paid up).		16.22	16.22
Total		16.22	16.22
GACL-NALCO Alkalies & Chemicals Private Limited (As at 31.03.2019: 15,95,30,934 shares of ₹ 10 each fully paid up, as at 31.03.2018: 10,13,30,934 shares of ₹ 10 each fully paid up).		159.53	101.33
Share application money for 2,28,00,000 shares of ₹10 each fully paid.		—	—
Total		159.53	101.33
During the year GACL-NALCO Alkalies & Chemicals Private Limited has issued 5,82,00,000 nos. of fully paid equity shares of ₹ 10/- each to the Company.			
Total investment in joint ventures		175.75	117.55
Details of joint ventures			
Details of each of the Company's joint ventures at the end of the reporting period are as follows:			
Name of the joint venture	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
(a) Angul Aluminium Park Private Limited	Promoting aluminium specific downstream in Odisha, Bhubaneswar, Odisha.	49.00%	49.00%
(b) GACL-NALCO Alkalies & Chemicals Private Limited	Production of caustic soda, Vadodara, Gujarat.	40.00%	40.00%
A.1.3 Investment in other entities			
Unquoted investments			
Odisha Capital Market & Enterprises Limited. (2,89,000 shares of ₹ 1 each fully paid up)		0.03	0.03
Total - Investments in other entities		0.03	0.03
Total - investments in equity instruments		175.78	117.61
Total non-current investments		175.78	117.61
Additional information			
Aggregate book value of quoted investments and market value thereof		—	—
Aggregate carrying amount of unquoted investments		175.78	117.61
Aggregate amount of impairment in value of investments		—	—



		Amount in ₹ Crore		
		As at 31.03.2019		As at 31.03.2018
9. Investments				
B. Current				
Investments in Mutual Funds	Units in '000	Amount in ₹ Crore	Units in '000	Amount in ₹ Crore
Quoted Investments				
BOI AXA Liquid Fund	130	13.01	899	90.09
BOI AXA TA Fund	—	—	2,012	202.61
Canara Robeco Liquid	80	8.01	747	75.08
IDBI Liquid Fund	—	—	998	100.06
SBI Liquid Fund Direct Daily Dividend	80	8.01	—	—
SBI Debt fund Series C-31(365 Days)	250	25.77	—	—
Union KBC Liquid	110	11.00	450	45.05
UTI Liquid Cash Plan-Direct Daily Dividend Reinvestment	150	15.01	—	—
UTI Money Market Fund	—	—	798	80.07
Total - Other current Investments	—	80.81	—	592.96
Additional Information				
Aggregate book value of quoted investments and market value thereof	—	80.81	—	592.96
Aggregate carrying amount of unquoted investments	—	—	—	—
Aggregate amount of impairment in value of investments	—	—	—	—
Category-wise classification:				
		As at 31.03.2019		As at 31.03.2018
Financial assets (quoted investments) mandatorily measured at fair value through profit or loss (FVTPL)		80.81		592.96
		80.81		592.96

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
10. Trade receivables			
A. Non-current			
(a) Considered good - Secured		—	—
(b) Considered good - Unsecured		—	—
(c) Having significant increase in credit risk		—	—
(d) Credit impaired		37.11	37.11
Less: Allowance for doubtful debts (expected credit loss allowance)		37.11	37.11
Net non-current trade receivables		—	—
B. Current		As at 31.03.2019	As at 31.03.2018
(a) Considered good - Secured		—	—
(b) Considered good - Unsecured		240.52	258.13
(c) Having significant increase in credit risk		—	—
(d) Credit impaired		—	—
Less: Allowance for doubtful debts		—	—
Net current trade receivables		240.52	258.13



10. Trade receivables (contd.)

Notes:

- 10.1 The sale of goods (Alumina and Aluminium) is made against either advances received from customer or letter of credit. The advance received from customer is adjusted on sale. The average credit period for sale of wind power is 30 days from the date of metering which is considered as collection period. There is no commercial arrangement for sale of inadvertent thermal power generated at captive power plant. It is linked to the wheeling arrangement in view of the plant requirement. The amount receivable on account of such power sale takes a longer period for settlement. There is no receivable for such sale as the cost of purchase for power drawn from the grid to meet production shortfall is substantially higher compared to such sale.

- 10.2 Customers that individually represent more than 5% of the total trade receivable as on 31.03.2019:

Customers	% of trade receivables	Customer Category
a. GLENCORE INTERNATIONAL AG	36%	Alumina
b. APSPDCL	15%	Wind Power
c. RDPPC, DEVIKOT, RAJASTHAN	9%	Wind Power

- 10.3 The company has used a practical approach for computing expected credit loss allowance for trade receivables based on a case to case basis. Since there is no credit period for sale of alumina and aluminum and the sale is either made against an advance or backed by letter of credit (LC) given by customers, no credit loss is expected against such receivables. For sale of wind power, although there is no credit arrangement, the Company estimates credit losses based on credit loss experience and forward looking information.

- 10.4 Age of receivables

	As at 31.03.2019	As at 31.03.2018
Alumina and Aluminium		
0-30 days	167.36	225.30
3-6 Months	—	—
More than 6 months	37.11	37.11
	204.47	262.41
Wind Power		
0-3 Months	14.50	18.90
3-6 Months	9.89	3.83
More than 6 months	48.77	10.10
	73.16	32.83

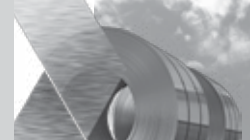
11. Loans

Amount in ₹ Crore

A. Non-current	As at 31.03.2019	As at 31.03.2018
(a) Loans to employees		
Secured, considered good	62.60	64.44
Unsecured, considered good	11.90	10.12
(b) Loans to others		
Secured, considered good	0.24	0.40
Total non-current loans	74.74	74.96
B. Current	As at 31.03.2019	As at 31.03.2018
(a) Loans to employees		
Considered good-Secured	17.88	18.74
Considered good-Unsecured	7.16	10.27
(b) Loans to related parties		
Considered good-Secured [refer note 11.2]	0.01	0.01
(c) Loans to others		
Considered good - Secured	0.70	0.27
Total current loans	25.75	29.29

Note:

- 11.1 Loans to employees and others are carried at amortised cost.
- 11.2 The amount of loan outstanding from related parties (Directors) is the amount of house building loan taken from the Company in their capacity as employees prior to directorship. Further information on these loans is set out in Note 39-Related party disclosure.



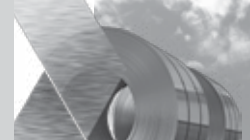
12. Other financial assets	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non current		
Security deposits	10.37	13.14
Total other non-current financial assets	10.37	13.14
B. Current	As at 31.03.2019	As at 31.03.2018
(a) Security deposits [refer note 12.2]	—	151.00
(b) Advances to employees	0.12	—
(c) Insurance claims receivables and others	9.56	10.44
(d) Derivative assets - forward contract	—	(0.44)
Gross - other current financial assets	9.68	161.00
Less: Allowance for bad and doubtful other current financial assets		
Insurance claims	8.45	8.45
Total allowance for bad and doubtful - other current assets	8.45	8.45
Total other current financial assets	1.23	152.55

Note:

- 12.1 Other financial assets are carried at amortised cost.
- 12.2 The understanding to set up Alumina Refinery at Gujrat jointly with Gujarat Mineral Development Corporation Ltd. (GMDC) has been mutually abandoned and the deposit amount of ₹151 crore paid as up-front money to GMDC is realised during the year.

13. Current tax assets	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Income tax	51.26	33.66
Total current tax assets	51.26	33.66

14. Other assets	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non-current		
(a) Capital advances	222.57	153.83
(b) Advances other than capital advance:		
Advance with public bodies		
(1) Customs, excise, sales tax, port trusts etc.	226.86	230.68
(2) Deposits with Income Tax Authority	268.06	293.27
(3) Other Government authorities	2.65	4.59
(c) Others		
Prepaid expenses		
(1) Lease-hold land premiums	377.35	136.17
(2) Deferred employee benefits	19.66	25.66
Gross other non-current assets	1,117.15	844.20
Less: Allowance for bad and doubtful for other non-current assets		
(a) Capital advances	0.27	0.27
Total allowance for bad and doubtful other non-current assets	0.27	0.27
Total other non-current assets	1,116.88	843.93



14. Other assets (contd.)

Amount in ₹ Crore

B. Current	As at 31.03.2019	As at 31.03.2018
Advances other than capital advances		
(a) Claims with statutory authorities		
(1) Export Incentive Claims	29.87	34.23
(2) Generation Based Incentive on power generated from renewable source and Renewable energy certificates	2.73	7.27
(3) VAT, CENVAT and GST Credit Recoverable	302.78	258.27
(4) Claims receivable from customs, excise and railway authorities	8.94	33.62
(b) Prepaid expenses		
(1) Lease-hold land premiums	12.95	7.68
(2) Deferred employee benefits	4.21	4.57
(3) Other prepaid expenses	6.65	4.12
(c) Gold medallion and stamp in hand	0.08	0.07
(d) Other receivables	2.08	1.90
(e) Other advances		
(i) Advances to employees	24.16	23.91
(ii) Advances to suppliers and service providers	304.40	312.51
(iii) Others	7.47	5.72
Gross other current assets	706.32	693.87
Less: Allowance for bad and doubtful other current assets		
(a) VAT and CENVAT Credit Recoverable	200.09	200.27
(b) Claims receivable from customs, excise and railway authorities	6.39	7.74
(c) Other receivables	1.26	0.98
(d) Advances to suppliers and service providers	1.81	2.38
(e) Others	2.00	2.64
Total allowance for bad and doubtful other current assets	211.55	214.01
Total other current assets	494.77	479.86

Note:

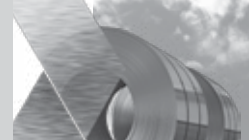
14.1 The position of prepaid lease premiums on account of acquisition of lease hold land is as below:

Opening un-amortised amount	Lease premium added during the year	Amortisation during the year	Closing un-amortised amount carried forward
143.85	321.97	75.52	390.30

14.2 The Company has 1624.18 acres of leasehold land in respect of which lease deeds are yet to be executed. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land.

14.3 The Company furnished undertaking for the purpose of obtaining extension of mining lease to pay differential stamp duty, if stands payable in terms of the Indian Stamp (Odisha Amendment) Act 2013, the dispute in respect of which is still pending before Court. Owing to such commitment, coupled with the opinion of external legal expert indicating possibility of outflow of resources, stamp duty liability of ₹191.72 crore, as demanded by Govt of Odisha, which was hitherto disclosed as contingent liability has been recognised as liability along with registration charges liability of ₹20.25 crore, with corresponding addition to the value of lease hold assets.

An amount of ₹62.44 crore which corresponds to expired lease period till 31.3.2018 out of total lease period of 20 years has been charged off during the year as amortisation of the said addition to the asset in addition to amortisation for the current year amounting to ₹10.60 crore.



15. Inventories

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Raw materials	125.55	161.07
(b) Coal and fuel oil	199.97	188.64
(c) Finished goods	122.29	143.21
(d) Carbon Anodes (Intermediaries)	141.12	77.76
(e) Work-in-progress	246.95	284.33
(f) Stores and spares	361.10	319.48
(g) Scrap and disposables	13.03	19.59
Total inventories	1,210.01	1,194.08
Included above, goods-in-transit:		
(i) Raw materials	9.26	17.23
(ii) Coal and fuel oil	13.87	8.47
(iii) Stores and spares	12.15	12.88
Total goods-in-transit	35.28	38.58

Note:

- 15.1 Cost of inventories recognised as expenses during the year is ₹4516.36 crore (previous year : ₹4143.52 crore).
- 15.2 Cost of inventories recognised as expenses includes ₹3.52 crore (previous year: ₹5.47 crore) in respect of write-downs of inventory for non moving items.
- 15.3 Inventories are hypothecated/pledged against cash credit facility.
- 15.4 Method of valuation of inventories is stated in note 3.10 of Significant Accounting Policies.

16.A. Cash and cash equivalents

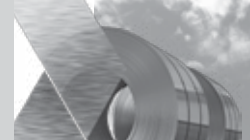
	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Balances with banks		
(1) Balance with scheduled banks		
(i) In current account	171.60	25.35
Total cash and cash equivalents	171.60	25.35

16.B. Bank balances (other than Cash and cash equivalents)

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) In deposit account (having original maturity between 3-12 months)	2,972.65	2,586.88
Principal	2,880.00	2,532.00
Accrued Interest	92.65	54.88
(b) Earmarked balance with scheduled banks	352.10	156.72
Total other bank balances	3,324.75	2,743.60

Note:

- 16.B.1 The earmarked balance with scheduled banks represents amount deposited towards unclaimed dividend amounting to ₹3.27 crore (previous year ₹1.70 crore) and deposit (including accrued interest) of ₹348.83 crore (previous year ₹155.02 crore) under court's directive towards disputed electricity duty.
- 16.B.2 Amount due for credit to Investor's Education and Protection Fund at the end of the current year ₹ Nil (previous year ₹ Nil).



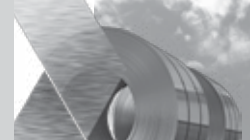
17. Share Capital

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Authorised share capital:		
6,00,00,00,000 equity shares of ₹ 5 each	3,000.00	3,000.00
	3,000.00	3,000.00
Issued and subscribed capital comprises:		
1,86,56,17,498 fully paid-up equity shares of ₹ 5 each (As at 31.03.2018: 1,93,29,28,884 fully paid-up equity shares of ₹ 5 each)	932.81	966.46
	932.81	966.46
17.1 Reconciliation of the number of equity shares		
	Number of shares	Amount ₹ in Crore
Balance as at 31.03.2017	1,93,29,28,884	966.46
Changes during the period	—	—
Balance as at 31.03.2018	1,93,29,28,884	966.46
Buy-back of shares	(6,73,11,386)	(33.65)
Balance as at 31.03.2019	1,86,56,17,498	932.81

- (i) The Company has only one class of equity shares having a par value of ₹ 5 each. Each holder of equity shares is entitled to one vote per share and carries proportionate right to dividends declared by the Company based on their holdings.
- (ii) Buy back: During 2016-17 Company bought back 64,43,09,628 numbers of equity shares of ₹ 5 each which led to decrease in the equity share capital from ₹ 1,288.62 crore to ₹ 966.46 crore. During 2018-19 Company again bought back 6,73,11,386 number equity shares of ₹ 5 each which further led to decrease in equity share capital from ₹ 966.46 crore to ₹ 932.81 crore.
- (iii) Disinvestment: During 2017-18 Government of India divested 27,77,65,383 Nos fully paid equity shares (through OFS 17,80,69,927 Nos, through employee offer 76,17,057 Nos and through ETF 9,20,78,399 Nos), consequent to which holding of Government of India came down from 1,44,14,82,490 Nos (74.58%) as on 31.03.2017 to 1,16,37,17,107 Nos (60.2%) as on 31.03.2018. During 2018-19 Government of India further divested 8,89,86,323 Nos of equity shares through ETF. Consequent to buyback and transfer of shares through ETF by Government of India during 2018-19, the holding of Government of India has come down from 1,16,37,17,107 Nos (60.20%) as on 31.03.2018 to 97,00,81,517 nos (51.99%) as on 31.03.2019.

17.2 Details of shares held by each shareholder holding more than 5% of shares

	Amount in ₹ Crore			
	As at 31.03.2019		As at 31.03.2018	
	Number of shares held	% of holding of equity shares	Number of shares held	% of holding of equity shares
Fully paid equity shares				
Government of India	97,00,81,517	51.99%	1,16,37,17,107	60.20%
Life Insurance Corporation of India	9,34,35,272	5.00%	15,84,31,120	8.20%
Others	80,21,00,709	42.99%	61,07,80,657	31.60%
Total	1,86,56,17,498	100.00%	1,93,29,28,884	100.00%



18. Other equity

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Capital redemption reserves	355.81	322.16
(b) General reserve	8,112.98	8,620.41
(c) Retained earnings	1,082.91	595.78
Total	9,551.70	9,538.35

18.1 Movement in other equity

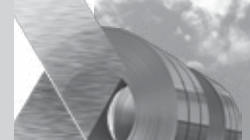
Other equity	Reserves and Surplus			Total
	Capital redemption reserves	General reserve	Retained earnings	
Balance as at 31.03.2017	322.16	8,620.41	296.76	9,239.33
Profit for the year	—	—	1,342.41	1,342.41
Other comprehensive income (net of taxes)	—	—	50.03	50.03
Total comprehensive income for the year	—	—	1,392.44	1,392.44
Premium on Buy-back of equity shares	—	—	—	—
Expenses on Buy-back of equity shares	—	—	—	—
Transfer of general reserve to Capital redemption reserve	—	—	—	—
Final dividend for previous year	—	—	—	—
Tax on final dividend for previous year	—	—	—	—
Interim dividend for the year	—	—	(908.48)	(908.48)
Tax on interim dividend for the year	—	—	(184.94)	(184.94)
Balance as at 31.03.2018	322.16	8,620.41	595.78	9,538.35
Profit for the year	—	—	1,732.40	1,732.40
Other comprehensive income (net of taxes)	—	—	(0.15)	(0.15)
Total comprehensive income for the year	—	—	1,732.25	1,732.25
Premium on Buy-back of equity shares	—	(471.18)	—	(471.18)
Expenses on Buy-back of equity shares (net of tax benefit)	—	(2.60)	—	(2.60)
Transfer of general reserve to Capital redemption reserve	33.65	(33.65)	—	—
Final dividend for previous year	—	—	(193.29)	(193.29)
Tax on final dividend for previous year	—	—	(39.73)	(39.73)
Interim dividend for the year	—	—	(839.53)	(839.53)
Tax on interim dividend for the year	—	—	(172.57)	(172.57)
Balance as at 31.03.2019	355.81	8,112.98	1,082.91	9,551.70

18.2 The Company had bought back its own equity shares on Septmeber 26, 2016 at a premium utilising general reserve amounting to ₹2834.97 crore and consequently a sum equal to the nominal value of the shares so bought back amounting to ₹ 322.16 crore had been transferred to the capital redemption reserve account in terms of section 69 of the Companies Act, 2013.

During the year the Company has bought back 6,73,11,386 number of fully paid equity shares of ₹5 each on December 4, 2018 at an offer price of ₹75 per share. The aggregate consideration paid was ₹504.83 crore. Post buyback, the paid up equity share capital of the Company is reduced by ₹33.65 crore from ₹966.46 crore to ₹932.81 crore. The premium amount ₹471.18 crore is appropriated from general reserve. The shares were extinguished on December 7, 2018 and in terms of the provisions of Companies Act, 2013 a sum of ₹33.65 crore is transferred from general reserve to capital redemption reserve.

18.3 During the year the Company has paid interim dividend @ ₹4.50 per equity share amounting in total ₹839.53 crore and final dividend for the year 2017-18 @ ₹1 per equity share totaling ₹193.29 crore . During the preceeding year, Company paid interim dividend of ₹908.48 crore for financial year 2017-18. Dividend tax of ₹172.57 crore, ₹39.73 crore and ₹ 184.94 crore on these respective amounts of dividends have been paid by the Company.

18.4 The Board has recommended a final dividend of ₹1.25 per share (25% on the equity shares of ₹5 each) amounting to ₹233.20 crore for approval of shareholders in the ensuing Annual General Meeting. Considering the applicable dividend distribution tax the amount of dividend payout works out to ₹281.14 crore.


19. Borrowings

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Current (secured at amortised cost)		
Liabilities towards bills discounted	66.79	44.99
Total other current financial liabilities	66.79	44.99

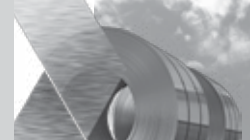
20. Trade payables

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non-current		
(1) Creditors for supplies and services		
— Dues to micro and small enterprises	—	—
— Others	21.14	15.63
Total non-current trade payables	21.14	15.63
B. Current		
(1) Creditors for supplies and services		
— Dues to micro and small enterprises	2.22	4.53
— Others	435.38	507.50
(2) Accrued wages and salaries	848.17	449.71
Total current trade payables	1,285.77	961.74

Notes:

- 20.1 Long-term wage settlement in respect of non-executive employees of the Company, effective from 01.01.2017, has been finalised during the year. In terms of the settlement, the liability for pay revision up to 31.03.2019 works out to be ₹530 crore. A sum of ₹275 crore was provided in the preceding year on an estimated basis. Differential amount of ₹255 crore has been provided in the current year.
- 20.2 Dues payable to Micro and Small Enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 have been determined to the extent such parties have been identified on the basis of information available with the Company. The disclosure pursuant to said Act in respect of such dues included in trade payables (note-20) and other financial liabilities (note-21) is as under.

Particulars	As at 31.03.2019	As at 31.03.2018
i) Principal amount due	2.69	5.82
ii) Interest on principal amount due	Nil	Nil
iii) Interest and principal amount paid beyond appointment day	Nil	Nil
iv) The amount of interest due and for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the amount of interest specified under MSME Development Act 2006.	Nil	Nil
v) The amount of interest accrued and remaining unpaid at the end of the year.	Nil	Nil
vi) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest due as above are actually paid to the small enterprise, for the purpose of disallowance as a deductible expenditure under section 23 of MSME Development Act 2006.	Nil	Nil

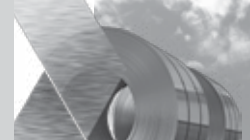


21. Other Financial Liabilities

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
A.	Non-current		
	(1) Creditors for supplies and services		
	— Dues to micro and small enterprises	—	—
	— Others	6.70	2.85
	Total other non-current financial liabilities	6.70	2.85
B.	Current		
	(a) Unpaid dividends	3.27	1.70
	(b) Creditors for other liabilities		
	(1) Creditors for capital supplies and services		
	— Dues to micro and small enterprises	0.47	1.29
	— Others	299.35	397.38
	(2) Security deposits from customers	1.78	2.24
	(3) Refund due to customers	7.84	15.41
	(4) Liabilities for discount on sales to customers	98.00	94.69
	(5) Employees' recoveries	0.15	0.16
	Total other current financial liabilities	410.86	512.87

22. Provisions

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
A.	Non-current		
(a)	Provision for employee benefits		
	(1) Retirement benefits obligations		
	(i) Post retirement medical benefits scheme (PRMBS)	117.22	116.35
	(ii) Settling in benefit on retirement	19.52	1.82
	(iii) Nalco benevolent fund scheme (NBFS)	2.45	2.32
	(iv) Nalco retirement welfare scheme(NRWS)	11.56	10.27
	(v) Retirement gift	6.79	6.45
	(2) Other long-term employee benefits		
	(i) Compensated absences	315.57	249.77
	(ii) Long service rewards	9.31	9.10
	(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	17.01	16.06
(b)	Other Provisions		
	(1) Asset restoration obligations/dismantling	31.12	23.57
	(2) Other legal and constructive obligations	0.38	0.38
	Total non current provisions	530.93	436.09
B.	Current		
(a)	Provision for employee benefits		
	(1) Retirement benefits obligations		
	(i) Gratuity (funded)	57.40	271.05
	(ii) Post retirement medical benefits scheme (PRMBS)	6.22	10.18
	(iii) Settling in benefit on retirement	2.90	0.45
	(iv) Nalco benevolent fund scheme (NBFS)	0.59	1.30
	(v) Nalco retirement welfare scheme(NRWS)	0.34	3.37
	(vi) Retirement gift	0.14	0.63
	(2) Other Long-term employee benefits		
	(i) Compensated absences	31.69	23.29
	(ii) Long service rewards	1.05	0.99
	(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	5.57	5.55
(b)	Other Provisions		
	(1) towards peripheral development expenses	31.53	32.64
	(2) towards other legal and constructive obligations	28.08	26.43
	Total current provisions	165.51	375.88



22. Provisions (contd.)

Amount in ₹ Crore

C. Movement of provisions		Compensated absences	Long service rewards	NEFFARS
(1) Movement of retirement benefit obligations [refer note 31]				
(2) Movement of employee benefits				
Balance at 31.03.2017		230.83	9.50	27.79
Additional provisions recognised		56.08	1.21	8.17
Reductions arising from payments		(93.54)	(2.47)	(14.35)
Changes arising from remeasurement		79.69	1.86	—
Balance at 31.03.2018		273.06	10.10	21.61
Additional provisions recognised		108.68	1.26	18.06
Reductions arising from payments		(76.91)	(1.51)	(17.09)
Changes arising from remeasurement		42.43	0.51	—
Balance at 31.03.2019		347.26	10.36	22.58
(3) Movement of other Provisions				
		Asset restoration obligation	Legal and Constructive Obligation	Peripheral Development Expenses
Balance at 31.03.2017		21.70	18.15	33.36
Additional provisions recognised		0.09	8.65	—
Reductions arising from payments		—	—	(0.72)
Unwinding of discount		1.78	0.02	-
Balance at 31.03.2018		23.57	26.82	32.64
Additional provisions recognised		5.23	3.87	—
Reductions arising from payments		—	(2.28)	(1.05)
Unwinding of discount		2.32	0.05	—
Balance at 31.03.2019		31.12	28.46	31.59

Note:

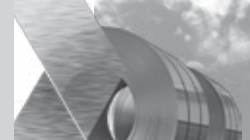
- 22.1 Provision related to retirement and other long term employee benefits are provided, in the case of gratuity as per the Gratuity Act, and for other benefits as per Company rules. Liability for the same is recognised on the basis of actuarial valuation by independent actuary.
- 22.2 Provision for asset restoration obligation and constructive obligation is made based on management estimation in line with Ind AS 16 and Ind AS 37 respectively.
- 22.3 Provision for peripheral development expenditure is the unspent development obligation of the Company prior to introduction of Companies Act 2013.

23. Deferred tax liabilities

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Deferred tax liabilities	1,560.12	1,501.72
Deferred tax assets	429.45	350.27
	1,130.67	1,151.45

2017-18	Opening balance as at 01.04.2017	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2018
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,463.93)	(19.00)	—	(1,482.93)
FVTPL financial assets	(22.93)	25.78	—	2.85
Provision for defined benefit obligation (OCI)	(19.01)	—	(2.63)	(21.64)
Deferred tax liabilities	(1,505.87)	6.78	(2.63)	(1,501.72)

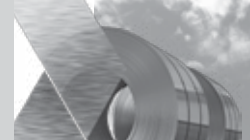


23. Deferred tax liabilities (contd.)

	Amount in ₹ Crore			
	Opening balance as at 01.04.2017	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2018
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	92.79	1.71	—	94.50
Provision for defined benefit obligation	57.11	31.44	—	88.55
Provision for doubtful debts / advances	84.86	5.36	—	90.22
Temporary Difference due to application of section 43B	—	60.12	—	60.12
MAT credit entitlement	17.46	(4.95)	—	12.51
Others	8.07	(3.70)	—	4.37
Deferred tax assets	260.29	89.98	—	350.27
Deferred tax (liabilities) / assets (net)	(1,245.58)	96.76	(2.63)	(1,151.45)
2018-19				
	Opening balance as at 01.04.2018	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2019
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,482.93)	(62.13)	—	(1,545.06)
FVTPL financial assets	2.85	0.09	—	2.94
Provision for defined benefit obligation (OCI)	(21.64)	—	3.64	(18.00)
Deferred tax liabilities	(1,501.72)	(62.04)	3.64	(1,560.12)
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	94.50	26.85	—	121.35
Provision for defined benefit obligation	88.55	(0.38)	—	88.17
Provision for doubtful debts / advances	90.22	0.02	—	90.24
Temporary Difference due to application of section 43B	60.12	65.15	—	125.27
MAT credit entitlement	12.51	(12.51)	—	—
Others	4.37	0.04	—	4.42
Deferred tax assets	350.27	79.17	—	429.45
Deferred tax (liabilities) / assets (net)	(1,151.45)	17.13	3.64	(1,130.67)

24. Other liabilities

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non-Current		
(i) Deposits under NEFFARS	67.89	62.04
Total other non-current liabilities	67.89	62.04



24. Other liabilities (contd.)

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
B. Current			
(i)	Revenue received in advance	57.72	53.06
(ii)	Statutory and other dues		
(a)	Electricity duty [refer note: 24.1]	385.90	192.01
(b)	Tax deducted and collected at source	24.38	40.91
(c)	Contribution to NEPF trust and NPS	35.58	47.40
(d)	Disputed dues towards stamp duty	212.78	-
(e)	Others (Service tax, excise duty etc)	78.28	53.53
(iii)	Renewable energy purchase obligation [refer note 24.2]	162.71	146.87
(iv)	Deposits under NEFFARS	17.64	10.69
(v)	Grants for property, plant and equipment	0.56	0.58
(vi)	Other credit balances	0.64	0.40
Total other current liabilities		976.19	545.45

Note:

24.1 The Energy Department of Govt. of Odisha vide its notification dated May 12, 2017 has enhanced the rate of electricity duty from ₹0.30 paise per unit to ₹0.55 paise per unit of consumption. Aggrieved by the said notification, Confederation of Captive Power Plants, Odisha of which the Company is a member, has challenged the order in the Hon'ble High Court of Orissa. As an interim measure, the Hon'ble High Court in its order dated 01.06.2017 has directed the petitioner to deposit the differential electricity duty in a separate interest bearing bank account which shall be subject to the result of writ petition. Accordingly, the Company provided for electricity duty expenditure at the enhanced rate and deposited the money into a separate interest bearing bank account as per direction of the Court. Interest earned on such deposits is not recognised as income but treated as liability along with the unpaid enhanced electricity duty. The amount lying as deposit as at the reporting date against such disputed liability is ₹348.83 crore (previous year ₹155.02 crore) [refer note 16.B.1].

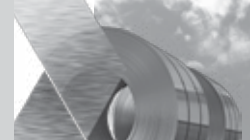
24.2 As per the provisions of Odisha Electricity Regulatory Commission (OERC) notification dated 1st August 2015, the Company, being an obligated entity has the obligation to generate power equal to 9.5% (previous year 7.5%) of its total consumption from renewable sources comprising of 4.5% (previous year 3%) from solar renewable source and 5% (previous year 4.5%) from non-solar renewable sources.

Cumulative non-solar obligation as on 31.3.2019 is ₹27.57 crore (as on 31.03.2018 ₹16.42 crore) towards 1,83,642 (previous year 1,09,444) nos of non-solar Renewable Energy Certificates (REC) valued @ ₹1,500 (previous year Rs 1,500) per certificate. During the year 1,67,964 nos (previous year 1,49,829 nos) of non-solar REC has been retained by the Company as a compliance to Renewable Purchase Obligation.

Due to non-fulfillment of the obligation to generate required quantum of power from renewable source of solar energy, the company has provided cumulative liability up to 31.3.2019 for ₹ 135.14 crore (previous year ₹130.45 crore) towards 6,75,716 (previous year 3,72,716) nos of solar REC valued @ ₹2,000 (previous year ₹3,500) per certificate.

25. Contingent liabilities (to the extent not provided for)

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
Claims against the Company not acknowledged as debts			
a.	Demand from statutory authority		
1.	ST/CST/VAT	376.55	366.17
2.	Excise duty	418.32	100.68
3.	Custom duty	102.77	102.77
4.	Service tax	21.92	18.11
5.	Income tax	670.09	706.40
6.	Entry tax and road tax	224.48	232.28
7.	Land acquisition and interest there on	46.98	35.49
8.	Stamp duty	0.00	204.53
9.	Demand from Dept. of mines Govt. of Odisha	136.32	136.32
10.	NPV related demand under Mining lease	92.45	93.10
11.	Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	119.24	119.24
12.	Claim From Govt. (NGT)	6.00	—
13.	Claim From PSUs	50.12	—
b.	Claim by contractors/suppliers and others		
1.	Claims of Contractor's suppliers and others	506.34	436.99
Total		2,771.59	2552.08



25. **Contingent liabilities (to the extent not provided for) (contd.)**

Amount in ₹ Crore

Claims against the Company not acknowledged as debt includes:

- i. Demand from various statutory authorities towards income tax, sales tax, excise duty, custom duty, service tax, entry tax and other government levies. The Company is contesting the demands before the respective appellate authorities. It is expected that the ultimate outcome of these proceedings will be in favour of the Company and will not have any material adverse effect on the Company's financial position and results of operation.
- ii. Claims of contractors for supply of materials/services pending with arbitration/courts have arisen in the ordinary course of business. The Company reasonably expects that these legal actions will be concluded and determined in favour of the Company and will not have any material adverse effect on the Company's results of operation or financial position.

25.1 **Movement of contingent liabilities**

	As at 31.03.2018	Reduction during the year	Addition during the year	As at 31.03.2019
a. Demand by statutory authority				
1. ST/CST/VAT	366.17	(1.57)	11.95	376.55
2. Excise duty	100.68	(87.21)	404.85	418.32
3. Custom duty	102.77	-	-	102.77
4. Service tax	18.11	(0.51)	4.32	21.92
5. Income tax	706.40	(86.87)	50.56	670.09
6. Entry tax and road tax	232.28	(7.80)	-	224.48
7. Land acquisition and interest there on	35.49	-	11.49	46.98
8. Stamp duty	204.53	(204.53)	-	0.00
9. Demand from Dept. of mines Govt. of Odisha	136.32	-	-	136.32
10. NPV related demand under Mining lease	93.10	(0.65)	-	92.45
11. Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	119.24	-	-	119.24
12. Claim From Govt. (NGT)	-	-	6.00	6.00
13. Claim From PSUs	-	-	50.12	50.12
b. Claim by contractors/suppliers and others				
1. Claims of Contractor's suppliers and others	436.99	(3.84)	73.19	506.34
Total	2,552.08	(392.98)	612.48	2,771.59

26. **Commitments**

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
a) Estimated amount of Contracts remaining to be executed on capital account and not provided for	829.92	297.02
b) Other Commitments		
(1) Amount payable to the Government of India but not yet due for payment for allocation of Utkal D & E coal block.	18.11	18.11
(2) Export obligation for import of capital goods under Export Promotion Capital Goods Scheme.	168.75	107.80
Total	1016.78	422.93

27. Revenue from operations

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Sale of products (including excise duty)		
1) Export:		
i) Alumina	4,222.41	3,047.36
ii) Aluminium	570.30	1,028.10
2) Domestic:		
i) Alumina	212.67	152.01
ii) Aluminium	6,253.33	5,188.28
(b) Sale of power		
i) Thermal power	1.57	3.40
ii) Wind Power	126.04	85.97
(c) Other operating income		
1) Export Incentives		
i) Alumina	45.91	33.06
ii) Aluminium	16.72	30.24
2) Incentives on Renewable Energy		
i) Renewable Energy certificates	39.37	33.84
ii) Generation based incentives	8.53	6.94
3) Own manufactured goods internally used /capitalised	2.47	9.11
Revenue from operations	11,499.32	9,618.31

Note:

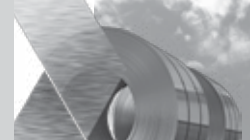
- 27.1 Domestic sale of alumina and aluminium during 2017-18 includes excise duty amounting to Rs.4.22 crore and Rs.124.74 crore respectively applicable upto 30.06.2017.
- 27.2 Goods and service taxes collected under Goods and Service Tax Act effective from 01.07.2017 are not included in sales.

28. Other income

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Interest income		
(i) Interest income earned from financial assets that are not designated as at fair value through profit or loss:		
— Bank deposits	224.28	171.89
— Loans to employees	9.69	12.46
— Other financial assets carried at amortised cost	3.17	0.44
(ii) Interest income earned towards Income tax refund	—	—
(b) Dividend income		
— Dividends from current investments	30.61	33.65
(c) Net gain/(loss) on disposal of property, plant and equipment		
(d) Net foreign exchange gain/(loss)	8.62	(2.55)
(e) Net gain/(loss) on financial assets designated as at FVTPL	(2.16)	2.96
(f) Net gain/(loss) on sale of other non-current investments	-	13.91
(g) Write back of liabilities no longer required [refer note: 28.1]	12.04	20.56
(h) Income from internally generated scrap	19.47	22.68
(i) Others	20.15	23.65
Total other income	325.87	299.65

Note:

- 28.1 Unclaimed liability lying in books for a period of more than 3 years as on the reporting date are written back and recognized as income.



29. Cost of materials consumed

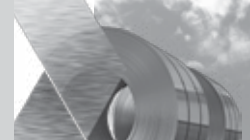
	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Raw material		
(1) Caustic soda	941.02	795.39
(2) C.P. coke	645.43	403.70
(3) C.T. pitch	176.41	127.80
(4) Aluminium flouride	75.43	62.67
(5) Lime	50.00	45.06
(6) Others	31.39	30.69
Total raw materials consumed	1,919.68	1,465.31
B. Power and Fuel		
(1) Coal [Refer Note 29.1]	1,525.72	1,757.22
(2) Fuel oil	708.06	523.66
(3) Duty on own generation [refer note: 24.1]	406.51	400.70
(4) Purchased power	283.64	60.36
(5) Power transmission charges	3.19	5.98
Total Power and Fuel consumed	2,927.12	2,747.92

Note:

- 29.1 Subsequent to clarification by GST Board vide circular dated 30th May 2018, the Company claimed refund including arrear since 01.07.2017 towards GST compensation cess on coal. Total amount claimed upto 31-03-2019 is Rs 231.58 crore is adjusted against coal expenditure of the current year.

30. Changes in inventories of finished goods, intermediaries and work-in-process

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Finished goods		
Opening stock		
(1) Bauxite	9.20	3.07
(2) Chemical	114.18	154.15
(3) Aluminium	19.83	41.52
Opening stock	143.21	198.74
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	—	18.22
(3) Aluminium	—	5.76
Excise duty on opening stock	—	23.98
Total opening stock of finished goods	143.21	222.72
Less:		
Closing stock		
(1) Bauxite	18.12	9.20
(2) Chemical	91.48	114.18
(3) Aluminium	12.68	19.83
Closing stock	122.28	143.21
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	—	—
(3) Aluminium	—	—
Excise duty on closing stock	—	—
Total Closing stock of finished goods	122.28	143.21
(Accretion)/Depletion in finished goods	20.93	79.51



30. Changes in inventories of finished goods, intermediaries and work-in-process (contd.)	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Intermediaries		
Opening stock		
Anodes	66.75	82.97
Others	10.99	10.65
Total opening stock of intermediaries	77.74	93.62
Less: Closing stock		
Anodes	122.16	66.75
Others	18.97	10.99
Total closing stock of intermediaries	141.13	77.74
(Accretion)/depletion in intermediaries	(63.39)	15.88
Work in process		
Opening stock	284.33	236.37
Less: Closing stock	246.95	284.33
(Accretion)/depletion in work in process	37.38	(47.96)
Total (Accretion)/Depletion in inventory	(5.08)	47.43

31. Employee benefit expense	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Salaries and wages, including bonus	1,718.22	1,659.81
(b) Contribution to provident and other funds		
1) Provident fund	102.91	100.89
2) Gratuity	45.32	301.91
3) Post employment pension scheme	95.59	88.07
(c) Staff welfare expenses	110.24	110.52
Total employee benefit expense	2,072.28	2,261.20

Notes:

31.A. Employee benefits

Long-term wage settlement in respect of non-executive employees of the Company, effective from 01.01.2017, has been finalised during the year. In terms of the settlement, the liability for pay revision up to 31.03.2019 works out to be Rs.530 crore. A sum of Rs.275 crore was provided in the preceding year on an estimated basis. Differential amount of Rs.255 crore has been provided in the current year.

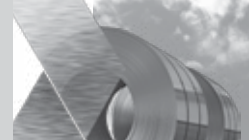
31.B. Employee benefit plans

31.B.1 Defined contribution plans

- Provident fund:** The Company pays fixed contribution to Provident Fund at predetermined rates, to a separate trust, which invests the funds in permitted securities. On contributions, the trust is required to pay a minimum rate of interest, to the members, as specified by Govt. of India.
- Pension fund:** The Company pays fixed contribution to the trustee bank of PFRDA, which in turn invests the money with the insurers as specified by the employee concerned. The company's liability is limited only to the extent of fixed contribution.

31.B.2 Defined benefit plans

- Gratuity:** Gratuity payable to employees as per The Payment of Gratuity Act subject to a maximum of Rs.20,00,000/-. The gratuity scheme is funded by the Company and is managed by a separate trust. The liability for gratuity under the scheme is recognised on the basis of actuarial valuation.
- Post retirement medical benefit:** The benefit is available to retired employees and their spouses who have opted for the benefit. Medical treatment as an in-patient can be availed from the Company's hospital/Govt.Hospital/ hospitals as per company's rule. They can also avail treatment as out patient subject to ceiling limit of expenses fixed by the Company. The liability under the scheme is recognised on the basis of actuarial valuation.
- Settling-in-benefit:** On superannuation/retirement/termination of service, if opted for the scheme, the transfer TA is admissible to the employees and / or family from the last head quarters to the hometown or any other place of settlement limited to distance of home town. Transport of personal conveyance shall also be admissible. The liability for the same is recognised on the basis of actuarial valuation.



- d) **NALCO Benevolent Fund Scheme** : The objective of the scheme is to provide financial assistance to families of the members of the scheme who die while in employment of the Company. As per the scheme there will be contribution by members @ Rs.30/- per member per death, in the event of death of a member while in the service of the company and matching contribution by the Company. The liability for the same is recognised on the basis of actuarial valuation.
- e) **NALCO Retirement Welfare Scheme** : The objective of the scheme is to provide financial assistance as a gesture of goodwill for post retirement support to employees retiring from the services of the company. As per the scheme the recovery form each employee member would be Rs. 10/- per retiring member. The Company would provide equivalent sum as matching contribution. The liability for the same is recognised on the basis of actuarial valuation.
- f) **Superannuation gift scheme**: The objective of the scheme is to recognise the employees superannuating or retiring on medical ground from the services of the Company. The scheme includes a gift item worth of Rs. 25000/- per retiring employees to be presented on superannuation/ retirement. The liability for the same is recognised on the basis of actuarial valuation.

31.B.3 Other long term employees benefits

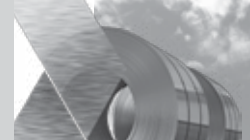
- a) **Compensated absences** : The accumulated earned leave, half pay leave & sick leave is payable on separation, subject to maximum permissible limit as prescribed in the leave rules of the Company. During the service period encashment of accumulated leave is also allowed as per company's rule. The liability for the same is recognised on the basis of actuarial valuation.
- b) **Long Service Reward** : The employee who completes 25 years of service are entitled for a long service reward which is equal to one month basic pay and DA. The liability for the same is recognised on the basis of actuarial valuation.
- c) **NEFFARS** : In the event of disablement/death, the Company pays monthly benefit to the employee/ nominee at their option and on deposit of prescribed amount as stipulated under the scheme upto the date of notional superannuation. The liability for the same is recognised on the basis of actuarial valuation.

The employee benefit plans typically expose the Company to actuarial risks such as actuarial risk, investment risk, interest risk, longevity risk and salary risk:-

- i. **Actuarial risk**: It is the risk that employee benefits will cost to the Company more than expected. This can arise due to one of the following reasons:
 - a. **Adverse Salary Growth Experience**: Salary hikes that are higher than the assumed salary escalation will result into an increase in obligation at a rate that is higher than expected.
 - b. **Variability in mortality rates**: If actual mortality rates are higher than assumed mortality rate assumption then the gratuity benefits will be paid earlier than expected. Since there is no condition of vesting on the death benefit, the acceleration of cashflow will lead to an actuarial loss or gain depending on the relative values of the assumed salary growth and discount rate.
 - c. **Variability in withdrawal rates**: If actual withdrawal rates are higher than assumed withdrawal rate assumption then the gratuity benefits will be paid earlier than expected. The impact of this will depend on whether the benefits are vested as at the resignation date.
- ii. **Investment risk**: For funded plans that rely on insurers for managing the assets, the value of assets certified by the insurer may not be the fair value of instruments backing the liability. In such cases, the present value of the assets is independent of the future discount rate. This can result in wide fluctuations in the net liability or the funded status if there are significant changes in the discount rate during the inter-valuation period.
- iii. **Interest risk**: The defined benefit obligation calculated uses a discount rate based on government bonds. If bond yields fall, the defined benefit obligation will tend to increase.
- iv. **Longevity risk**: The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.
- v. **Salary risk**: The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	Valuation as at	
	31/03/2019	31/03/2018
Discount rate(s)	7.50%	7.50%
Expected rate(s) of salary increase	8%	6%
Mortality	IALM 2006-2008 ULTIMATE	IALM 2006-2008 ULTIMATE
Attrition Rate	1%	1%



31. Employee benefit expense (contd.)

Amount in ₹ Crore

Amounts recognised in statement of profit and loss in respect of these defined benefits plans are as follows:-

	Year ended 31.03.2019	Year ended 31.03.2018
Service Cost:		
— Current Service cost	(48.58)	(35.47)
— Past Service Cost and (gain)/loss from settlements	6.21	(225.93)
— Net Interest expense	(29.38)	(28.89)
Components of defined benefit costs recognised in profit or loss	(71.75)	(290.29)
Remeasurement of the net defined benefit liability:		
Return on the net defined benefit liability	(10.98)	(0.88)
Actuarial (Gains)/losses arising from changes in financial assumptions	(17.24)	71.41
Actuarial (Gains)/losses arising from experience assumptions	28.28	(17.89)
Others (describe)		
Adjustments for restrictions on the defined benefit asset		
Components of defined benefit costs recognised in other comprehensive income	0.06	52.64
Total	(71.69)	(237.65)

The amount included in the balance sheet arising from the entity's obligation in respect of its defined benefit plans is as follows:

	Post retirement medical benefit	Settling-in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super-annuation gift scheme	Gratuity (Funded)
March 31, 2018						
Present value of defined benefit obligation	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)
Fair value of plan assets	—	—	—	—	—	302.48
Net liability arising from defined benefit obligation	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(271.05)
March 31, 2019						
Present value of defined benefit obligation	(123.44)	(22.42)	(3.04)	(11.90)	(6.93)	(604.90)
Fair value of plan assets	—	—	—	—	—	547.80
Net liability arising from defined benefit obligation	(123.44)	(22.42)	(3.04)	(11.90)	(6.93)	(57.10)

Movements in the present value of the defined benefit obligations are as follows:

	Post retirement medical benefit	Settling— in—benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super— annuation gift scheme	Gratuity (Funded)
Opening defined benefit obligations as at April 01, 2017	(64.31)	(2.41)	(3.86)	(13.84)	(7.34)	(314.03)
Current service cost	—	(0.41)	—	—	—	(35.06)
Interest Cost	(4.66)	(0.16)	(0.26)	(0.97)	(0.54)	(22.30)
Remeasurement						
Actuarial (Gains)/losses arising from changes in demographic assumptions	—	—	—	—	—	—
Actuarial (Gains)/losses arising from changes in financial assumptions	5.76	0.03	0.04	0.18	0.13	65.27
Actuarial (Gains)/losses arising from experience assumptions	16.52	0.23	(0.30)	(0.72)	0.26	(33.88)
Past Service Cost, including losses /(gains) on curtailment	(84.10)	—	—	—	—	(267.07)
Liabilities extinguished as settlements	—	—	—	—	—	—
Liabilities assumed in a business combination	—	—	—	—	—	—

31. Employee benefit expense (contd.)

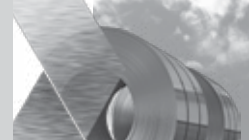
	Amount in ₹ Crore					
	Post retirement medical benefit	Settling-in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super-annuation gift scheme	Gratuity (Funded)
Exchange differences on foreign plans	—	—	—	—	—	—
Benefits paid	4.27	0.45	0.76	1.71	0.41	33.54
Others	—	—	—	—	—	—
Closing defined benefit obligation as at March 31, 2018	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)
Current service cost	—	(3.35)	—	—	—	(45.23)
Interest Cost	(9.29)	(0.15)	(0.25)	(0.96)	(0.50)	(40.96)
Remeasurement						
Actuarial (Gains)/losses arising from changes in demographic assumptions	—	—	—	—	—	—
Actuarial (Gains)/losses arising from changes in financial assumptions	—	—	—	—	—	(17.24)
Actuarial (Gains)/losses arising from experience assumptions	7.07	2.96	0.27	0.96	(0.16)	17.18
Past Service Cost, including losses /(gains) on curtailment	—	(20.16)	—	—	—	—
Liabilities extinguished as settlements	—	—	—	—	—	—
Liabilities assumed in a business combination	—	—	—	—	—	—
Exchange differences on foreign plans	—	—	—	—	—	—
Benefits paid	5.31	0.55	0.56	1.74	0.81	54.88
Others (describe)	—	—	—	—	—	—
Closing defined benefit obligation as at March 31, 2019	(123.43)	(22.42)	(3.04)	(11.90)	(6.93)	(604.90)

Movements in the fair value of the plan assets are as follows:

	Gratuity (Funded)
Opening fair value of plan assets as at April 01, 2017	302.10
Interest income	22.64
Remeasurement	
Return on plan assets (excluding amounts included in net interest income)	(0.88)
Others (describe)	(0.25)
Contribution from the employer	12.40
Benefits paid	(33.53)
Closing fair value of plan assets as at March 31, 2018	302.48
Interest income	22.73
Remeasurement	
Return on plan assets (excluding amounts included in net interest income)	(10.98)
Others (describe)	0.59
Contribution from the employer	287.86
Contribution from plan participant	—
Assets distributed on settlements	—
Assets acquired in a business combination	—
Exchange differences on foreign plans	—
Benefits paid	(54.88)
Others (describe)	—
Closing fair value of plan assets as at March 31, 2019	547.80

The fair value of the plan assets at the end of the reporting period for each category, are as follows

	Fair value of plan assets as at	
	31/03/2019	31/03/2018
Investments in Funds:		
1. Insurance Companies	547.80	302.48
Total	547.80	302.48



31 Employee benefit expense

31.C. Sensitivity analysis of defined benefit plans

Significant actuarial assumption for determination of defined benefit plan are discount rate, expected salary growth, attrition rate and mortality rate. The sensitivity analysis below have been based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period while holding all other assumptions constant.

Sensitivity Analysis					Amount in ₹ Crore	
Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2017-18						
Impact on amount due to change in Discount rate (-/+0.5%)	3.87	3.74	0.07	0.07	0.08	0.07
% Change compared to base due to sensitivity [+ /(-)%]	3.06%	2.95%	3.19%	3.02%	2.14%	2.07%
Impact on amount due to change in Salary growth (+/-0.5%)	0.00	0.00	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	—	—	—	—
Impact on amount due to change in Attrition rate (+/-0.5%)	0.07	0.15	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.05%	0.12%	0.06%	0.06%	0.07%	0.07%
Impact on amount due to change in Mortality rate (-/+10%)	0.73	0.81	0.01	0.01	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.58%	0.64%	0.51%	0.51%	0.03%	0.03%
Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
2017-18	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	0.39	0.37	0.27	0.26	17.74	16.77
% Change compared to base due to sensitivity [+ /(-)%]	2.86%	2.71%	3.82%	3.62%	3.09%	2.92%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	4.27	4.31
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	—	—	0.74%	0.75%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.01	0.01	—	—	0.49	0.49
% Change compared to base due to sensitivity [+ /(-)%]	0.04%	0.04%	0.05%	0.05%	0.09%	0.09%
Impact on amount due to change in Mortality rate (-/+10%)	—	—	—	—	3.49	3.49
% Change compared to base due to sensitivity [+ /(-)%]	0.03%	0.03%	0.03%	0.03%	0.61%	0.61%
Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
2018-19	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
Impact on amount due to change in Discount rate (-/+0.5%)	3.57	3.64	0.65	0.66	0.08	0.08
% Change compared to base due to sensitivity [+ /(-)%]	2.89%	2.95%	2.89%	2.95%	2.71%	2.76%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.15	0.15	0	0	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.12%	0.12%	0.12%	0.12%	0.15%	0.15%
Impact on amount due to change in Mortality rate (-/+10%)	0.57	0.57	0.10	0.10	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.46%	0.46%	0.46%	0.46%	0.26%	0.26%

Sensitivity Analysis (contd.)

Particulars	Amount in ₹ Crore					
	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2018-19						
Impact on amount due to change in Discount rate (-/+0.5%)	0.32	0.33	0.19	0.19	20.06	18.84
% Change compared to base due to sensitivity [+ /(-)%]	2.71%	2.76%	2.71%	2.76%	3.32%	3.11%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	3.22	3.67
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.53%	0.61%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.02	0.02	—	—	0.10	0.10
% Change compared to base due to sensitivity [+ /(-)%]	0.15%	0.15%	0.15%	0.15%	0.02%	0.02%
Impact on amount due to change in Moratlity rate (-/+10%)	—	—	—	—	0.63	0.63
% Change compared to base due to sensitivity [+ /(-)%]	0.26%	0.26%	0.26%	0.26%	0.10%	0.10%

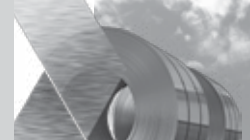
The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using projected unit credit method at the end of the reporting period, which is same as that applied in calculating the defined benefit obligation liability recognised in the balance sheet.

There is no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

32. Finance cost

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Finance cost		
a. Interest cost	2.38	1.95
Total finance cost	2.38	1.95



33. Other expenses

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
(a) Stores and spares consumed	365.52	344.52
(b) Repair and maintenance to		
(1) Buildings	49.11	38.75
(2) Machinery	166.14	155.94
(3) Others	31.44	24.82
(c) Other Manufacturing Expenses		
(1) Water charges	29.37	26.71
(2) Royalty	147.36	127.70
(3) Contribution to District Mineral Fund and National Mineral Exploration Trust	47.16	40.88
(4) Continuous Technical Assistance expenses	10.54	8.76
(5) Others	80.13	72.35
(d) Freight and handling charges		
(1) Incoming materials (Alumina)	120.01	113.45
(2) Outgoing materials	146.45	152.97
(e) Auditors remuneration and out-of-pocket expenses		
(i) As Auditors	0.35	0.26
(ii) For Taxation matters	0.06	0.08
(iii) For Other services	0.29	0.22
(iv) For reimbursement of expenses	0.20	0.12
(f) Payment to Cost Auditors	0.03	0.03
(g) Security and fire fighting expenses	133.90	117.77
(h) Corporate social responsibility expenses [refer note 33.1]	30.35	29.01
(i) Administrative and general expenses	118.86	109.90
(j) Renewable purchase obligation	55.22	120.37
(k) Provision towards disputed Government dues and others	0.05	7.06
(l) Selling and distribution expenses	23.01	28.16
(m) Write off of Inventories, Claims etc	12.52	15.98
(n) Bad and doubtful Provisions/ (write back)	(3.51)	13.43
(o) Others	128.23	40.90
Total other expenses	1,692.79	1,590.14

Note:

33.1 Expenditure on Corporate Social Responsibility.

a)	Gross amount to be spent by the company during the year ended March 31, 2019 is ₹27.38 crore (March 31, 2018 ₹27.88 crore)	
b)	Amount spent during the year ended March 31, 2019	
i)	Construction/acquisition of assets	₹ Nil (previous year ₹Nil)
ii)	On purpose other than (i) above	₹ 30.35 crore (previous year ₹29.01 crore)
	Total	₹ 30.35 crore (previous year ₹29.01 crore)

34. Exceptional items	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Exceptional items		
a. Write back of provision against disputed interest on water charges	—	(785.71)
b. Reversal of liability towards DMF contribution on bauxite extraction	—	(18.32)
c. Refund claim of DMF contribution on coal procurement	—	(22.37)
d. Employment benefits in the form of interest subsidy	—	46.44
e. Write back of doubtful provision against advance to employees towards (d) above	—	(44.12)
Total exceptional items	—	(824.08)

35. Income taxes	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
35.1 Income tax recognised in profit or loss		
Current tax		
In respect of current year	998.36	521.99
In respect of prior years	26.29	271.19
	1,024.65	793.18
Deferred tax		
In respect of current year	(17.13)	(101.71)
Others (MAT credit entitlement)	—	4.95
	(17.13)	(96.76)
Total income tax expense recognised in current year	1,007.52	696.42
The income tax expense for the year can be reconciled to the accounting profit as follows:		
Profit before tax	2,739.92	2,038.83
Income tax expense thereon @ 34.944% (previous year @34.608%) :	957.44	705.60
Tax effect of -		
i) income exempt from taxation	(10.70)	(23.71)
ii) disallowable expenses (permanent difference)	13.23	9.89
iii) expenses allowable in excess of expenditure incurred	(14.25)	(12.53)
iv) effect of concessions (research and development and other allowances)	—	(12.95)
v) difference for long-term capital gains	—	8.54
vi) Adjustment relating to earlier years	26.29	29.16
vii) others	35.51	(7.58)
Income tax expense recognised in profit or loss	1,007.52	696.42
35.2 Income tax recognised directly in equity		
Current tax		
Share buy-back costs	(1.39)	—
Income tax recognised directly in equity	(1.39)	—

35. Income taxes (contd.)

Amount in ₹ Crore

35.3 Income tax recognised in other comprehensive income	Year ended 31.03.2019	Year ended 31.03.2018
Tax on remeasurement gain or loss of defined benefit obligations		
— Current Tax	3.85	—
— Deferred Tax	(3.64)	2.63
Total income tax recognised in other comprehensive income	0.21	2.63
Bifurcation of the income tax recognised in other comprehensive income into:		
Items that will be reclassified to profit or loss	—	—
Items that will not be reclassified to profit or loss	0.21	2.63

36. Segment information

36.1 Products from which reportable segments derive their revenues

Information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of segment performance focuses on the types of goods delivered. The directors of the company have chosen to organise the Company around differences in products. No reporting segment have been aggregated in arriving at the reportable segments in the Company. Specifically, the Company's reportable segment under Ind AS 108- Operating Segments are as follows:

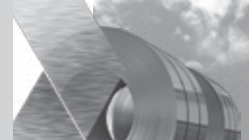
- i) Chemical segment
- ii) Aluminium segment

The Company has considered Chemicals and Aluminium as the two primary operating business segments. Chemicals include Calcined Alumina, Alumina Hydrate and other related products. Aluminium includes aluminium ingots, wire rods, billets, strips, rolled and other related products. Bauxite produced for captive consumption for production of alumina is included under chemicals and power generated for captive consumption for production of Aluminium is included under Aluminium segment. Wind Power Plant commissioned primarily to harness the potential renewable energy sources is included in the unallocated Common segment.

36.2 Segment revenues and results

The following is an analysis of the Company's revenue and results from operations by reportable segment

	Amount in ₹ Crore	
	Segment revenue	
Operating Segments	Year ended 31.03.2019	Year ended 31.03.2018
Chemical segment	5,680.07	4,339.76
Aluminium segment	6,875.72	6,323.93
Unallocated	173.95	126.75
Total for operations	12,729.74	10,790.44
Less: Intersegment revenue	1,230.42	1,172.13
Revenue from operations	11,499.32	9,618.31
Operating Segments	Segment results	
	Year ended 31.03.2019	Year ended 31.03.2018
Chemical segment	1,819.81	783.46
Aluminium segment	778.38	370.30
Segment result before exceptional items, interest and tax	2,598.19	1,153.76
Exceptional Income/(Expenses)	—	824.08
Interest & financing charges	2.37	1.95
Interest and dividend income	256.34	240.37
Other unallocated income net of unallocated expenses	(112.24)	(177.43)
Profit before tax	2,739.92	2,038.83


36.3 Segment assets and liabilities

	Amount in ₹ Crore			
	Segment Assets		Segment Liabilities	
	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
Chemical segment	4,040.88	4,041.84	1806.17	1041.48
Aluminium segment	5,579.21	5,117.43	1337.01	1606.60
Total segment assets and liabilities	9,620.09	9,159.27	3,143.18	2,648.08
Unallocated	5,526.87	5,454.53	388.60	309.46
Total assets and Liabilities	15,146.96	14,613.80	3,531.78	2,957.54

36.4 Other segment information

	Amount in ₹ Crore			
	Depreciation and amortisation		Additions to non-current assets	
	Year ended 31.03.2019	Year ended 31.03.2018	Year ended 31.03.2019	Year ended 31.03.2018
Chemical segment	180.03	174.36	250.77	256.64
Aluminium segment	236.18	248.31	53.23	(119.74)
Unallocated	59.89	57.74	137.94	161.24
Total for operations	476.10	480.40	441.94	298.14

	Material non-cash expenditure	
	Year ended 31.03.2019	Year ended 31.03.2018
		66.96
Chemical segment	52.82	85.53
Aluminium segment	2.26	7.56
Unallocated	122.04	138.79

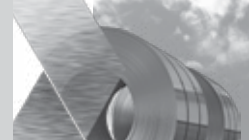
36.5 Revenue from major products

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
The following is an analysis of the Company's revenue from continuing operations from its major products and services		
Chemical segment (Hydrate and Alumina)	4,435.08	3,199.37
Aluminium segment (Aluminium)	6,823.63	6,216.38
	11,258.71	9,415.75

36.6 Geographical information

The Company operates mainly in principal geographical areas-India (country of domicile) and Outside India

	Amount in ₹ Crore			
	Revenue from external customers		Non-current assets	
	Year ended 31.03.2019	Year ended 31.03.2018	As at 31.03.2019	Year ended 31.03.2018
India	6,466.00	5,340.29	9,546.26	9,104.32
Outside India	4,792.71	4,075.46	—	—
Total	11,258.71	9,415.75	9,546.26	9,104.32


36.6 Geographical information (contd.)

Amount in ₹ Crore

Note:

i) The Company has changed the pricing of inter-segment transactions for intersegment transfers of Alumina from average export sales realisation net of freight and intersegment transfer of power from periodic average purchase price for the purpose of segment reporting to cost basis. The effect of such change, causing increase (+) or decrease (-) in the measurement of segment revenue and results, are stated below:

Particulars	Year ended 31.03.2019	Year ended 31.03.2018
Segment Revenue :		
— Chemical Segment	(-) 1628.33	(-) 822.26
— Aluminium Segment	(-) 48.24	(-) 84.88
Segment Results :		
Profit before tax, exceptional items and interest		
— Chemical Segment	(-) 1580.09	(-) 737.37
— Aluminium Segment	(+) 1580.1	(+) 737.37

ii) Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities. Revenue, expenses, assets and liabilities, which relate to the enterprise as a whole and are not allocable on a reasonable basis, have been included under Unallocated Common segment.

37. Earnings per share

Amount in ₹ Crore

37.1 Basic Earnings per share (₹)	Year ended 31.03.2019	Year ended 31.03.2018
From total operations	9.06	6.94
Total Basic earnings per share	9.06	6.94

37.2 Basic Earnings per Share

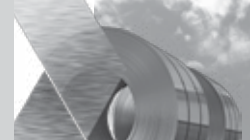
The Earnings and weighted average number of equity shares used in the calculation of basic earnings per share are as follows

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Profit for the year attributable to Owners of the Company	1,732.40	1,342.41
Earnings used in the calculation of basic earnings per share	1,732.40	1,342.41
Weighted average number of equity shares used in calculation of basic earnings per share (in crore)	191.17	193.29

38. Financial Instruments

Amount in ₹ Crore

38.1 Categories of financial instruments	As at 31.03.2019	As at 31.03.2018
Financial Assets		
Measured at fair value through profit or loss (FVTPL)		
(a) Mandatorily measured:		
(i) Investments in mutual funds	80.81	592.96
(ii) Forward contract on foreign currency	Nil	(0.44)
Measured at Amortised cost		
(a) Cash and bank balances	171.60	25.35
(b) Other financial assets at amortised cost	3,853.14	3,389.72
	4,105.55	4,007.59
Financial Liabilities		
Measured at Amortised cost	1,791.26	1,538.08



38.2 Financial risk management objectives

In the course of its business, the Company is exposed primarily to fluctuations in foreign currency exchange rates, interest rates, equity prices, liquidity and credit risk, which may adversely impact the fair value of its financial instruments. The Company has a risk management policy which not only covers the foreign exchange risks but also other risks associated with the financial assets and liabilities such as interest rate risks and credit risks.

The objectives of the Company’s risk management policy are, inter-alia, to ensure the following:

- i) Sustainable business growth with financial stability;
- ii) Provide a strategic framework for Company’s risk management process in alignment with the strategic objectives including the risk management organisation structure;
- iii) That all the material risk exposures of Company, both on and off-balance sheet are identified, assessed, quantified, appropriately mitigated and managed and
- iv) Company’s compliance with appropriate regulations, wherever applicable, through the voluntary adoption of international best practices, as far as may be appropriate to the nature, size and complexity of the operations.

The risk management policy is approved by the board of directors. The Internal Control Team would be responsible to evaluate the efficacy and implementation of the risk management system. It would present its findings to the Audit Committee every quarter. The Board is responsible for the Company’s overall process of risk management. The Board shall, therefore, approve the compliance and risk management policy and any amendments thereto, and ensure its smooth implementation.

38.3 Market risk

Market risk is the risk of any loss in future earnings (spreads), in realizable fair values (economic value) or in future cash flows that may result from a change in the price of a financial instrument. The value of a financial instrument may change as a result of changes in the interest rates, foreign currency exchange rates, liquidity and other market changes. The Company may also be subjected to liquidity risk arising out of mismatches in the cash flows arising out of sales proceeds and funds raised and loan repayments/prepayments. Future specific market movements cannot be normally predicted with reasonable accuracy.

38.4 Foreign currency risk management

Foreign currency risk emanates from the effect of exchange rate fluctuations on foreign currency transactions. The overall objective of the currency risk management is to protect the Company’s income arising from changes in foreign exchange rates. The policy of the Company is to avoid any form of currency speculation. Hedging of currency exposures shall be effected either naturally through offsetting or matching assets and liabilities of similar currency, or in the absence of thereof, through the use of approved derivative instruments transacted with reputable institutions. The Currency risk is measured in terms of the open positions in respective currencies vis-à-vis the Company’s operating currency viz. INR. A currency gap statement shall be prepared to find the gap due to currency mismatch.

The fluctuation in foreign currency exchange rates may have impact on the income statement and 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.

The Company undertakes transactions denominated in foreign currency; consequently, exposures to exchange rate fluctuations arise. Exchange rate are managed within approved policy parameters utilising forward foreign exchange contracts.

The carrying amounts of the Company’s foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:-

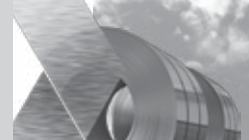
	Liabilities as at		Assets as at	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
USD	0.81	33.96	241.69	173.98
EURO	15.34	15.13	—	—

38.4.1 Foreign currency sensitivity analysis

The Company evaluates the impact of foreign exchange rate fluctuations by assessing its exposure to exchange rate risks. It hedges a part of these risks by using derivative financial instruments in accordance with its risk management policies.

The foreign exchange rate sensitivity is calculated for each currency by aggregation of the net foreign exchange rate exposure of a currency and a simultaneous parallel foreign exchange rates shift in the foreign exchange rates of each currency by 10%.

The following analysis is based on the gross exposure as of the relevant balance sheet dates, which could affect the income statement. There is no exposure to the income statement on account of translation of financial statements of consolidated foreign entities.



The following table sets forth information relating to foreign currency exposure as at March 31, 2019 and March 31, 2018.

	USD impact		EURO impact	
	Year ended	Year ended	Year ended	Year ended
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Impact on profit or loss for the year	24.1	14.0	1.53	1.51

38.5 Other price risks

38.5.1 Equity price sensitivity analysis

The Company is not exposed to equity price risk arising from equity instruments as all the equity investments are held for strategic rather than trading purposes.

38.6 Credit risk management

Credit risk is the risk of financial loss arising from counterparty failure to repay or service debt according to the contractual terms or obligations. Credit risk encompasses both the direct risk of default and the risk of deterioration of creditworthiness as well as concentration risks. There is no significant credit exposure as advance collection from customer is made.

Financial instruments that are subject to concentrations of credit risk, principally consist of investments classified as loans and receivables, trade receivables, loans and advances and derivative financial instruments. None of the financial instruments of the Company result in material concentrations of credit risks.

38.7 Liquidity risk management

Liquidity risk refers to the risk that the Company cannot meet its financial obligations. The objective of liquidity risk management is to maintain sufficient liquidity and ensure that funds are available for use as per requirements.

Company has established an appropriate liquidity risk management framework for the management of the Company's short-term, medium-term and long-term funding liquidity management requirements. The Company manages liquidity risk by maintaining adequate reserves and banking facilities by continuously monitoring forecast and actual cashflows and by matching the maturity profiles of financial assets and financial liabilities.



39. Related party disclosures

39.1 Related parties

A. Key Managerial Personnel:

I) Whole time Directors

(a) Dr. T K Chand	Chairman-Cum-Managing Director
(b) Shri K C Samal	Director (Finance) (upto 31.08.2018)
(c) Shri V Balasubramanyam	Director (Production)
(d) Shri B K Thakur	Director (HR)
(e) Shri S K Roy	Director (Proj & Tech)
(f) Shri P K Mishra	Director (Commercial)
(g) Shri S. Patra	Director (Finance) (w.e.f 01.09.2018)

Others

Shri N K Mohanty	Company Secretary
------------------	-------------------

II) Part time Official Directors: (Nominee of Govt. of India):

- (a) Dr. K Rajeswara Rao., IAS
- (b) Shri Anil Kumar Nayak, IOFS

III) Part time non official (Independent) Directors:

- (a) Ms.Kiran Ghai Sinha
- (b) Shri N N Sharma
- (c) Smt. Achla Sinha
- (d) Shri Dipankar Mahanta
- (e) Shri S. Sankararaman
- (f) Shri Pravat Keshari Nayak
- (g) Shri Maheswar Sahu
- (h) Prof.Damodar Acharya

B. Joint Ventures & associates

- (a) Angul Aluminium Park Pvt. Ltd.
- (b) NPCIL-NALCO power company Ltd.
- (c) GACL NALCO Alkalies & Chemicals Pvt. Ltd.

C. Post Employment Benefit Plan

- (a) Nalco Employees Provident Fund Trust
- (b) Nalco Employees Group Gratuity Trust

D. Entity controlled by a person identified in (A) as KMP

- (a) Nalco Foundation

E. Government that has control or significance influence:

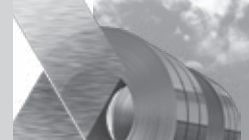
- (a) Govt. Of India

F. Entities on which Govt. of India has control or significant influence (CPSEs)

The Company has major business transactions during the year with the following CPSEs.

i) Purchase of Goods and Services

- a) Indian Oil Corporation Ltd.
- b) Bharat Petroleum Corporation Ltd.
- c) Hindustan Petroleum Corporation Ltd.
- d) Mahanadi Coalfields Ltd.
- e) Northern Coalfields Ltd.
- f) Singareni Collieries Ltd.
- g) Western Coalfields Ltd.
- h) Eastern Coalfields Ltd.
- i) Numaligarh Refinery Ltd.
- j) Bharat Earthmovers Ltd.
- k) Bharat Heavy Electrical Ltd.
- l) Mineral Exploration Corporation Ltd.
- m) Balmer Lawrie & Co.
- n) East Coast railways
- o) Vizag Port Trust
- p) MECON Limited.
- q) Engineers India Ltd.



ii) Sale of Goods

- a) National Small Industries Corporation (NSIC)
- b) Steel Authority of India Ltd.
- c) Rashtriya Ispat Nigam Ltd.
- d) National Thermal Power Corporation Ltd.

39.2 Related Party Transactions

I. Key Managerial Personnel

Amount in ₹ Crore

Remuneration to Key Managerial Personnel

Particulars	Year ended 31.03.2019	Year ended 31.03.2018
Short-term employee benefits		
— Salaries	3.79	3.22
— Contribution to Provident Fund	0.24	0.21
— Medical Benefits	0.01	0.01
— Other Benefits	0.03	0.03
Post employment benefits #	(0.09)	(0.01)
Other long term benefits	0.09	0.03
Total	4.07	3.49

Since actuarial valuation of employee benefit expenses under post-employment benefits and other long-term benefits are done on an overall basis for all employees, these expenses for the key managerial persons is considered on a proportionate basis.

Loans / advances due from Key Managerial Personnel

Amount in ₹ Crore

Particulars	As at 31.03.2019	As at 31.03.2018
Outstanding at the end of the year	0.01	0.01
Maximum amount due at any time during the year	0.01	0.07

II. Joint Venture/Associate Companies

During the year the company has made following transaction with the JVs.

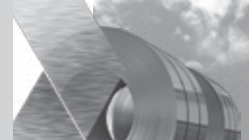
Amount in Rs. Crore

Name of JV/Associate	Nature of Transaction	Year ended 31.03.2019	Year ended 31.03.2018
Angul Aluminium Park Pvt Ltd.	Equity Contribution (rights issue)	—	1.52
GACL NALCO Alkalis & Chemicals Limited	Equity Contribution (preferential issue)	—	48.53
GACL NALCO Alkalis & Chemicals Limited	Equity Contribution (rights issue)	58.20	28.00
GACL NALCO Alkalis & Chemicals Limited	Receivable- man power assistance and other expenses	0.64	0.03

Balance at the end of the reporting day

Amount in Rs. Crore

Name of JV/Associate	Nature of Transaction	As at 31.03.2019	As at 31.03.2017
Angul Aluminium Park Pvt Ltd.	Investment in equity	16.22	16.22
NPCIL-NALCO power company Ltd	Investment in equity	—	0.03
GACL NALCO Alkalies & Chemicals Limited	Investment in equity	159.53	101.33
GACL NALCO Alkalies & Chemicals Limited	Receivable- Man power assistance	0.64	0.51



III. Post Employment Benefit Plan

Transactions during the year		Amount in Rs. Crore	
Name of Trust	Nature of Transaction	Year ended 31.03.2019	Year ended 31.03.2018
NEPF Trust	PF-Contribution	333.12	332.99
NEGG Trust	Funding of shortfall	270.75	12.6

Outstanding balance at the end of the year		Amount in Rs. Crore	
Name of Trust	Nature of Transaction	As at 31.03.2019	As at 31.03.2018
NEPF Trust	PF-Contribution payable	26.59	38.45
NEGG Trust	Funding of shortfall payable	57.4	271.05

IV. Nalco Foundation

Particulars	Amount in Rs. Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Contribution to CSR Trust	9.61	21.50

V. Govt. of India : Transaction during the year

Particulars	Amount in Rs. Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Buyback of shares	260.70	—
Final Dividend-2017-18	193.29	—
Interim Dividend-2018-19	839.53	—
Interim Dividend-2017-18	—	546.95

VI. CPSEs/ Govt Undertakings – Transaction during the year

Particulars	Amount in Rs. Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Purchase of goods and services from CPSEs/ Govt undertakings	3007.70	2747.90
Sale of goods to CPSEs and Govt undertakings	1245.97	1147.49

Outstanding balance at the end of the year		Amount in Rs. Crore	
Particulars	As at 31.03.2019	As at 31.03.2019	As at 31.03.2018
Payable for purchase of goods and services from CPSEs/ Govt. undertakings	137.78	195.03	—
Receivable for sale of goods to CPSEs and Govt. undertakings	—	—	—

40. Regrouping of previous year's figures

Previous year's figures have been regrouped/rearranged wherever necessary to make them comparable

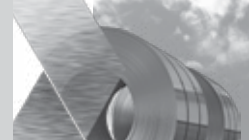
For Guha Nandi & Co.
Chartered Accountants
FRN-302039E

(CA Dr. B S Kundu)
Partner (M No.:051221)

For Patro & Co.
Chartered Accountants
FRN-310100E

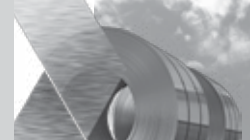
(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

Place: New Delhi
Date: May 30, 2019

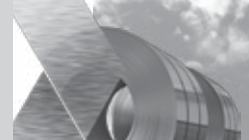


Status of Compliance to Ind ASs notified by MCA:

Ind As Nos.	Nomenclature	Description
Ind AS 1	Presentation of Financial Statement	<ul style="list-style-type: none"> — The Financial Statements of the Company have been prepared in accordance with the Indian Accounting Standards and presented in the format prescribed under Schedule III to the Companies Act 2013, following the guidelines set out in Ind AS 1 — The measurement basis used in preparing the financial statements and accounting policies adopted have been disclosed. — Information as required by Ind ASs (also discussed below against respective Ind AS) that are not presented elsewhere in the Financial Statements have been disclosed as Notes to it. The Notes to the Financial Statement also provides the information that is not presented elsewhere in the financial statements, but is relevant to an understanding of any of them.
Ind AS 2	Inventories	<ul style="list-style-type: none"> — Accounting policy adopted in measuring inventories including the cost formula used is disclosed at para 3.10 of the Significant Accounting Policy placed at Notes 3 of the Financial Statements — Disclosure in respect of classification of inventories and their carrying amounts, amount of inventory recognised as expenses, amount of any write-down of inventories recognised as an expense and inventory pledged has been made at note 15.
Ind AS 7	Statement of Cash Flow	<ul style="list-style-type: none"> — The cash flow statement using indirect method, whereby the indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows. — The cash flows are segregated into operating, investing and financing activities
Ind AS 8	Accounting Policies, Change in Accounting Estimates & Errors	<ul style="list-style-type: none"> — Any change in accounting policy is applied retrospectively, unless impracticable, adjusting the opening balance of each affected component of equity for the earliest prior period presented and the other comparative amounts disclosed for each prior period presented. — Any Change in accounting estimate which gives rise to changes in assets and liabilities, or relates to an item of equity, is recognised by adjusting the carrying amount of the related asset, liability or equity item in the period of the change. — On discovery of any prior period error(s) with an impact of Rs.50 crore during a period, the error is corrected retrospectively as guided by the standard.
Ind AS 10	Events after Reporting Period	<ul style="list-style-type: none"> — The Company adjusts the amounts recognised in its financial statements to reflect the adjusting events after the reporting period. — Dividends declared after the reporting period are not recognised as a liability at the end of the period. However, suitable disclosure is made to this effect at Note :18.4.
Ind AS 11	Construction Contract	<ul style="list-style-type: none"> — This standard is applicable in preparing the financial statements of contractors which are into the construction business. Not being a contractor for construction of any asset, Ind AS 11 is not applicable to the Company.
Ind AS 12	Income Taxes	<ul style="list-style-type: none"> — Relationship between tax expenses and accounting profit is explained through a numerical reconciliation between tax expense and the product of accounting profit multiplied by the applicable tax rate at Note 35. — Current tax and deferred tax relating to items that are recognised in other comprehensive income and directly in equity are recognised in other comprehensive income and equity respectively. Disclosures are made at Note 35.
Ind AS 16	Property, Plant & Equipment	<ul style="list-style-type: none"> — Measurement basis, useful life and method of depreciation followed for each class of property, plant and equipment has been discussed at para 3.4 of the significant accounting policy. — A reconciliation between opening carrying value and the closing carrying value stating addition during the period, disposals and depreciation expenses is placed at note 5.
Ind AS 17	Leases	<ul style="list-style-type: none"> — The Company does not have any assets which can be categorised as finance lease. — Depreciable amount of assets categorised as operating leases are amortised over the lease life on a straight line basis.
Ind AS 19	Employee Benefits	<ul style="list-style-type: none"> — Long term employees benefits are categorised into three heads i.e. Defined Contribution Plans, Defined Benefit Plans and Other Long Term Employee Benefits. Company's contribution to provident fund and pension fund of the employees are recognised as defined contribution plans where as gratuity on superannuation, post retirement medical benefits, settling-in-benefit, NALCO benevolent fund scheme, NALCO retirement welfare scheme are recognised as defined benefit plans. Payments towards compensated absences, Long service rewards and NEFFARS are recognised as long term employees benefits.

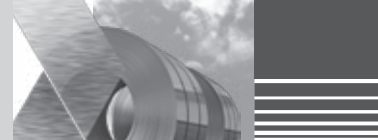


Ind AS 19	Employee Benefits	<ul style="list-style-type: none"> — Actuarial valuation of Company's obligation towards defined benefit plans and long term employees benefits have been made and the expenses/ income is recognised accordingly. — A reconciliation between the opening liability and the closing liability against each defined benefit obligations showing service cost, interest expenses/ income, rereasurement gains or losses due to change in demographic and financial assumptions are disclosed at note 31.B. — A sensitivity analysis of the actuarial assumptions showing how the defined benefit obligation would have been affected by changing the relevant actuarial assumptions is disclosed at note 31.C.
Ind AS 20	Accounting for Government Grants and Disclosure of Government Assistance	<ul style="list-style-type: none"> — Grants received from the Government for assets is presented as deferred income. Accounting policy of in this regard is disclosed at para 3.15.
Ind AS 21	The Effects of Changes in Foreign Exchange Rates	<ul style="list-style-type: none"> — Accounting policies with regard to transaction in foreign currency has been disclosed at para 3.7 of the Significant Accounting policy.
Ind AS 23	Borrowing Cost	<ul style="list-style-type: none"> — The Company capitalises borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Disclosure in this regard has been made at para 3.14 of the significant accounting policy.
Ind AS 24	Related Party Disclosure	<ul style="list-style-type: none"> — Name of related parties, aggregated sales and purchase transaction with them, any outstanding balances against them and benefits paid to and loan outstanding against the key managerial persons has been disclosed at Note 39.
Ind AS 27	Separate Financial Statements	<ul style="list-style-type: none"> — Investments made in joint ventures and associates are presented at cost in the separate financial statements.
Ind AS 28	Investment in Associates & Joint Venture	<ul style="list-style-type: none"> — The Company adjusts its' share of profit in the profit or loss of the subsidiaries with the carrying amount of the investments in its consolidated financial statements using equity method.
Ind AS 29	Financial Reporting in Hyperinflationary Economics	<ul style="list-style-type: none"> — This standard is not applicable to the company as its' functional currency is not a currency of any hyperinflationary economy.
Ind AS 32	Financial Instruments Presentation	<ul style="list-style-type: none"> — All items of assets and liabilities have been segregated into financial and other assets and liabilities based on the definitions laid down in the standard and are presented as required in Schedule III.
Ind AS 33	Earnings per share	<ul style="list-style-type: none"> — The Company has not issued any potential equity shares. Thus, both the Basic and Diluted EPS remains same. — Disclosure with regard to the weighted average number of equity shares and earnings for the period used in computation of EPS is made at Note 37.
Ind AS 34	Interim Financial Reporting	<ul style="list-style-type: none"> — Being a listed entity, the Company prepares its interim financials as required by SEBI(LODR) Regulations, 2015 in accordance with the recognition and measurement principles laid down in this standard on a quarterly basis.
Ind AS 36	Impairment of Asset	<ul style="list-style-type: none"> — Accounting policy relating to impairment of various assets is disclosed at respective paras in the significant accounting policies. — The management reviews the carrying values of assets at each reporting date and assesses whether there is any indication that an asset may be impaired in accordance with the standard.
Ind AS 37	Provisions, Contingent Liabilities and Assets	<ul style="list-style-type: none"> — Accounting policies relating to Provisions, Contingent Liabilities and Assets are stated at para 3.8 of the Significant Accounting Policies. — Provisions are recognised when the company has a present obligation as a result of past events, legal or constructive, which requires out flow of resources to settle the obligation and can reliably be estimated considering the risks and uncertainties surrounding the event. Movement of different types of provisions are disclosed at note 22 (C). — In case of other obligations that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the company contingent liabilities are disclosed at note 25 and in compliance with the requirement of Schedule III. — Contingent assets are not recognised but are disclosed where an inflow of economic benefits is probable.
Ind AS 38	Intangible Assets	<ul style="list-style-type: none"> — The accounting policy in this regard is mentioned at para 3.5 of the significant accounting policies. — The Company recognises expenditure on R&D activities, payments towards NPV, expenditure on cluster projects and expenditure on softwares, which qualifies the conditions for recognitions laid down in the standard, as intangible assets. — Reconciliation of opening carrying amount and closing carrying amount of intangible assets showing additions, reduction and amortisation is placed at note 7.



Ind AS 40	Investment Property	The company does not have any investment property, thus the standard is not applicable.
Ind AS 41	Agriculture	The company does not have any agricultural activity, thus the standard is not applicable.
Ind AS 101	First time Adoption of Indian Accounting Standards	The Company adopted Ind AS in the year 2016-17 and hence this standard is no longer applicable.
Ind AS 102	Share Based Payments	— There is no such transaction during the year which involves share-based payments, hence the standard is not applicable.
Ind AS 103	Business Combination	— The standard is not applicable.
Ind AS 104	Insurance Contracts	— The standard is not applicable.
Ind AS 105	Non-Current Assets Held for Sale and Discontinued Operations	— The Company does not have any disposal group, thus no disclosure has been made.
Ind AS 106	Exploration for and Evaluation of Mineral Resources	— The Company has not incurred any expenses on exploration and evaluation of mineral resources, hence the standard is not applicable.
Ind AS 107	Financial Instruments Disclosure	— Disclosure as required by the standard with regard to classification of financial instruments, nature and extent of risk arising from the instruments both qualitative and quantitatives are made at note 37.
Ind AS 108	Operating Segments	— The Company has classified its operation into two segments i.e. Chemical Segment and Aluminium Segment based on the approach of the Chief Operating Decision Maker (CODM) what it takes while reviewing the performance of the Company. — Segment revenue, results, assets and liabilities, revenue from major products, geographical informations and other segment informations are disclosed at note 35.
Ind AS 109	Financial Instruments	— Except investments in mutual funds and forward contract on foreign currency other Financial assets and liabilities have been measured at amortised cost and same is disclosed at note 37.
Ind AS 110	Consolidated Financial Statements	— Consolidated financial statements are prepared considering the joint ventures and associates of the company following the equity method of consolidation.
Ind AS 111	Joint Arrangements	— The Company follows the principles set out in the standard for financial reporting of its interest in arrangements that are jointly controlled.
Ind AS 112	Disclosure of Interest in Other Entities	— The Company has two joint ventures whose summarised financial informations and its reconciliation with the carrying amount of the interest are disclosed at note 9.
Ind AS 113	Fair Value Measurement	— The Company has adopted the principles of fair value measurement as laid down in the standard while measuring its financial assets and liabilities. — Accounting policy in this regard is disclosed at para 4.2.6. of the Significant Accounting Policy.
Ind AS 114	Regulatory Deferral Accounts	— The Company is not subject to any rate regulation, thus the standard is not applicable.
Ind AS 115	Revenue from contracts with customers	— The Company recognises revenue on completion of all its performance obligation relating to the contract with the customers.

Consolidated
Financial Statements
for 2018-19



To the Members of
National Aluminium Company Limited

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the accompanying consolidated financial statements of **National Aluminium Company Limited** (hereinafter referred to as “the Company”) and its jointly controlled entities, which comprise the consolidated balance sheet as at March 31, 2019, and the consolidated statement of profit and loss (including other comprehensive income), the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as the “consolidated financial statements”).

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated 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 Indian Accounting Standards (Ind AS) prescribed under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015 as amended and the accounting principles generally accepted in India, of the consolidated state of affairs of the Company as at March 31, 2019, of consolidated profit, total comprehensive income, consolidated changes in equity and its consolidated cash flows for the year then ended on that date.

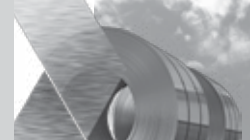
Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) 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 Financial Statements section of our report. We are independent of the Company and its jointly controlled entities 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 consolidated 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 opinion.

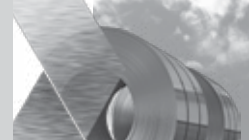
Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The key audit matters that we have identified in the current year are as follows:

Key Audit Matter	How the matter was addressed in our audit
1. Carrying value of property, plant and equipment including intangible assets and capital work-in- progress	
<p>Property, plant and equipment (Note 5) ₹7109.37 crore (2017-18 : ₹7019.38 crore); capital work-in-progress (Note 6) ₹843.91 crore (2017-18 : ₹825.83 crore); and intangible assets (Note 7) ₹176.41 crore (2017-18 : ₹120.08 crore) represent significant balances recorded in the consolidated statement of financial position. Significant accounting policies in respect of property, plant and equipment, capital work-in-progress and intangible assets are described in Note 3.4, 3.5 & 3.6.</p> <p>The evaluation of the recoverable amount of these assets requires significant judgement in determining the key assumptions supporting the expected future cash flows of the business and the utilisation of the relevant assets.</p> <p>There are a number of areas where management judgement impacts the carrying value of property, plant and equipment, intangible assets and their respective depreciation profiles. These include the decision to capitalise or expense costs; the asset life review including the impact of changes in the strategy; and the timeliness of the transfer from assets in the course of construction.</p>	<p>We evaluated the assumptions made by management in the determination of residual values and useful lives to ensure that these are consistent with the principles of Ind AS 16 <i>Property, Plant and Equipment</i> and Ind AS 38 <i>Intangible Assets</i>.</p> <p>We assessed whether useful lives and residual values were reasonable by challenging management’s judgements through comparing the useful lives and residual values prescribed in Schedule II to the Companies Act 2013.</p> <p>We compared the useful lives of each class of asset in the current year to the prior year to determine whether there were any significant changes in the useful lives of assets, and considered the reasonableness of changes based on our knowledge of the business and the industry.</p> <p>We assessed whether indicators of impairment existed as at 31 March 2019 based on our knowledge of the business and the industry;</p> <p>We tested the controls in place over the property, plant and equipment and intangible assets, evaluated the appropriateness of capitalisation policies, performed tests of details on costs capitalised and assessed the timeliness of the transfer of assets in the course of construction and the application of the asset life.</p>



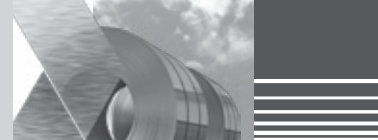
Key Audit Matter	How the matter was addressed in our audit
	<p>In performing these substantive procedures, we assessed the judgements made by management including the nature of underlying costs capitalised; the appropriateness of asset lives applied in the calculation of depreciation and amortisation; and in assessing the need for accelerated depreciation/ amortisation, if required, in the context of impairment.</p> <p>We found management's assessment in determining the carrying value of the property, plant and equipment and intangible assets to be reasonable.</p>
2. Valuation of Inventory	
<p>As described in Note 3.10 (Significant Accounting Policies) and Note 15 (Inventories), inventory is carried at the lower of cost and net realisable value as at 31st March 2019 at ₹1210.01 crore (2017- 18 : ₹1194.08 crore).</p> <p>Obsolescence is provided based on period for which an items remains as non- moving. This methodology relies upon assumptions made in determining appropriate provisioning to apply to inventory balances.</p>	<p>We obtained a detailed understanding and evaluated the design and implementation of controls that has been established in relation to inventory valuation.</p> <p>We obtained assurance over the appropriateness of management's control over transfer of finished product from one unit to be used as raw material in other unit and estimating year end actual level of in process stock compared to standard level to be maintained for ensuring continuity of production process and used data analytics to identify unusual inventory usage characteristics.</p> <p>We critically assessed the inventory provisioning policy, with specific consideration given to aged inventory and their movement status;</p> <p>We have verified the value of a sample of inventory items to confirm whether they are held at the lower of cost and net realisable value.</p> <p>We agree with the value of inventory as determined by the management.</p>
3. Valuation of employees' defined benefit obligations and other long-term benefits	
<p>Long-term employee benefit liabilities of ₹380.20 crore (2017-18 : ₹304.76 crore) and defined benefit obligations (net of plan asset against funded gratuity obligation) of ₹225.13 crore (2017-18 : ₹424.19 crore) have been recognised and described in Note 3.16 (Significant Accounting Policies) and Notes 22 & 31 of the consolidated financial statements.</p> <p>The valuation of employee benefit obligations is dependent on market conditions and assumptions made. The key audit matter specifically relates to the following key assumptions: discount rate, inflation expectations and life expectancy assumptions. The setting of these assumptions is complex and requires the exercise of significant management judgement with the support of third party actuary.</p>	<p>In testing the valuation, we have examined the reports of external actuarial specialists to review the key actuarial assumptions used, both financial and demographic, and considered the methodology utilised to derive these assumptions. Furthermore, we have examined the sensitivity analysis on the key assumptions in valuing the defined benefit obligations.</p> <p>We are satisfied that the methodology and assumptions applied in relation to determining the liabilities are acceptable.</p>
4. Ascertainment, disclosure and provisioning in respect of contingent liabilities	
<p>As described in Note 4.2.5 (Critical accounting judgments and key sources of estimation uncertainty) contingent liabilities of ₹2771.59 crore (2017-18 : ₹2552.08 crore) is disclosed in Note 25 of the consolidated financial statements.</p> <p>There is material uncertain tax matters, both direct and indirect, under dispute involving aggregate demand of ₹1814.14 crore (2017-18 : ₹1526.41 crore) which require significant judgment to determine the possible outcome of these disputes.</p>	<p>We obtained a detailed understanding and evaluated the design and implementation of controls that has been established in relation to disclosure and provisioning of contingent liabilities in accordance to Ind AS 37 <i>Provisions, Contingent Liability and Contingent Assets</i>.</p> <p>Regarding direct and indirect tax contingent liabilities, we undertook following principal audit procedures:</p> <ul style="list-style-type: none"> — Assessment of the process and relevant controls implemented to identify tax litigations and pending administrative proceedings. — Assessment of assumptions used in the evaluation of potential tax risks performed by the tax department considering the legal precedence and other rulings in similar cases.



Key Audit Matter	How the matter was addressed in our audit
<p>Additionally, there are other ongoing legal matters relating to various claims by the Government of Odisha or other agencies constituted by the State Government and by contractors/ suppliers involving aggregate demand of ₹957.45 crore (2017-18 : ₹1025.67 crore) which require application of management judgement in order to determine the likely outcome.</p>	<ul style="list-style-type: none"> — Discussion with the management regarding the status of the most significant disputes and inspection of the key relevant documentation. — Analysis of opinion received from tax experts where available. — Review of the adequacy of the disclosures in the notes to the consolidated financial statements. <p>In assessing the potential exposures in respect of other contingent liabilities, we have:</p> <ul style="list-style-type: none"> — assessed the design and implementation of controls in relation to the monitoring of known exposures; — referred Board and other meeting minutes to identify areas subject to consideration; — consulted with the internal legal advisors in understanding ongoing and potential legal matters having an impacting on consolidated financial position; — reviewed available legal opinions from experts; and — reviewed the proposed accounting and disclosure of actual and potential legal liabilities. <p>We concur that the accounting and disclosures in relation to the ongoing legal matters are appropriate.</p>
5. Advances and deposits in respect of tax matters under litigation continuing as assets	
<p>As at March 31, 2019, other assets (Note 14) includes recoverable claims of direct and indirect tax deposits (net of provision) including GST, VAT and Cenvat credits amounting to ₹597.61 crore (2017-18 : ₹581.95 crore) which are pending adjustment/adjudication.</p> <p>Significant judgement is required in assessing the nature of these exposures and their accounting and disclosure requirements.</p>	<p>Our audit procedure was to obtain from management details of completed tax assessments and demands and appeal orders of the appellate authority. We involved our internal experts to challenge the management's underlying assumptions in estimating the tax liability and the possible outcome of the disputes. Our internal experts also considered legal precedence and other rulings in evaluating management's position on these uncertain tax positions. Additionally, we have considered opinions of legal and tax experts, wherever available, to review the nature of the amounts recoverable, the sustainability and the likelihood of recoverability upon final resolution.</p> <p>We are in agreement with the management's determination of the claim amount considered recoverable.</p>
6. Valuation of deferred tax assets and liabilities	
<p>Note 23 discloses deferred tax liability (net of deferred tax asset) as on March 31, 2019 ₹1130.67 crore (2017-18: ₹1151.45 crore).</p> <p>The activities involves application of multiple income tax provisions. The assessment of the valuation of deferred tax assets/ liability, resulting from timing differences, and provisions for uncertain tax positions is significant to our audit as the calculations are complex and depend on sensitive and judgmental assumptions. These include, amongst others, long-term future profitability and local fiscal regulations and developments.</p>	<p>Our audit procedures included, among others, ascertaining the completeness and accuracy of the deferred tax assets/liabilities and recognizing uncertain tax positions. We challenged and tested the Management's assessment of the recoverability of the deferred tax assets, and the probability of future cash outflows in respect deferred tax liabilities identified. We also assessed the applicable local fiscal regulations and developments, in particular those related to changes in the statutory income tax rate and of the statutes of limitation, as these are key assumptions underlying the valuation of the deferred tax assets/liabilities. We analysed the tax positions and evaluated the assumptions and methodologies used. In addition, we also focused on the adequacy of disclosures as per Ind AS 12 <i>Income Taxes</i> on deferred tax assets/liabilities and assumptions used.</p> <p>We are satisfied that the methodology and assumptions applied in relation to determining the deferred tax assets and liabilities are acceptable.</p>

Other Information

The Company's Board of Directors is responsible for the other information. The other information comprises the information contained in Directors' Report including Annual Report on CSR Activities, Management Discussion & Analysis Report, Business Responsibility Report, Report on Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and outgo, Report on Corporate Governance annexed thereto and other information contained in the Annual Report, but does not include the consolidated financial statements and our report thereon. These reports are expected to be made available to us after the date of this auditors' report.



Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the other information, if we conclude that there is material misstatement therein, we are required to communicate the matter to those charged with governance.

Management's Responsibility for the Consolidated 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 and presentation of these consolidated financial statements in term of the requirements of the Act that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Company including its jointly controlled entities in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under section 133 of the Act. The respective Board of Directors of the Company and its jointly controlled entities are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the respective companies and for preventing and detecting frauds and other irregularities; the 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 accuracy and completeness of the accounting records, relevant to the preparation and presentation of the consolidated 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 financial statements by the Directors of the Company, as aforesaid.

In preparing the consolidated financial statements, the respective Board of Directors of the Company and its jointly controlled entities are responsible for assessing their 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 of the Company or the jointly controlled entities either intends to be liquidated or to cease operations, or has no realistic alternative but to do so.

The respective Board of Directors of the Company and jointly controlled entities are responsible for overseeing the financial reporting process of the Company and of the jointly controlled entities.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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 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 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 Companies Act, 2013, 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 ability of the Company and its 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 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 or its jointly controlled entities to cease to continue as a going concern.



- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities of the Company and its jointly controlled entities to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in.

We communicate with those charged with governance of the Company and such other entities included in the consolidated 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 financial statements of the current period 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 Matters

The consolidated financial statements include the Company's share of net profit of ₹1.29 crore for the year ended 31st March, 2019, as considered in the consolidated financial statements, in respect of jointly controlled entities, whose financial statements have not been audited by us. These financial statements have been audited by other auditors whose reports have been furnished to us by the Management and our opinion on the consolidated financial statements, in so far as it relates to the amounts and disclosures included in respect of these jointly controlled entities, and our report in terms of sub-sections (3) and (11) of Section 143 of the Act, in so far as it relates to the aforesaid jointly controlled entities, is based solely on the reports of the other auditors.

Our opinion on the consolidated 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.

Report on Other Legal and Regulatory Requirements

1. In compliance to directions of the Comptroller and Auditor General of India u/s.143(5) of the Act, we give in Annexure "A" to this report a statement on the matters specified therein.
2. As required by Section 143(3) of the Act, we report, to the extent applicable, 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 of the aforesaid consolidated financial statements.
 - (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated financial statements have been kept so far as it appears from our examination of those books and the reports of the other auditors.
 - (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss, and the Consolidated Cash Flow Statement dealt with by this Report are in agreement with the relevant books of account maintained for the purpose of preparation of the consolidated financial statements.
 - (d) In our opinion, the aforesaid consolidated financial statements comply with the Accounting Standards specified under Section 133 of the Act.
 - (e) Section 164(2) of the Act regarding disqualification of directors is not applicable to the Company by virtue of Notification No. G.S.R. 463(E) dated 05.06.2015 and on the basis of the reports of the statutory auditors of its jointly controlled entities incorporated in India, none of the director of these jointly controlled entities is disqualified as on 31st March, 2018 from being appointed as a director in terms of Section 164 (2) of the Act.
 - (f) With respect to the adequacy of internal financial controls over financial reporting of the Company and its jointly controlled entities and the operating effectiveness of such controls, refer to our separate report in Annexure "B" to this report.



- (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
- i. The Company and its jointly controlled entities have pending litigations, the liabilities in respect of which is either provided for or disclosed as contingent liabilities – Refer Note 25 to consolidated financial statements. The impact of these pending litigations on the consolidated financial position of the Company including its jointly controlled entities is subject to their judicial outcome;
 - ii. The Company including its jointly controlled entities did not have any material foreseeable losses on long-term contracts including derivative contracts.
 - iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company or its jointly controlled entities incorporated in India.

For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

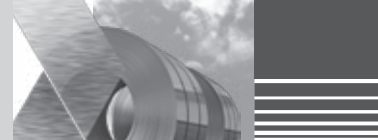
(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi

Date : 30.05.2019



ANNEXURE - "A"

ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2019 OF NATIONAL ALUMINIUM COMPANY LIMITED

(Referred to in paragraph 1 under the heading of "Report on Other Legal and Regulatory Requirements" of our Report of even date)

Report on the directions under section 143(5) of the Companies Act, 2013 by the Comptroller & Auditor General of India

According to the information and explanations given to us by the management and on the basis of our examination of books and records of the Company, we report that:

1. The Company has SAP system in place to process all the accounting transactions through IT system. AS there is no processing of accounting transactions outside IT system, comment on the integrity of the accounts and financial implications of accounting transactions processed outside IT system does not arise.
2. The Company has not obtained any loan and as such question of restructuring of loan by the lender does not arise.
3. During the year no fund has been received by the Company from Central/State agencies for any scheme and hence accounting of receipt of fund and utilization thereof as per terms and conditions does not arise.

Our reports under Section 143(5) of the Act on the consolidated financial statements of National Aluminium Co. Ltd., in so far as it relates to the jointly controlled entities of the Company, to which Section 143(5) of the Act is applicable, is based on the corresponding reports of the auditors of such jointly controlled entities and information furnished by the management of such jointly controlled entities. As informed to us, GACL-NALCO Alkalies & Chemicals Pvt. Ltd., a jointly controlled entity of the Company, is not a Government company and hence section 143(5) is not applicable to it.

For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

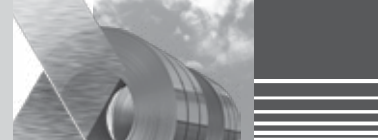
(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi

Date : 30.05.2019



ANNEXURE "B"

ANNEXURE TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST MARCH 2019 OF NATIONAL ALUMINIUM COMPANY LIMITED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

In conjunction with our audit of the consolidated financial statements of the Company as of and for the year ended March 31, 2019, we have audited the internal financial controls over financial reporting of NATIONAL ALUMINIUM COMPANY LIMITED (hereinafter referred to as ("the Company")) and considered the auditors' reports on Internal Financial Controls over financial reporting of its jointly controlled entities, which are companies incorporated in India, as of that date.

The financial statements of the jointly controlled entities have been audited by other auditors whose reports have been furnished to us and our opinion on the consolidated financial statements, in so far as it relates to the amounts and disclosures included in respect of these jointly controlled entities, and our report in terms of sub-sections (3) and (11) of Section 143 of the Act, in so far as it relates to these jointly controlled entities, is based solely on the reports of the other auditors

Our aforesaid reports under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting in so far as it relates to the jointly controlled entities, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies.

Management's Responsibility for Internal Financial Controls

The respective Board of Directors of the Company and 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 the Company 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 Companies Act, 2013.

Auditors' Responsibility

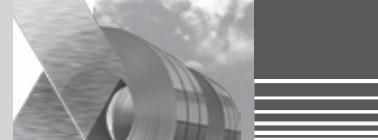
Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing, both issued by ICAI and deemed to be prescribed under section 143(10) of the Companies Act, 2013, 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 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 system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, 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 judgment, including the assessment of the risks of material misstatement of financial statements, whether due to fraud or error.

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 Company's internal financial controls system over financial reporting.

Meaning of Internal Financial Controls Over Financial Reporting

A company's internal financial control over financial reporting 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 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 authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized 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

Because of the inherent limitations of internal financial controls over financial reporting, 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 to future periods are subject to the risk that the internal financial control over financial reporting 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 and its jointly controlled entities, which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting 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 the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

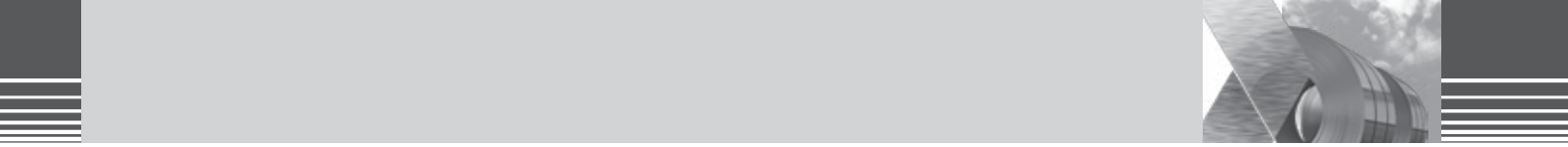
For Guha Nandi & Co.
Chartered Accountants
FRN: 302039E

(CA Dr. B. S. Kundu)
Partner
Membership No.051221

For Patro & Co.
Chartered Accountants
FRN: 310100E

(CA Ambika Prasad Mohanty)
Partner
Membership No.057820

Place : New Delhi
Date : 30.05.2019



**COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA
UNDER SECTION 143(6)(b) READ WITH SECTION 129(4) OF THE COMPANIES ACT, 2013
ON THE CONSOLIDATED FINANCIAL STATEMENTS OF
NATIONAL ALUMINIUM COMPANY LIMITED
FOR THE YEAR ENDED 31 MARCH 2019**

The preparation of consolidated financial statements of National Aluminium Company Limited for the year ended 31 March 2019 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 (Act) is the responsibility of the management of the company. The statutory auditor appointed by the Comptroller and Auditor General of India under section 139(5) read with section 129(4) of the Act is responsible for expressing opinion on these financial statements under section 143 read with section 129(4) of the Act based on independent audit in accordance with the standards on auditing prescribed under section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 30 May 2019.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit of the consolidated financial statements of National Aluminium Company Limited for the year ended 31 March 2019 under section 143(6)(a) read with section 129(4) of the Act. We conducted a supplementary audit of the financial statements of National Aluminium Company Limited, but did not conduct supplementary audit of the financial statements of its associate company NPCIL-NALCO Power Company Limited and Joint venture Company Angul Aluminium Park Private Limited for the year ended on that date. Further, section 139(5) and 143(6)(a) of the Act are not applicable to GACL-NALCO Alkalies & Chemicals Private Limited being private entity, for appointment of their Statutory Auditor and for conduct of supplementary audit. Accordingly, Comptroller and Auditor General of India has neither appointed the Statutory Auditors nor conducted the supplementary audit of this company. This supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records.

On the basis of my supplementary audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to statutory auditors' report under Section 143(6)(b) of the Act.

For and on the behalf of the
Comptroller & Auditor General of India

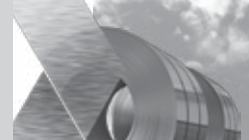
(Suparna Deb)

Director General of Commercial Audit
& Ex-officio Member, Audit Board-I,
Kolkata

Place: Kolkata
Date: 08 Jul 2019

CONSOLIDATED BALANCE SHEET

as at March 31, 2019



Particulars	Notes	Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
Assets			
(1) Non-current assets			
(a) Property, plant and equipment	5	7,109.37	7,019.38
(b) Capital work-in-progress	6	843.91	825.83
(c) Intangible assets	7	176.41	120.08
(d) Intangible assets under development	8	38.80	89.39
(e) Financial assets			
(i) Investments	9	176.21	116.75
(ii) Trade receivables	10	—	—
(iii) Loans	11	74.74	74.96
(iv) Other financial assets	12	10.37	13.14
(f) Other non-current assets	14	1,116.88	843.93
Total non-current assets		9,546.69	9,103.46
(2) Current assets			
(a) Inventories	15	1,210.01	1,194.08
(b) Financial assets			
(i) Investments	9	80.81	592.96
(ii) Trade receivables	10	240.52	258.13
(iii) Cash and cash equivalents	16	171.60	25.35
(iv) Bank balances other than (iii) above	16	3,324.75	2,743.60
(v) Loans	11	25.75	29.29
(vi) Other financial assets	12	1.23	152.55
(c) Current tax assets (Net)	13	51.26	33.66
(d) Other current assets	14	494.77	479.86
Total current assets		5,600.70	5,509.48
Total assets		15,147.39	14,612.94
Equity and liabilities			
(1) Equity			
(a) Equity share capital	17	932.81	966.46
(b) Other equity	18	9,552.13	9,537.49
Total equity		10,484.94	10,503.95
Liabilities			
(2) Non-current liabilities			
(a) Financial liabilities			
(i) Trade payables			
(a) Dues of micro and small enterprises	20	—	—
(b) Dues of creditros other than micro and small enterprises	20	21.14	15.63
(ii) Other financial liabilities	21	6.70	2.85
(b) Provisions	22	530.93	436.09
(c) Deferred tax liabilities (Net)	23	1,130.67	1,151.45
(d) Other non-current liabilities	24	67.89	62.04
Total non-current liabilities		1,757.33	1,668.06
(3) Current liabilities			
(a) Financial liabilities			
(i) Borrowings	19	66.79	44.99
(ii) Trade payables			
(a) Dues of micro and small enterprises	20	2.22	4.53
(b) Dues of creditros other than micro and small enterprises	20	1,283.55	957.21
(iii) Other financial liabilities	21	410.86	512.87
(b) Other current liabilities	24	976.19	545.45
(c) Provisions	22	165.51	375.88
Total current liabilities		2,905.12	2,440.93
Total liabilities		4,662.45	4,108.99
Total equity and liabilities		15,147.39	14,612.94

See accompanying notes (1-42) to the financial statements

For and on behalf of Board of Directors

(CS. N K Mohanty)
(Company Secretary)

(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

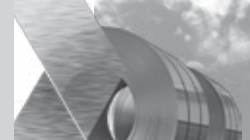
In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E
(CA Dr. B S Kundu)
Partner (M No.:051221)

For Patro & Co.
Chartered Accountants
FRN-310100E
(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

Place: New Delhi
Date : May 30, 2019

CONSOLIDATED STATEMENT OF PROFIT AND LOSS for the period ended March 31, 2019



	Notes	Amount in ₹ Crore	
		Year ended 31.03.2019	Year ended 31.03.2018
I Revenue from operations	27	11,499.32	9,618.31
II Other Income	28	325.87	299.65
III Total Income (I + II)		11,825.19	9,917.96
IV EXPENSES			
(a) Cost of raw materials consumed	29	1,919.68	1,465.31
(b) Cost of power and fuel consumed	29	2,927.12	2,747.92
(c) Changes in inventories of finished goods and work-in-progress	30	(5.08)	47.43
(d) Employee benefits expenses	31	2,072.28	2,261.20
(e) Finance costs	32	2.38	1.95
(f) Depreciation and amortisation expenses	5 & 7	476.10	480.40
(g) Excise duty		—	108.86
(h) Other expenses	33	1,692.79	1,590.14
Total expenses (IV)		9,085.27	8,703.21
V Profit/(loss) before exceptional items and tax (III - IV)		2,739.92	1,214.75
VI Exceptional Items	34	—	(824.08)
VII Share of Profit/(loss) of Joint Ventures		1.29	(0.22)
VIII Profit/(loss) before tax (V - VI+VII)		2,741.21	2,038.61
IX Tax Expense			
(1) Current tax	35	1,024.65	793.18
(2) Deferred tax	35	(17.13)	(96.76)
X Profit/(loss) for the period (VIII - IX)		1,733.69	1,342.19
XI Other comprehensive income			
(i) Items that will not be reclassified to profit or loss			
- Remeasurement gains / (losses) on defined benefit plans		0.06	52.66
(ii) Income tax relating to items that will not be reclassified to profit or loss	35	0.21	2.63
Other comprehensive income for the period(net of tax) (XI)		(0.15)	50.03
XII Total comprehensive income for the period (X+XI) (comprising profit/(loss) and other comprehensive income for the period)		1,733.54	1,392.22
XIII Earnings per equity share:			
(1) Basic (in ₹)	37	9.07	6.94
(2) Diluted (in ₹)	37	9.07	6.94

See accompanying notes (1-42) to the financial statements

(CS. N K Mohanty)
(Company Secretary)

For and on behalf of Board of Directors

(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

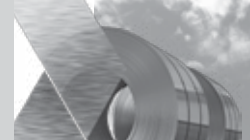
In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E
(CA Dr. B S Kundu)
Partner (M No.:051221)

For Patro & Co.
Chartered Accountants
FRN-310100E
(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

Place: New Delhi
Date: May 30, 2019

CONSOLIDATED BALANCE SHEET as at March 31, 2019



Amount in ₹ Crore

A. Equity share capital

Balance as at 31.03.2017	966.46
Changes in equity share capital during the year	—
Balance as at 31.03.2018	966.46
Buy-back of equity shares	(33.65)
Balance as at 31.03.2019	932.81

B. Other equity

Amount in ₹ Crore

Other equity	Reserves and surplus			Total
	Capital redemption reserve	General reserve	Retained earnings	
Balance as at 31.03.2017	322.16	8,620.53	296.00	9,238.69
Profit for the year	—	—	1,342.19	1,342.19
Other comprehensive income (net of taxes)	—	—	50.03	50.03
Total comprehensive income for the year	—	—	1,392.22	1,392.22
Interim dividend for the year			(908.48)	(908.48)
Tax on interim dividend for the year			(184.94)	(184.94)
Balance as at 31.03.2018	322.16	8,620.53	594.80	9,537.49
Profit for the year	—	—	1,733.69	1,733.69
Other comprehensive income (net of taxes)	—	—	(0.15)	(0.15)
Total comprehensive income for the year	—	—	1,733.54	1,733.54
Premium on Buy-back of equity shares		(471.18)	—	(471.18)
Expenses on Buy-back of equity shares (net of tax benefit)		(2.60)	—	(2.60)
Transfer of general reserve to Capital redemption reserve	33.65	(33.65)	—	—
Final dividend for previous year	—	—	(193.29)	(193.29)
Tax on final dividend for previous year			(39.73)	(39.73)
Interim dividend for the year			(839.53)	(839.53)
Tax on interim dividend for the year			(172.57)	(172.57)
Balance as at 31.03.2019	355.81	8,113.10	1,083.22	9,552.13

For and on behalf of Board of Directors

(CS. N K Mohanty)
(Company Secretary)

(Sridhar Patra)
Director (Finance)
DIN: 06500954

(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E

(CA Dr. B S Kundu)
Partner (M No.:051221)

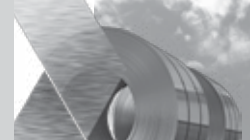
Place : New Delhi
Date : May 30, 2019

For Patro & Co.
Chartered Accountants
FRN-310100E

(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

CONSOLIDATED STATEMENT OF PROFIT AND LOSS

for the period ended March 31, 2019



	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
A. Cash flows from operating activities		
Profit for the period	1,733.69	1,342.19
Adjustments for:		
Income tax expense recognised in profit or loss	1,007.52	696.42
Share of profit of Joint Ventures	(1.29)	0.22
Finance costs recognised in profit or loss	2.38	1.95
Interest income recognised in profit or loss	(237.14)	(184.79)
Dividend income recognised in profit or loss	(30.61)	(33.65)
Net (gain) / loss on sale of non-current investments	—	(13.91)
Net (gain) / loss on disposal of property, plant and equipment	7.50	(0.44)
Net (gain) / loss arising on financial assets mandatorily measured at fair value through profit or loss	2.16	(2.96)
Impairment loss recognised on other assets	(3.51)	13.43
Inventories of stores, spares written off	12.52	15.98
Depreciation and amortisation of non-current assets	476.10	480.40
Amortisation of lease premium	75.52	1.87
Net foreign exchange (gain)/loss	(8.62)	2.55
Operating profit before working capital changes	3,036.22	2,319.26
Movements in working capital:		
(Increase) / decrease in inventories	(28.37)	(54.62)
(Increase) / decrease in trade receivables	17.61	(73.88)
(Increase) / decrease in loans and other financial asset	157.85	14.62
(Increase) / decrease in other assets	6.08	98.89
Increase / (decrease) in trade payables	338.16	110.75
Increase / (decrease) in other financial liabilities	(4.73)	6.25
Increase / (decrease) in other liabilities	30.00	(766.01)
Increase / (decrease) in provisions	(123.08)	417.56
Cash (used in) / generated from operations	3,429.74	2,072.82
Income taxes paid	(1,020.89)	(482.49)
Net cash flow from operating activities	2,408.85	1,590.33
B. Cash flows from investing activities		
Payments to acquire financial assets	(48.00)	(420.00)
Proceeds from sale of financial assets	560.97	1,065.03
Payments to acquire equity in joint ventures and associates	(58.19)	(78.05)
Investment in term deposits with banks	(385.77)	(326.27)
Dividends received from other investments	30.61	33.65
Interest received from banks and others	237.14	184.79
Payments for property, plant and equipment (including capital advances)	(749.49)	(790.78)
Proceeds from disposal of property, plant and equipment	8.56	11.82
Payments for other intangible assets	(18.49)	(46.57)
Payment for acquiring leasehold assets	(109.19)	(123.07)
Net cash flow from investing activities	(531.85)	(490.16)
C. Cash flows from financing activities		
Payments for buy-back of equity shares	(504.83)	—
Payments for share buy-back costs (net of tax)	(2.60)	—
Proceeds from short term borrowings	21.80	(6.10)
Finance cost paid	(0.00)	(0.13)
Dividends paid on equity shares	(1,032.82)	(908.48)
Tax on dividends paid on equity shares	(212.30)	(184.94)
Net cash flow from financing activities	(1,730.75)	(1,099.65)
Net increase or (decrease) in cash or cash equivalents	146.25	0.52
Cash and cash equivalents at the beginning of the year	25.35	24.83
Cash and cash equivalents at the end of the year [refer note 16.A]	171.60	25.35

Note: Figures in the brackets are cash outflow/income as the case may be.

For and on behalf of Board of Directors

(CS. N K Mohanty)
(Company Secretary)

(Sridhar Patra)
Director (Finance)
DIN: 06500954

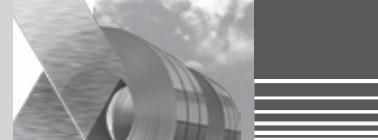
(Dr. T K Chand)
Chairman-Cum-Managing Director
DIN: 01710900

In terms of our attached report of even date.

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E
(CA Dr. B S Kundu)
Partner (M No.:051221)

For Patro & Co.
Chartered Accountants
FRN-310100E
(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

Place: New Delhi
Date: May 30, 2019



Note No.1 Corporate Background

National Aluminium Company Limited is a Navratna Central Public Sector Enterprise (CPSE) under Ministry of Mines, Government of India, incorporated under the relevant provisions of the Companies Act and is listed in the stock exchanges in India. The Company is engaged in the business of manufacturing and selling of Alumina and Aluminium. The Company is operating a 22.75 lakh TPA Alumina Refinery plant located at Damanjodi in Koraput district of Odisha and 4.60 lakh TPA Aluminium Smelter located at Angul, Odisha. The Company has a captive bauxite mines adjacent to refinery plant to feed the bauxite requirement of Alumina Refinery and also a 1200 MW captive thermal power plant adjacent to Smelter plant to meet the power requirement of Smelter. Besides, the Company is also operating four wind power plants with total capacity of 198.40 MW located in the state of Andhra Pradesh (Gandikota), Rajasthan (Jaisalmer & Devikot) and Maharashtra (Sangli) to harness the renewable energy and to comply with its Renewable Purchase Obligation. The Company has made strategic investments in two joint ventures companies namely Angul Aluminium Park Pvt. Ltd. and Gujarat Alkalies and Chemicals Pvt. Ltd. for furtherance of its business.

Note No.2 Statement of Compliance:

All the Indian Accounting Standards issued and notified by the Ministry of Corporate Affairs under the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and are applicable for the year and relevant to the Company and its joint ventures have been taken into consideration and complied with without any exception while preparing the consolidated financial statements of the Company and its joint ventures.

Note No.3 Significant Accounting Policies:

3.1 Basis of preparation

The consolidated financial statements of the Company and its joint ventures have been prepared in accordance with Ind AS and relevant provisions of the Companies Act, 2013.

The consolidated financial statements have been prepared on historical cost basis, except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies below.

All assets and liabilities have been classified as current or non-current as per Company's operating cycle and other criteria set out in Schedule-III of the Companies Act 2013. Based upon the nature of business, the Company and its joint ventures has ascertained a 12 month operating cycle for the purpose of current or non-current classification of assets and liabilities.

3.2 Use of estimates:

These consolidated financial statements have been prepared using estimates and assumptions, wherever necessary, in conformity with the recognition and measurement principles of Ind AS.

Estimates and underlying assumptions are reviewed on an ongoing basis and revisions, if any, in such estimates are accounted for in the year of revision.

Key sources of estimation uncertainty, which may cause a material adjustment to the carrying amounts of assets and liabilities are stated in Note No.4.

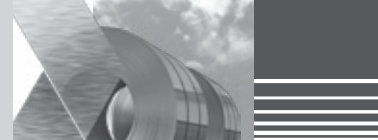
3.3 Investments in associates and joint ventures

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.

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 joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results, assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment, or a portion thereof, is classified as held for sale, in which case it is accounted for in accordance with Ind AS 105. Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated balance sheet at cost and adjusted thereafter to recognise the Company's share of the profit or loss and other comprehensive income of the associate or joint venture.

Distributions received from an associate or a joint venture reduces the carrying amount of the investment. When the Company's share of losses of an associate or a joint venture exceeds the Company's interest in that associate or joint venture (which includes



any long-term interests that, in substance, form part of the Company's net investment in the associate or joint venture), the Company discontinues recognizing its share of further losses. Additional losses are recognised only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Company's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised directly in equity as capital reserve in the period in which the investment is acquired.

After application of the equity method of accounting, the Company determines whether there is any objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the net investment in an associate or a joint venture and that event (or events) has an impact on the estimated future cash flows from the net investment that can be reliably estimated. If there exists such an objective evidence of impairment, then it is necessary to recognise impairment loss with respect to the Company's investment in an associate or a joint venture.

When necessary, the entire carrying amount of the investment is tested for impairment in accordance with Ind AS 36 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with Ind AS 36 to the extent that the recoverable amount of the investment subsequently increases.

For the purpose of consolidation the use of the equity method is discontinued from the date when the investment ceases to be an associate or a joint venture, or when the investment is classified as held for sale. When the Company retains an interest in the former associate or joint venture and the retained interest is a financial asset, the Company measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition in accordance with Ind AS 109. The difference between the carrying amount of the associate or joint venture at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate or joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Company accounts for all amounts previously recognised in other comprehensive income in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities.

The equity method is continued when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no re-measurement to fair value upon such changes in ownership interests.

When the ownership interest in an associate or a joint venture is reduced but the use of equity method is continued, the proportion of the gain or loss that had previously been recognised in other comprehensive income relating to that reduction in ownership interest is reclassified to profit or loss if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

3.4 Property, Plant and Equipment

Property, plant and equipment, other than freehold lands, held for use in the production and/or supply of goods or services, or for administrative purposes, are stated at cost, less accumulated depreciation and accumulated impairment losses. Freehold lands, unless impaired, are stated at cost.

3.4.1 Initial Measurement

The initial cost comprises purchase price, non-refundable purchase taxes, other expenditure directly attributable to bringing the assets to its location and condition necessary for it to be capable of operating in the manner intended by the management, borrowing cost, if any, incurred, and the initial estimates of the present value of any asset restoration obligation or obligatory decommissioning and dismantling costs.

Expenditure incurred on development of freehold land is capitalized as part of the cost of the land.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads and directly attributable borrowing costs, if any.



Spare parts having unit value of more than Rs.5 lakh, held for use in the production and/or supply of goods or services and are expected to be used during more than one period are recognised as Property, Plant and Equipment. Spares of critical nature and irregular in use, which can be identified to a particular equipment and having unit value more than Rs.1 lakh is also recognised as Property, Plant and Equipment.

3.4.2 Subsequent expenditure

Expenditure on major inspection/maintenance or repairs including cost of replacing the parts of assets and overhaul costs where it is probable that future economic benefits associated with the expenditure will be available over a period of more than one year, are capitalised and the carrying amount of the identifiable parts so replaced is derecognised.

3.4.3 Capital work-in-progress

Assets in the course of construction are included under capital work in progress and are carried at cost, less any recognised impairment loss. Such capital work in progress, on completion, is transferred to the appropriate category of property, plant and equipment.

Expenses for assessment of new potential projects incurred till investment decisions are charged to revenue. Expenditure incurred for projects after investment decisions are accounted for under capital work in progress and capitalized subsequently.

Any costs directly attributable to acquisition/ construction of property, plant and equipment till it is brought to the location and condition necessary for it to be capable of operating in the manner as intended by the management form part of capital work-in-progress

3.4.4 Depreciation and amortisation

Depreciation on assets are provided on a straight-line basis over their useful life, either as prescribed under Schedule II of the Companies Act, 2013 or, wherever considered necessary, determined on the basis of technical estimations carried out by the Management not exceeding the prescribed useful life as per Schedule II to the Companies Act, 2013.

Component of an item of property, Plant and Equipment with a cost that is significant in relation to the total cost of that item, is depreciated separately if its useful life differs from that of the asset. The Company and its joint ventures has chosen a benchmark of Rs.1 Crore as significant value for identification of a separate component except 'Pot Relining' which is considered as a component of each 'Electrolytic Pot' due to its inherent nature and useful life.

The residual value of plant and machinery, vehicles, mobile equipment and earth moving equipment, railway facilities, rolling stock, and residential quarters are maintained at 5% of the original cost and for all other assets, the residual value is considered as Nil.

The estimated useful lives are reviewed at each year end and the effect of change, if any, is accounted for prospectively.

For the purpose of depreciation of assets, useful lives of -

- (a) immovable property, plant and equipment at bauxite mines is up to the lease period of the mines.
- (b) captive thermal power generation plant namely Captive Power Plant (CPP) is considered to be 30 years;
- (c) Steam Power Plant (SPP) is considered to be 25 years.
- (d) Red Mud Ponds and Ash Ponds at alumina Refinery and Ash Ponds at CPP are based on their estimated remaining useful lives evaluated on the basis of technical estimates made periodically;
- (e) assets laid on leasehold land excluding assets of Bauxite mines are considered to be lower of balance lease period or the useful life of the asset.

Assets laid on land not owned are depreciated over the useful life from the date on which the asset is capable of operating in the manner intended by the management unless a longer / shorter life can be justified.

Individual Assets costing Rs.10,000/- or less are depreciated fully in the year in which they are put to use.



Property, plant and equipment other than mentioned above are subject to the following useful lives.

Sl. No.	Particulars of asset category (Property, Plant & Equipment)	Range of useful life in years
1	Buildings	30 - 60
2	Plant and machinery	15 - 40
3	Vehicles	08 - 10
4	Furniture and fixtures	08 - 10
5	Computer equipment	06

3.4.5 De-recognition of assets

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the use of the asset. Any gain or loss arising on the disposal/de-recognition is recognised in the statement of profit and loss.

3.4.6 Stripping costs:

Stripping costs of surface mining is recognised as an asset when they represent significantly improved access to ore, provided all the following conditions are met:

- it is probable that the future economic benefit associated with the stripping activity will be realised;
- the component of the ore body for which access has been improved can be identified; and
- the costs relating to the stripping activity associated with the improved access can be reliably measured.

The stripping cost incurred during the production phase is added to the existing “stripping cost asset” to the extent the current period stripping ratio exceeds the planned stripping ratio.

The “stripping cost asset” is subsequently depreciated on a unit of production basis over the life of the identified component of the ore body that become more accessible as a result of the stripping activity and is then stated at cost less accumulated depreciation and impairment loss, if any.

3.5 Intangible Assets

3.5.1 Intangible assets acquired separately

Intangible assets acquired are reported at cost less accumulated amortisation and impairment loss, if any. Intangible assets having finite useful life are amortised over their estimated useful lives. The estimated useful life and amortisation method are reviewed at the end of each annual reporting period, and the effect of any changes in estimate is accounted for on a prospective basis.

3.5.2 Internally-generated intangible assets – research and development expenditure

Expenditure on research activities, except capital expenditure considered as Property, plant and equipment, is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development is recognised if and only if all the conditions stipulated in “Ind AS 38 – Intangible Asset” are met.

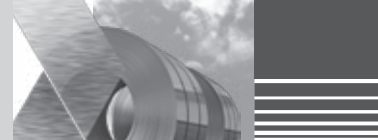
3.5.3 Mining Rights

The costs of mining rights include amounts paid towards Net Present Value (NPV) including related payments and upfront money as determined by the regulatory authorities.

Cost of mining rights are amortised over the total estimated remaining commercial reserves of mining property and are subject to impairment loss.

3.5.4 Mines Development Expenses

Expenditure incurred for mines development prior to commercial production i.e., primary development expenditure other than land, buildings, plant and equipment is capitalised until the mining property is capable of commercial production.



3.5.5 User Rights

Amount of expenditure incurred in a cluster project, having future economic benefits with exclusive use of co-beneficiaries but without physical control on the assets, are capitalised as user rights.

3.5.6 Software

Operating software acquired separately (RDBMS, Sybase, ERP/SAP) are capitalised as software.

3.5.7 License and Franchise

Amount of expenditure incurred for obtaining license for use of technology is capitalised under the head "License and Franchise".

3.5.8 De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from its use. Gains or losses arising from disposal/de-recognition are recognised in the statement of profit and loss.

3.5.9 Amortisation

The basis of amortisation of intangible assets is as follows:

- (a) Licenses in the nature of technical know-how for processing plants which are available for the useful life of the respective processing plants are amortised over a period of ten years.
- (b) Software classified as intangible assets carries a useful life of 3 years and are amortised over that period.
- (c) Mining Rights and Mines Development Expenses are amortised over the period of availability of reserves.
- (d) User Right for cluster projects is amortised over the useful life of the asset from the date of commissioning.

3.6 Impairment of tangible and intangible assets

At the end of each reporting period the carrying amounts of tangible and intangible assets are reviewed to determine whether there is any indication that the assets have suffered an impairment loss. If any such indication exists, the recoverable amount (i.e. higher of the fair value less cost to sell and the value-in-use) of the asset is estimated to determine the extent of impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of the cash-generating unit (CGU) to which the asset belongs is estimated. If the estimated recoverable amount of the CGU is less than its carrying amount, the carrying amount of the CGU is reduced to its recoverable amount and the difference between the carrying amount and recoverable amount is recognised as impairment loss in the statement of profit or loss.

3.7 Functional & Foreign Currencies

Items included in the consolidated financial statements are measured using the currency of the primary economic environment i.e. Indian Rupee in which the Company and its joint ventures operates.

In preparing the consolidated financial statements, transactions in foreign currencies i.e. currencies other than the entity's functional currency are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date.

Exchange differences on monetary items are recognised in the statement of profit and loss in the period in which they arise.

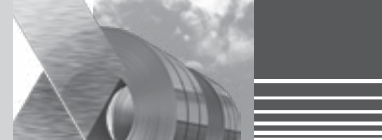
3.8 Provisions and contingencies

3.8.1 Provisions

Provisions are recognised when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation.

Where a provision is measured using the estimated cash outflows to settle the present obligation, its carrying amount is the present value of those cash outflows.



3.8.2 Restoration, rehabilitation and decommissioning

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine and other manufacturing facilities. The obligated restoration, rehabilitation and decommissioning liability as per statutory mandate is recognised in the consolidated financial statements.

Net present value of such costs are provided for and a corresponding amount is capitalised at the commencement of each project. These costs are charged to the statement of profit or loss over the life of the asset by way of depreciation and unwinding of the discounted liability. 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 in lives of operations, new disturbance and revisions of 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 and other cost in the statement of profit or loss.

3.8.3 Environmental liabilities

Environmental liabilities are recognised when the Company and its joint ventures becomes obliged, legally or constructively to rectify environmental damage or perform remedial work.

3.8.4 Legal Obligations

Provision is recognised once it has been established that there is a present obligation based on consideration of the information which becomes available up to the date of reporting.

3.8.5 Contingent Liabilities

Contingent liabilities are possible obligations that arises from past events, the existence of which would be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control or there is a present obligation but payment is not probable or the amount cannot be measured reliably. Contingent liabilities are disclosed in the consolidated financial statements unless the possibility of any outflow in settlement is remote.

3.8.6 Contingent Assets

Contingent assets are not recognised in the consolidated financial statement, but are disclosed where inflow of economic benefits is probable.

3.9 Leases

At the inception of a lease, the lease arrangement is classified as either a finance lease or an operating lease, based on the substance of the lease arrangement.

3.9.1 Assets taken on finance lease

Financial leases are those that transfer substantially all the risks and rewards incidental to ownership of the asset to the lessee.

Finance leases are capitalised at the commencement of lease, at the lower of the fair value of the property or the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income over the period of the lease.

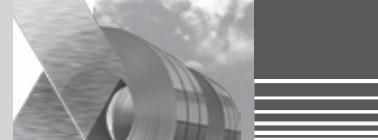
3.9.2 Assets taken on operating lease

Leases other than finance leases are operating leases, and the leased assets are not recognised as property, plant and equipment. Instead, upfront lease payments, if any, made under operating leases are apportioned and recognised in the statement of profit and loss over the term of the lease. Rent and maintenance charges paid for assets/facilities taken on operating leases are charged to revenue in the period in which they arise.

3.10 Inventories

Inventory of raw material, including bulk material such as coal and fuel oil are valued at the lower of cost net of tax credit wherever applicable and net realisable value.

Stores and spares other than those meeting the criteria for recognition as Property, Plant and Equipment are valued at cost net of tax credit wherever applicable.



Stores and spares (other than major spares considered as Property, Plant and Equipment) held but not issued for more than 5 years are valued at 5% of the cost.

Materials and other supplies held for use in the production (other than considered as non-moving) are not written down below cost, if the finished products in which they will be incorporated are expected to be sold at or above cost.

Cost of raw materials, stores and spares as stated above are determined on moving weighted average price.

Inventories of finished goods, semi-finished goods, intermediary products and work in process including process scrap are valued at lower of cost and net realisable value. Cost is generally determined at moving weighted average price of materials, appropriate share of labour and related overheads. Net realisable value is the estimated selling price in the ordinary course of business available on the reporting date less estimated cost necessary to make the sale.

Inventory of scraps internally generated are valued at net realisable value.

3.11 Trade receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the outstanding is due for payment within a period 12 months or less from the reporting date, they are classified as current assets otherwise as non-current assets.

Trade receivables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.

3.12 Financial Instruments

Financial assets and liabilities are recognised when the Company becomes a party to the contractual provisions of the instrument. Except for trade receivables and payables, financial assets and liabilities are initially measured at fair value. Transaction cost that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value measured on initial recognition of financial asset or financial liabilities.

3.12.1 Financial assets

a. Cash or Cash Equivalent:

All short-term bank deposits having a maturity period of three months or less as cash & cash equivalent is considered as cash or cash equivalent. Term deposits in Bank with a maturity period of more than 3 months are considered as other Bank Balance.

b. Financial assets at amortised cost:

Financial assets, including trade receivables where it contains significant financing component, are classified as subsequently measured at amortised costs and are measured accordingly using effective interest method if the financial assets are held within a business model whose objective is to hold these assets in order to collect contractual cash flows and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

c. Financial assets at Fair value through Other Comprehensive Income (OCI)

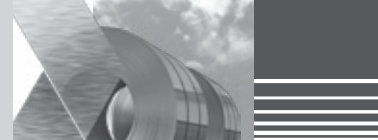
Financial assets are classified as subsequently measured at fair value through other comprehensive income if these financial assets are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

d. Financial assets at Fair value through Profit or loss

Financial assets are classified as subsequently measured at fair value through profit or loss unless it is classified as subsequently measured at amortised cost or at fair value through other comprehensive income. Transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognised in the statement of profit or loss.

3.12.2 Financial liabilities

Trade payables are measured at their transaction price unless it contains a significant financing component or pricing adjustments embedded in the contract.



Financial liabilities, including trade payables where it contains significant financing component, are subsequently measured at amortised cost using effective interest method.

3.12.3 De-recognition of financial assets

Financial assets are derecognised only when the contractual rights to the cash flows from the asset expires, or when substantially all the risks and rewards of ownership of the assets are transferred to another entity.

3.12.4 Impairment of financial assets

At each reporting date, assessment is made whether the credit risk on a financial instrument has increased significantly or not since initial recognition.

If the credit risk on a financial instrument has not increased significantly since initial recognition, the loss allowance is measured for that financial instrument at an amount equal to 12-month expected credit losses. If the credit risk on that financial instrument has increased significantly since initial recognition, the loss allowance is measured for a financial instrument at an amount equal to the lifetime expected credit losses.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the statement of profit and loss.

3.12.5 De-recognition of financial liability

Financial liabilities are derecognised when, and only when, the obligations are discharged, cancelled or expired.

In the case of retention for liquidated damages, if on finalization/closure of contract, liquidated damage is leviable, the amount retained is written back and recognized as income except capital contracts where liquidated damage is directly attributable to escalation/increase in the cost of the asset. In such case, the retention amount is adjusted against cost of the asset.

3.12.6 Off-setting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet, when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business.

3.13 Derivatives

Derivative instruments such as forward foreign exchange contracts are recognised at fair value at the date the derivative contracts are entered into and are re-measured at the end of each reporting period. The resulting gain or loss is recognised in statement of profit or loss immediately.

3.14 Borrowing cost

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use. All other borrowing cost is recognised in profit or loss in the period in which they are incurred.

3.15 Accounting for government grants

Government grants are recognised when there is reasonable assurance that the conditions attached to them will be complied and that the grants will be received.

Government grants related to assets whose primary condition is to purchase, construct or otherwise acquire non-current assets are recognised in the balance sheet by setting up the grant as deferred income and are transferred to profit or loss on a systematic basis over the useful life of the related assets.

Government grants related to income are recognised as income on a systematic basis over the periods necessary to match them with the costs for which they are intended to compensate.

3.16 Employee Benefits

3.16.1 Short-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, short term compensated absences etc. in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid.



3.16.2 Post-employment and long term employee benefits

3.16.3 Defined contribution plans

A defined contribution plan is plan under which fixed contributions are paid to a separate entity. Contributions to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them for such contributions.

3.16.4 Defined benefit plans

For defined benefit plans, the cost of providing benefits is determined through actuarial valuation using the Projected Unit Credit Method, carried out at each balance sheet date. Re-measurement gains and losses of the net defined benefit liability are recognised immediately in other comprehensive income. The service cost, net of interest on the net defined benefit liability, is treated as an expense.

Past service cost is recognised as an expense when the plan amendment or curtailment occurs or when any related restructuring costs or termination benefits are recognised.

The retirement benefit obligation recognised in the balance sheet represents the present value of the defined-benefit obligation as reduced by the fair value of plan assets.

3.16.5 Other long-term employee benefits

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the statement of profit and loss in the period in which they arise. These obligations are valued annually by independent actuaries.

3.17 Revenue recognition

Revenue is earned primarily from sale of product like alumina, aluminium and sale of power. Revenue is recognised when the performance obligation by transferring promised goods to a customer is satisfied.

3.17.1 Sales of Goods

Revenue from ex-factory/ ex-stockyard sales are recognised upon handing over of goods at the factory/ stock yard along with commercial invoice with due statutory compliance. Sales on FOB basis are recognised on preparation of shipping bill and handing over of goods to the shipper. In case of sale on CIF basis, revenue is recognised on placing the goods on board at the port of shipment and getting the shipping document prepared as per the incoterm.

3.17.2 Sale of Energy

Sale of wind power is recognised on the basis of energy transmitted to DISCOMs at the price notified by respective authorities.

Sale of power from captive power plant is considered on the basis of quantity injected to state GRID excluding wheeling to Refinery but including inadvertent energy injection, at the price notified by appropriate authority.

Revenue from sale of energy is recognised if -

- (a) the amount of revenue can be measured reliably;
- (b) It is probable that the economic benefits associated with the transaction will flow to the Company and its joint ventures;
- (c) recovery of the consideration is assured reasonably.

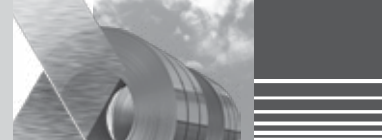
3.17.3 Income from dividend and interest

3.17.4 Dividend

Dividend income from investments is recognised when the right to receive the dividend is established.

3.17.5 Interest

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and its joint ventures and the amount of income can be measured reliably. Interest income is accrued on a time proportion basis, by reference to the principal outstanding and effective interest rate.



3.17.6 Income from Incentives from Government Agencies

Incentives from government agencies in the nature of duty draw back and Merchandise Export Incentive Scheme (MEIS) on exports and incentives on generation of renewable sources of energy are recognised as per the relevant statute on compliance of the conditions provided thereunder.

3.18 Income Taxes

Tax expense represents the sum of current tax and deferred tax.

3.18.1 Current taxes

Current tax expense is based on taxable profit for the year as per the Income Tax Act, 1961. Current tax liabilities (assets) for the current and prior period are measured at amounts expected to be paid (or recovered) using the tax rates and tax laws that have been enacted or substantively enacted by the end of reporting period and includes any adjustment to tax payable in respect of previous years.

3.18.2 Deferred taxes

Deferred tax expense or income is recognised on temporary difference between the carrying amount of assets and liabilities in the consolidated financial statements and the corresponding tax base used in computation of taxable profits.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. Tax relating to items recognised directly in other comprehensive income forms part of the statement of comprehensive income.

The carrying amount of deferred tax asset is reviewed at the end of each reporting period and adjusted to the extent it has become probable that sufficient taxable profits will be available to allow the asset to be recovered.

3.19 Exceptional items

Exceptional items are items of income and expenses within profit or loss from ordinary activities but of such size, nature or incidence whose disclosure is felt necessary for better explanation of the financial performance achieved.

3.20 Cash flow statement

Cash flow statement is prepared in accordance with indirect method prescribed in Ind AS 7 'Statement of Cash Flows'.

3.21 Restatement of material error / omissions

Errors and omissions is construed to be material for restating the opening balances of assets and liabilities and equity if the sum total effect of earlier period income / expenses exceeds Rs.50 crore.

Note No. 4 : Critical accounting judgments and key sources of estimation uncertainty

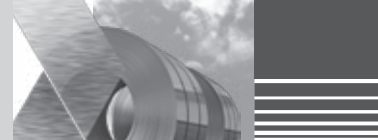
The preparation of the consolidated financial statements requires the management to make complex and/or subjective judgements, estimates and assumptions about matters that are inherently uncertain. These estimates and assumptions affect the reported amounts of assets and liabilities as well as disclosure of contingent liabilities and assets at the date of the consolidated financial statements and also revenues and expenses during the reported period.

The estimates and associated assumptions are based on past experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The 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.

4.1 Critical accounting judgments:

Apart from those involving estimations that the management have made in the process of applying the Company and its joint ventures's accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements, management has decided that reporting of Company and its joint ventures's financial assets at amortised cost would be appropriate in the light of its business model and have confirmed the Company and its joint ventures's positive intention and ability to hold these financial assets to collect contractual cash flows.



4.2 Key sources of estimation uncertainty:

The following are the key assumptions concerning the future, and other key sources of estimation of uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

4.2.1 Impairment

Investments in Associates and other investments, loans and advances, property, plant and equipment and intangible assets are reviewed for impairment whenever events and changes in circumstances indicate that the carrying value may not be fully recoverable or atleast annually.

Future cash flow estimates of Cash Generating Units which are used to calculate the asset's fair value are based on expectations about future operations primarily comprising estimates about production and sales volumes, commodity prices, reserves and resources, operating rehabilitations and restoration costs and capital expenditure.

4.2.2 Useful lives of property, plant and equipment

The Company and its joint ventures reviews the useful life of property, plant and equipment at the end of each reporting period. This reassessment may result in change in depreciation expense in future periods.

4.2.3 Assessment of Mining Reserve:

Changes in the estimation of mineral reserves where useful lives of assets are limited to the life of the project, which in turn is limited to the life of the probable and economic feasibility of reserve, could impact the useful lives of the assets for charging depreciation. Bauxite reserves at Mines is estimated by experts in extraction, geology and reserve determination and based on approved mining plan submitted to Indian Bureau of Mines (IBM).

4.2.4 Obligation for post-employment benefit Liability

Liability for post-employment benefit and long term employee benefit is based on valuation by the actuary which is in turn based on realistic actuarial assumptions.

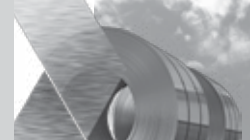
4.2.5 Provisions & Contingent Liabilities:

The amount recognised as a provision, including tax, legal, restoration and rehabilitation, contractual and other exposures or obligations is the best estimate of the consideration required to settle the related liability, including any interest charges, taking into account the risks and uncertainties surrounding the obligation. The Company and its joint ventures assess its liabilities and contingent liabilities based upon the best information available, relevant tax and other laws, contingencies involved and other appropriate requirements.

4.2.6 Fair value measurements and valuation processes:

For financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company and its joint ventures can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.


5. Property, plant and equipment

Amount in ₹ Crore

	Amount in ₹ Crore						
	As at 31.03.2019	As at 31.03.2018					
Carrying amount of:							
Freehold land	86.41	84.33					
Buildings	578.17	591.68					
Plant and equipment	6,346.37	6,245.74					
Furniture and fixtures	9.63	8.91					
Office equipments	24.21	23.64					
Vehicles	16.63	13.06					
Railway sidings	47.95	52.02					
	7,109.37	7,019.38					

	Freehold land	Buildings	Plant and equipment	Furniture and fixtures	Office equipment	Vehicles	Railway sidings	Total
Cost or deemed cost								
Balance as at 31.03.2017	84.33	638.51	7,078.92	12.03	15.51	14.44	53.68	7,897.42
Additions	—	63.78	372.57	3.97	20.54	6.75	10.67	478.28
Disposals	—	(0.03)	(33.06)	—	(0.04)	(0.03)	—	(33.16)
Balance as at 31.03.2018	84.33	702.26	7,418.43	16.00	36.01	21.16	64.35	8,342.54
Additions	2.08	20.97	531.58	3.43	8.40	6.60	(0.16)	572.90
Disposals	—	(0.08)	(28.12)	(0.04)	(0.02)	(0.44)	(0.03)	(28.73)
Balance as at 31.03.2019	86.41	723.15	7,921.89	19.39	44.39	27.32	64.16	8,886.71
Accumulated depreciation and impairment								
Balance as at 31.03.2017	—	73.88	778.23	4.38	8.19	5.51	8.60	878.79
Depreciation Expense	—	36.73	416.18	2.71	4.21	2.59	3.73	466.15
Disposals	—	(0.03)	(21.72)	—	(0.03)	—	—	(21.78)
Balance as at 31.03.2018	—	110.58	1,172.69	7.09	12.37	8.10	12.33	1,323.16
Depreciation Expense	—	34.42	415.25	2.69	7.83	2.77	3.89	466.85
Disposals	—	(0.02)	(12.42)	(0.02)	(0.02)	(0.18)	(0.01)	(12.67)
Balance as at 31.03.2019	—	144.98	1,575.52	9.76	20.18	10.69	16.21	1,777.34
Carrying amount								
Balance as at 31.03.2017	84.33	564.63	6,300.69	7.65	7.32	8.93	45.08	7,018.63
Additions	—	63.78	372.57	3.97	20.54	6.75	10.67	478.28
Disposals	—	—	(11.34)	—	(0.01)	(0.03)	—	(11.38)
Depreciation Expense	—	36.73	416.18	2.71	4.21	2.59	3.73	466.15
Balance as at 31.03.2018	84.33	591.68	6,245.74	8.91	23.64	13.06	52.02	7,019.38
Additions	2.08	20.97	531.58	3.43	8.40	6.60	(0.16)	572.90
Disposals	—	(0.06)	(15.70)	(0.02)	—	(0.26)	(0.02)	(16.06)
Depreciation Expense	—	34.42	415.25	2.69	7.83	2.77	3.89	466.85
Balance as at 31.03.2019	86.41	578.17	6,346.37	9.63	24.21	16.63	47.95	7,109.37

Notes:

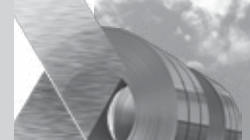
- Title deeds have been executed for freehold land acquired through Govt. of Odisha, except for land measuring 64.78 acres. The Company is in the process of conversion of freehold land for Industrial use and has taken-up matter with Revenue Authorities.
- Registration formalities in respect of office space (building) of 6,459 Sq.ft at Kolkata purchased from Kolkata Municipal Development Authority with a carrying amount of ₹5.50 crore is under progress.
- Ind AS 116 will replace the existing leases standard Ind AS 17 Leases. Ind AS 116 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. It introduces a single, on-balance sheet lease accounting model for lessees. The Company being a lessee, substantially holding leasehold land, shall recognise right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. The Company will adopt Ind AS 116 from reporting period beginning April 1, 2019.

6. Capital work-in-progress (CWIP)

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Capital work-in-progress (CWIP)	809.59	702.91
Construction materials including in transit	34.32	124.16
	843.91	827.07
Less: Provision for impairment	—	(1.24)
Total Capital Work-in-progress	843.91	825.83

- The amount of capital work in progress includes an amount of ₹41.16 crore (previous year ₹43.98 crore) towards infrastructural development expenditure attributable to Coal Mines Division.


7. Intangible assets

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Carrying amount of:		
User right	72.51	9.99
Computer software	2.24	2.08
Mining rights [refer note 8.1]	99.13	103.58
Licenses	2.53	4.43
	176.41	120.08

Amount in ₹ Crore

	User right	Computer software	Mining rights	Licenses	Total intangible assets
Cost or deemed cost					
Balance as at 31.03.2017	15.43	4.66	121.11	10.25	151.45
Additions	—	2.32	6.21	—	8.53
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.03.2018	15.43	6.98	126.97	10.25	159.63
Additions	64.36	1.35	3.37	—	69.08
Disposals	—	—	—	—	—
Balance as at 31.03.2019	79.79	8.33	130.34	10.25	228.71
Accumulated depreciation and impairment					
Balance as at 31.03.2017	3.62	2.98	15.17	3.88	25.65
Depreciation Expense	1.82	1.92	8.57	1.94	14.25
Disposals	—	—	(0.35)	—	(0.35)
Balance as at 31.03.2018	5.44	4.90	23.39	5.82	39.55
Depreciation Expense	1.84	1.19	7.82	1.90	12.75
Disposals	—	—	—	—	—
Balance as at 31.03.2019	7.28	6.09	31.21	7.72	52.30
Carrying amount					
Balance as at 31.03.2017	11.81	1.68	105.94	6.37	125.80
Additions/Adjustments	—	2.32	6.21	—	8.53
Disposals	—	—	(0.35)	—	(0.35)
Depreciation Expense	1.82	1.92	8.57	1.94	14.25
Balance as at 31.03.2018	9.99	2.08	103.58	4.43	120.08
Additions	64.36	1.35	3.37	—	69.08
Disposals	—	—	—	—	—
Depreciation Expense	1.84	1.19	7.82	1.90	12.75
Balance as at 31.03.2019	72.51	2.24	99.13	2.53	176.41

Notes:

- 7.1 The Company is operating its mining activities at Panchpatmali bauxite mines based on lease granted by Government of Odisha. In connection with lease renewal, the Company has paid NPV and related payments which is capitalized as intangible assets under Mining Rights and amortized on straight line basis as per the Accounting Policy of the Company.
- 7.2 The Company constructed 220 KV sub-station at Laxmipur in October 2013 jointly with two other parties on cost sharing basis. Since the land on which the asset was built did not belong to the Company the shared cost of ₹17.98 crore was taken as an intangible asset under user-rights. Although the Company was unable to derive benefit out of the asset pending completion of 220 KV Transmission Line from Laxmipur to Damanjodi and Switchyard at Damanjodi, the asset was depreciated assuming a maximum life of 10 years in terms of earlier accounting standard. Construction of the transmission line and switchyard has been completed during the year and put to use along with the sub-station at Laxmipur. The Company has adopted life for amortisation of the transmission line and the switchyard for a period of 30 years as per life of power transmission system specified in schedule II of Companies Act 2013. Accordingly, the life of the sub-station has been revised to 30 years so as to amortise the carrying amount of the asset over the remaining life of the asset.

The power transmission line (220 KV) from the substation at Laxmipur to the termination switchyard at Damanjodi, which has been transferred to M/s. Odisha Power Transmission Co. Ltd. (OPTCL) for operation and maintenance, has been included in user right.

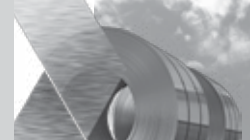
8. Intangible assets under development

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Mining right	38.8	39.49
User rights	—	49.90
	38.80	89.39

Note:

- 8.1 Mining right under development constitutes amount paid to statutory authorities towards allotment of coal blocks, NPV and wild life management plan of coal blocks and related jobs.


9. Investments

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
--	---------------------	---------------------

A. Non-current
A.1 Investments in equity instruments
A.1.1 Investment in associates
Unquoted investments

NPCIL-NALCO Power Company Limited (26,000 shares of ₹ 10 each fully paid up)	—	0.02
Total investment in associates	—	0.02

Details of associates

Details of each of the Company's associates at the end of the period are as follows

Name of the associate	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
NPCIL-NALCO Power Company Limited	Development of nuclear power, Kakrapara, Gujarat	0%	26%

Note: The Board of Nuclear Power Corporation of India Limited (NPCIL) and the Board of National Aluminium Company Limited (NALCO) had passed resolution in their respective meeting held on Mar 20, 2017 and Mar 2, 2017 to liquidate the associate Company. Subsequently, based on approval of the Board of NPCIL-NALCO Power Company Limited, in its meeting held on 14.03.2019 and approval of shareholders in Extraordinary General Meeting held on 22.03.2019 application for striking the name of the Company u/s 248 of the Companies Act, 2013 has been filed on 29.03.2019. The approved statement of accounts of NPCIL-NALCO Power Company Limited shows neither any assets nor any liabilities as on 14.03.2019. In view of the above, the investment amount of ₹2,60,000 (equity contribution) has been written off during the year.

A.1.2 Investment in joint ventures
Unquoted investments

Angul Aluminium Park Private Limited (As at 31.03.2019 : 1,62,23,900 shares of Rs. 10 each fully paid up, as at 31.03.2018: 1,62,23,900 shares of Rs. 10 each fully paid up).	17.38	16.91
Total	17.38	16.91

GACL-NALCO Alkalies & Chemicals Private Limited (As at 31.03.2019: 15,95,30,934 shares of Rs. 10 each fully paid up, as at 31.03.2018: 10,13,30,934 shares of Rs. 10 each fully paid up).	158.80	99.79
Total	158.80	99.79

During the year GACL-NALCO Alkalies & Chemicals Private Limited has issued 5,82,00,000 nos. of fully paid equity shares of ₹ 10/- each to the Company.

Total investment in joint ventures	176.18	116.70
---	---------------	---------------

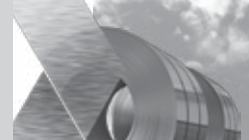
Details of joint ventures

Details of each of the Company's joint ventures at the end of the reporting period are as follows

Name of the joint venture	Principal Activity and place of business	Proportion of ownership interest / voting rights held by the Company	
(a) Angul Aluminium Park Private Limited	Promoting aluminium specific downstream in Odisha, Bhubaneswar, Odisha.	49.00%	49.00%
(b) GACL-NALCO Alkalies & Chemicals Private Limited	Production of caustic soda, Vadodara, Gujarat.	40.00%	40.00%

Financial Information in respect of individually material Joint Ventures

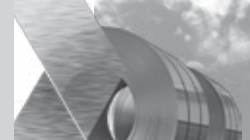
Particulars	GNAL		AAPPL	
	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
Non- current assets	398.21	210.22	4.35	3.92
Current asset	87.07	47.93	43.93	42.24
Non- current liabilities	—	—	12.21	11.18
Current liabilities	40.12	8.67	0.59	0.45



Particulars	GNAL		AAPPL	
	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
The above amounts of assets and liabilities includes the following:				
Cash and cash equivalents	49.76	37.87	0.43	0.03
Current financials liabilities (excluding trade payables and provisions)	38.53	1.14	0.22	0.23
Non- current financials liabilities (excluding trade payables and provisions)	48.13	—	—	11.18
Revenue	5.59	2.63	1.38	1.17
Profit or loss from continuing operations	2.05	(1.34)	0.95	0.66
Other comprehensive income for the year	—	—	—	—
Total comprehensive income for the year	2.05	(1.34)	0.95	0.66
The above profit / (loss) for the year include the following:				
Depreciation and amortisation	0.10	0.01	—	—
Interest Income	1.86	2.63	1.38	1.17
Interest expenses	—	—	—	—
Income tax expense/(income)	1.59	0.73	0.37	0.23
Reconciliation of the above summarised financial information to the carrying amount of the interest in JVs recognised in the consolidated financial statements:				
Net asset of the Joint Venture	397.04	249.48	35.47	34.52
Proportion of the Group's ownership interest in JV (%)	40%	40%	49%	49%
Proportion of the Group's ownership interest in JV (INR)	158.80	99.79	17.38	16.91
Add:- additional subscription of share warrant/advance against equity	—	—	—	—
Add:- goodwill on acquisition	—	—	—	—
Less:- unrealised profit	—	—	—	—
Group's share in the net asset of JV	158.80	99.79	17.38	16.91
Carrying amt of the Group's interest in JV	158.80	99.79	17.38	16.91

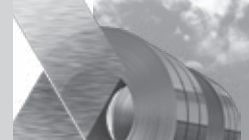
A.1.3 Investment in other entities

Unquoted investments			
Odisha Capital Market & Enterprises Limited. (2,89,000 shares of ₹ 1 each fully paid up)		0.03	0.03
Total - Investments in other entities		0.03	0.03
Total - investments in equity instruments		176.21	116.75
Total non-current investments		176.21	116.75
Additional information			
Aggregate book value of quoted investments and market value thereof		—	—
Aggregate carrying amount of unquoted investments		176.21	116.75
Aggregate amount of impairment in value of investments		—	—



		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
9. Investments			
B. Current			
Investments in Mutual Funds	Units in '000	Amount in ₹ Crore	Units in '000
			Amount in ₹ Crore
Quoted Investments			
BOI AXA Liquid Fund	130	13.01	899
BOI AXA TA Fund	—	—	2,012
Canara Robeco Liquid	80	8.01	747
IDBI Liquid Fund	—	—	998
SBI Liquid Fund Direct Daily Dividend	80	8.01	—
SBI Debt fund Series C-31(365 Days)	250	25.77	—
Union KBC Liquid	110	11.00	450
UTI Liquid Cash Plan-Direct Daily Dividend Reinvestment	150	15.01	—
UTI Money Market Fund	—	—	798
Total - Other current Investments		80.81	592.96
Additional Information			
Aggregate book value of quoted investments and market value thereof		80.81	592.96
Aggregate carrying amount of unquoted investments		—	—
Aggregate amount of impairment in value of investments		—	—
Category-wise classification:			
		As at 31.03.2019	As at 31.03.2018
Financial assets (quoted investments) mandatorily measured at fair value through profit or loss (FVTPL)		80.81	592.96
		80.81	592.96

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
10. Trade receivables			
A. Non-current			
(a) Considered good - Secured		—	—
(b) Considered good - Unsecured		—	—
(c) Having significant increase in credit risk		—	—
(d) Credit impaired		37.11	37.11
Less: Allowance for doubtful debts (expected credit loss allowance)		37.11	37.11
Net non-current trade receivables		—	—
B. Current			
(a) Considered good - Secured		—	—
(b) Considered good - Unsecured		240.52	258.13
(c) Having significant increase in credit risk		—	—
(d) Credit impaired		—	—
Less: Allowance for doubtful debts		—	—
Net current trade receivables		240.52	258.13


10. Trade receivables (contd.)

Notes:

- 10.1 The sale of goods (Alumina and Aluminium) is made against either advances received from customer or letter of credit. The advance received from customer is adjusted on sale. The average credit period for sale of wind power is 30 days from the date of metering which is considered as collection period. There is no commercial arrangement for sale of inadvertent thermal power generated at captive power plant. It is linked to the wheeling arrangement in view of the plant requirement. The amount receivable on account of such power sale takes a longer period for settlement. There is no receivable for such sale as the cost of purchase for power drawn from the grid to meet production shortfall is substantially higher compared to such sale.

- 10.2 Customers that individually represent more than 5% of the total trade receivable as on 31.03.2019:

Customers	% of trade receivables	Customer Category
a. GLENCORE INTERNATIONAL AG	36%	Alumina
b. APSPDCL	15%	Wind Power
c. RDPPC, DEVIKOT, RAJASTHAN	9%	Wind Power

- 10.3 The company has used a practical approach for computing expected credit loss allowance for trade receivables based on a case to case basis. Since there is no credit period for sale of alumina and aluminum and the sale is either made against an advance or backed by letter of credit (LC) given by customers, no credit loss is expected against such receivables. For sale of wind power, although there is no credit arrangement, the Company estimates credit losses based on credit loss experience and forward looking information.

- 10.4 Age of receivables

	As at 31.03.2019	As at 31.03.2018
Alumina and Aluminium		
0-30 days	167.36	225.30
3-6 Months	—	—
More than 6 months	37.11	37.11
	204.47	262.41
Wind Power		
0-3 Months	14.50	18.90
3-6 Months	9.89	3.83
More than 6 months	48.77	10.10
	73.16	32.83

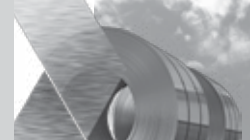
11. Loans

Amount in ₹ Crore

A. Non-current	As at 31.03.2019	As at 31.03.2018
(a) Loans to employees		
Secured, considered good	62.60	64.44
Unsecured, considered good	11.90	10.12
(b) Loans to others		
Secured, considered good	0.24	0.40
Total non-current loans	74.74	74.96
B. Current	As at 31.03.2019	As at 31.03.2018
(a) Loans to employees		
Considered good-Secured	17.88	18.74
Considered good-Unsecured	7.16	10.27
(b) Loans to related parties		
Considered good-Secured [refer note 11.2]	0.01	0.01
(c) Loans to others		
Considered good - Secured	0.70	0.27
Total current loans	25.75	29.29

Note:

- 11.1 Loans to employees and others are carried at amortised cost.
- 11.2 The amount of loan outstanding from related parties (Directors) is the amount of house building loan taken from the Company in their capacity as employees prior to directorship. Further information on these loans is set out in Note 39-Related party disclosure.



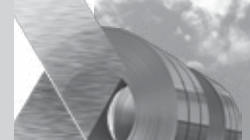
12. Other financial assets	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non current		
Security deposits	10.37	13.14
Total other non-current financial assets	10.37	13.14
B. Current	As at 31.03.2019	As at 31.03.2018
(a) Security deposits [refer note 12.2]	—	151.00
(b) Advances to employees	0.12	—
(c) Insurance claims receivables and others	9.56	10.44
(d) Derivative assets - forward contract	—	(0.44)
Gross - other current financial assets	9.68	161.00
Less: Allowance for bad and doubtful other current financial assets		
Insurance claims	8.45	8.45
Total allowance for bad and doubtful - other current assets	8.45	8.45
Total other current financial assets	1.23	152.55

Note:

- 12.1 Other financial assets are carried at amortised cost.
- 12.2 The understanding to set up Alumina Refinery at Gujarat jointly with Gujarat Mineral Development Corporation Ltd. (GMDC) has been mutually abandoned and the deposit amount of Rs.151 crore paid as up-front money to GMDC is realised during the year.

13. Current tax assets	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Income tax	51.26	33.66
Total current tax assets	51.26	33.66

14. Other assets	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non-current		
(a) Capital advances	222.57	153.83
(b) Advances other than capital advance:		
Advance with public bodies		
(1) Customs, excise, sales tax, port trusts etc.	226.86	230.68
(2) Deposits with Income Tax Authority	268.06	293.27
(3) Other Government authorities	2.65	4.59
(c) Others		
Prepaid expenses		
(1) Lease-hold land premiums	377.35	136.17
(2) Deferred employee benefits	19.66	25.66
Gross other non-current assets	1,117.15	844.20
Less: Allowance for bad and doubtful for other non-current assets		
(a) Capital advances	0.27	0.27
Total allowance for bad and doubtful other non-current assets	0.27	0.27
Total other non-current assets	1,116.88	843.93



14. Other assets (contd.)

Amount in ₹ Crore

B. Current	As at 31.03.2019	As at 31.03.2018
Advances other than capital advances		
(a) Claims with statutory authorities		
(1) Export Incentive Claims	29.87	34.23
(2) Generation Based Incentive on power generated from renewable source and Renewable energy certificates	2.73	7.27
(3) VAT, CENVAT and GST Credit Recoverable	302.78	258.27
(4) Claims receivable from customs, excise and railway authorities	8.94	33.62
(b) Prepaid expenses		
(1) Lease-hold land premiums	12.95	7.68
(2) Deferred employee benefits	4.21	4.57
(3) Other prepaid expenses	6.65	4.12
(c) Gold medallion and stamp in hand	0.08	0.07
(d) Other receivables	2.08	1.90
(e) Other advances		
(i) Advances to employees	24.16	23.91
(ii) Advances to suppliers and service providers	304.40	312.51
(iii) Others	7.47	5.72
Gross other current assets	706.32	693.87
Less: Allowance for bad and doubtful other current assets		
(a) VAT and CENVAT Credit Recoverable	200.09	200.27
(b) Claims receivable from customs, excise and railway authorities	6.39	7.74
(c) Other receivables	1.26	0.98
(d) Advances to suppliers and service providers	1.81	2.38
(e) Others	2.00	2.64
Total allowance for bad and doubtful other current assets	211.55	214.01
Total other current assets	494.77	479.86

Note:

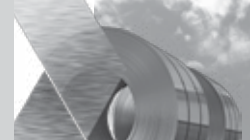
14.1 The position of prepaid lease premiums on account of acquisition of lease hold land is as below:

Opening un-amortised amount	Lease premium added during the year	Amortisation during the year	Closing un amortised amount carried forward
143.85	321.97	75.52	390.30

14.2 The Company has 1624.18 acres of leasehold land in respect of which lease deeds are yet to be executed. However, the Company has been permitted by the concerned authorities to carry on its operation on the said land.

14.3 The Company furnished undertaking for the purpose of obtaining extension of mining lease to pay differential stamp duty, if stands payable in terms of the Indian Stamp (Odisha Amendment) Act 2013, the dispute in respect of which is still pending before Court. Owing to such commitment, coupled with the opinion of external legal expert indicating possibility of outflow of resources, stamp duty liability of ₹191.72 crore, as demanded by Govt. of Odisha, which was hitherto disclosed as contingent liability has been recognised as liability along with registration charges liability of ₹20.25 crore, with corresponding addition to the value of lease hold assets.

An amount of ₹62.44 crore which corresponds to expired lease period till 31.3.2018 out of total lease period of 20 years has been charged off during the year as amortisation of the said addition to the asset in addition to amortisation for the current year amounting to ₹10.60 crore.


15. Inventories

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Raw materials	125.55	161.07
(b) Coal and fuel oil	199.97	188.64
(c) Finished goods	122.29	143.21
(d) Carbon Anodes (Intermediaries)	141.12	77.76
(e) Work-in-progress	246.95	284.33
(f) Stores and spares	361.10	319.48
(g) Scrap and disposables	13.03	19.59
Total inventories	1,210.01	1,194.08
Included above, goods-in-transit:		
(i) Raw materials	9.26	17.23
(ii) Coal and fuel oil	13.87	8.47
(iii) Stores and spares	12.15	12.88
Total goods-in-transit	35.28	38.58

Note:

- 15.1 Cost of inventories recognised as expenses during the year is ₹4516.36 crore (previous year : ₹4143.52 crore).
- 15.2 Cost of inventories recognised as expenses includes ₹3.52 crore (previous year: ₹5.47 crore) in respect of write-downs of inventory for non moving items.
- 15.3 Inventories are hypothecated/pledged against cash credit facility.
- 15.4 Method of valuation of inventories is stated in note 3.10 of Significant Accounting Policies.

16.A. Cash and cash equivalents

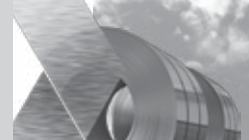
	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Balances with banks		
(1) Balance with scheduled banks		
(i) In current account	171.60	25.35
Total cash and cash equivalents	171.60	25.35

16.B. Bank balances (other than Cash and cash equivalents)

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) In deposit account (having original maturity between 3-12 months)	2,972.65	2,586.88
Principal	2,880.00	2,532.00
Accrued Interest	92.65	54.88
(b) Earmarked balance with scheduled banks	352.10	156.72
Total other bank balances	3,324.75	2,743.60

Note:

- 16.B.1 The earmarked balance with scheduled banks represents amount deposited towards unclaimed dividend amounting to ₹3.27 crore (previous year ₹1.70 crore) and deposit (including accrued interest) of ₹348.83 crore (previous year ₹155.02 crore) under court's directive towards disputed electricity duty.
- 16.B.2 Amount due for credit to Investor's Education and Protection Fund at the end of the current year ₹ Nil (previous year ₹ Nil).

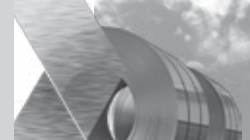

17. Share Capital

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Authorised share capital:		
6,00,00,00,000 equity shares of ₹ 5 each	3,000.00	3,000.00
	3,000.00	3,000.00
Issued and subscribed capital comprises:		
1,86,56,17,498 fully paid-up equity shares of ₹ 5 each (As at 31.03.2018: 1,93,29,28,884 fully paid-up equity shares of ₹ 5 each)	932.81	966.46
	932.81	966.46
17.1 Reconciliation of the number of equity shares		
	Number of shares	Amount ₹ in Crore
Balance as at 31.03.2017	1,932,928,884	966.46
Changes during the period	—	—
Balance as at 31.03.2018	1,932,928,884	966.46
Buy-back of shares	(67,311,386)	(33.65)
Balance as at 31.03.2019	1,865,617,498	932.81

- (i) The Company has only one class of equity shares having a par value of ₹ 5 each. Each holder of equity shares is entitled to one vote per share and carries proportionate right to dividends declared by the Company based on their holdings.
- (ii) **Buy back:** During 2016-17 Company bought back 64,43,09,628 numbers of equity shares of ₹ 5 each which led to decrease in the equity share capital from ₹ 1,288.62 crore to ₹ 966.46 crore. During 2018-19 Company again bought back 6,73,11,386 number equity shares of ₹ 5 each which further led to decrease in equity share capital from ₹ 966.46 crore to ₹ 932.81 crore.
- (iii) **Disinvestment:** During 2017-18 Government of India divested 27,77,65,383 Nos fully paid equity shares (through OFS 17,80,69,927 Nos, through employee offer 76,17,057 Nos and through ETF 9,20,78,399 Nos), consequent to which holding of Government of India came down from 1,44,14,82,490 Nos (74.58%) as on 31.03.2017 to 1,16,37,17,107 Nos (60.2%) as on 31.03.2018. During 2018-19 Government of India further divested 8,89,86,323 Nos of equity shares through ETF. Consequent to buyback and transfer of shares through ETF by Government of India during 2018-19, the holding of Government of India has come down from 1,16,37,17,107 Nos (60.20%) as on 31.03.2018 to 97,00,81,517 nos (51.99%) as on 31.03.2019.

17.2 Details of shares held by each shareholder holding more than 5% of shares

	Amount in ₹ Crore			
	As at 31.03.2019		As at 31.03.2018	
	Number of shares held	% of holding of equity shares	Number of shares held	% of holding of equity shares
Fully paid equity shares				
Government of India	97,00,81,517	51.99%	1,16,37,17,107	60.20%
Life Insurance Corporation of India	9,34,35,272	5.00%	15,84,31,120	8.20%
Others	80,21,00,709	42.99%	61,07,80,657	31.60%
Total	1,86,56,17,498	100.00%	1,93,29,28,884	100.00%


18. Other equity

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Capital redemption reserves	355.81	322.16
(b) General reserve	8,113.10	8,620.53
(c) Retained earnings	1,083.22	594.80
Total	9,552.13	9,537.49

18.1 Movement in other equity

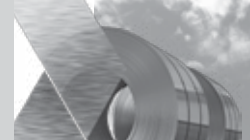
Other equity	Reserves and Surplus			Total
	Capital redemption reserves	General reserve	Retained earnings	
Balance as at 31.03.2017	322.16	8,620.53	296.00	9,238.69
Profit for the year	—	—	1,342.19	1,342.19
Other comprehensive income (net of taxes)	—	—	50.03	50.03
Total comprehensive income for the year	—	—	1,392.22	1,392.22
Premium on Buy-back of equity shares	—	—	—	—
Expenses on Buy-back of equity shares	—	—	—	—
Transfer of general reserve to Capital redemption reserve	—	—	—	—
Final dividend for previous year	—	—	—	—
Tax on final dividend for previous year	—	—	—	—
Interim dividend for the year	—	—	(908.48)	(908.48)
Tax on interim dividend for the year	—	—	(184.94)	(184.94)
Balance as at 31.03.2018	322.16	8,620.53	594.80	9,537.49
Profit for the year	—	—	1,733.69	1,733.69
Other comprehensive income (net of taxes)	—	—	(0.15)	(0.15)
Total comprehensive income for the year	—	—	1,733.54	1,733.54
Premium on Buy-back of equity shares	—	(471.18)	—	(471.18)
Expenses on Buy-back of equity shares (net of tax benefit)	—	(2.60)	—	(2.60)
Transfer of general reserve to Capital redemption reserve	33.65	(33.65)	—	—
Final dividend for previous year	—	—	(193.29)	(193.29)
Tax on final dividend for previous year	—	—	(39.73)	(39.73)
Interim dividend for the year	—	—	(839.53)	(839.53)
Tax on interim dividend for the year	—	—	(172.57)	(172.57)
Balance as at 31.03.2019	355.81	8,113.10	1,083.22	9,552.13

18.2 The Company had bought back its own equity shares on Septmeber 26, 2016 at a premium utilising general reserve amounting to ₹ 2834.97 crore and consequently a sum equal to the nominal value of the shares so bought back amounting to ₹ 322.16 crore had been transferred to the capital redemption reserve account in terms of section 69 of the Companies Act, 2013.

During the year the Company has bought back 6,73,11,386 number of fully paid equity shares of ₹5 each on December 4, 2018 at an offer price of ₹75 per share. The aggregate consideration paid was ₹504.83 crore. Post buyback, the paid up equity share capital of the Company is reduced by ₹33.65 crore from ₹966.46 crore to ₹932.81 crore. The premium amount ₹471.18 crore is appropriated from general reserve. The shares were extinguished on December 7, 2018 and in terms of the provisions of Companies Act, 2013 a sum of ₹33.65 crore is transferred from general reserve to capital redemption reserve.

18.3 During the year the Company has paid interim dividend @ ₹4.5 per equity share amounting in total ₹839.53 crore and final dividend for the year 2017-18 @ ₹1 per equity share totaling ₹193.29 crore. During the preceeding year, Company paid interim dividend of ₹ 908.48 crore for financial year 2017-18. Dividend tax of ₹ 172.57 crore, ₹39.73 crore and ₹ 184.94 crore on these respective amounts of dividends have been paid by the Company.

18.4 The Board has recommended a final dividend of ₹ 1.25 per share (25% on the equity shares of ₹ 5 each) amounting to ₹233.20 crore for approval of shareholders in the ensuing Annual General Meeting. Considering the applicable dividend distribution tax the amount of dividend payout works out to ₹ 281.14 crore.


19. Borrowings

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Current (secured at amortised cost)		
Liabilities towards bills discounted	66.79	44.99
Total other current financial liabilities	66.79	44.99

20. Trade payables

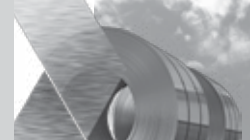
Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
A. Non-current		
(1) Creditors for supplies and services		
— Dues to micro and small enterprises	—	—
— Others	21.14	15.63
Total non-current trade payables	21.14	15.63
B. Current		
(1) Creditors for supplies and services		
— Dues to micro and small enterprises	2.22	4.53
— Others	435.38	507.50
(2) Accrued wages and salaries	848.17	449.71
Total current trade payables	1,285.77	961.74

Notes:

- 20.1 Long-term wage settlement in respect of non-executive employees of the Company, effective from 01.01.2017, has been finalised during the year. In terms of the settlement, the liability for pay revision up to 31.03.2019 works out to be ₹530 crore. A sum of ₹275 crore was provided in the preceding year on an estimated basis. Differential amount of ₹255 crore has been provided in the current year.
- 20.2 Dues payable to Micro and Small Enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006 have been determined to the extent such parties have been identified on the basis of information available with the Company. The disclosure pursuant to said Act in respect of such dues included in trade payables (note-20) and other financial liabilities (note-21) is as under.

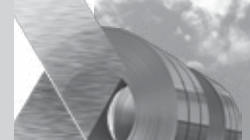
Particulars	As at 31.03.2019	As at 31.03.2018
i) Principal amount due	2.69	5.82
ii) Interest on principal amount due	Nil	Nil
iii) Interest and principal amount paid beyond appointment day	Nil	Nil
iv) The amount of interest due and for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the amount of interest specified under MSME Development Act 2006.	Nil	Nil
v) The amount of interest accrued and remaining unpaid at the end of the year.	Nil	Nil
vi) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest due as above are actually paid to the small enterprise, for the purpose of disallowance as a deductible expenditure under section 23 of MSME Development Act 2006.	Nil	Nil


21. Other Financial Liabilities

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
A.	Non-current		
	(1) Creditors for supplies and services		
	— Dues to micro and small enterprises	—	—
	— Others	6.70	2.85
	Total other non-current financial liabilities	6.70	2.85
B.	Current		
	(a) Unpaid dividends	3.27	1.70
	(b) Creditors for other liabilities		
	(1) Creditors for capital supplies and services		
	— Dues to micro and small enterprises	0.47	1.29
	— Others	299.35	397.38
	(2) Security deposits from customers	1.78	2.24
	(3) Refund due to customers	7.84	15.41
	(4) Liabilities for discount on sales to customers	98.00	94.69
	(5) Employees' recoveries	0.15	0.16
	Total other current financial liabilities	410.86	512.87

22. Provisions

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
A.	Non-current		
	(a) Provision for employee benefits		
	(1) Retirement benefits obligations		
	(i) Post retirement medical benefits scheme (PRMBS)	117.22	116.35
	(ii) Settling in benefit on retirement	19.52	1.82
	(iii) Nalco benevolent fund scheme (NBFS)	2.45	2.32
	(iv) Nalco retirement welfare scheme(NRWS)	11.56	10.27
	(v) Retirement gift	6.79	6.45
	(2) Other long-term employee benefits		
	(i) Compensated absences	315.57	249.77
	(ii) Long service rewards	9.31	9.10
	(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	17.01	16.06
	(b) Other Provisions		
	(1) Asset restoration obligations/dismantling	31.12	23.57
	(2) Other legal and constructive obligations	0.38	0.38
	Total non current provisions	530.93	436.09
B.	Current		
	(a) Provision for employee benefits		
	(1) Retirement benefits obligations		
	(i) Gratuity (funded)	57.40	271.05
	(ii) Post retirement medical benefits scheme (PRMBS)	6.22	10.18
	(iii) Settling in benefit on retirement	2.90	0.45
	(iv) Nalco benevolent fund scheme (NBFS)	0.59	1.30
	(v) Nalco retirement welfare scheme(NRWS)	0.34	3.37
	(vi) Retirement gift	0.14	0.63
	(2) Other Long-term employee benefits		
	(i) Compensated absences	31.69	23.29
	(ii) Long service rewards	1.05	0.99
	(iii) Nalco employees family financial assistance rehabilitation scheme(NEFFARS)	5.57	5.55
	(b) Other Provisions		
	(1) towards peripheral development expenses	31.53	32.64
	(2) towards other legal and constructive obligations	28.08	26.43
	Total current provisions	165.51	375.88



22. Provisions (contd.)

Amount in ₹ Crore

C. Movement of provisions		Compensated absences	Long service rewards	NEFFARS
(1) Movement of retirement benefit obligations [refer note 31]				
(2) Movement of employee benefits				
Balance at 31.03.2017		230.83	9.50	27.79
Additional provisions recognised		56.08	1.21	8.17
Reductions arising from payments		(93.54)	(2.47)	(14.35)
Changes arising from remeasurement		79.69	1.86	—
Balance at 31.03.2018		273.06	10.10	21.61
Additional provisions recognised		108.68	1.26	18.06
Reductions arising from payments		(76.91)	(1.51)	(17.09)
Changes arising from remeasurement		42.43	0.51	—
Balance at 31.03.2019		347.26	10.36	22.58
(3) Movement of other Provisions				
		Asset restoration obligation	Legal and Constructive Obligation	Peripheral Development Expenses
Balance at 31.03.2017		21.70	18.15	33.36
Additional provisions recognised		0.09	8.65	—
Reductions arising from payments		—	—	(0.72)
Unwinding of discount		1.78	0.02	-
Balance at 31.03.2018		23.57	26.82	32.64
Additional provisions recognised		5.23	3.87	—
Reductions arising from payments		—	(2.28)	(1.05)
Unwinding of discount		2.32	0.05	—
Balance at 31.03.2019		31.12	28.46	31.59

Note:

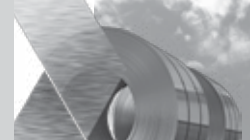
- 22.1 Provision related to retirement and other long term employee benefits are provided, in the case of gratuity as per the Gratuity Act, and for other benefits as per Company rules. Liability for the same is recognised on the basis of actuarial valuation by independent actuary.
- 22.2 Provision for asset restoration obligation and constructive obligation is made based on management estimation in line with Ind AS 16 and Ind AS 37 respectively.
- 22.3 Provision for peripheral development expenditure is the unspent development obligation of the Company prior to introduction of Companies Act 2013.

23 Deferred tax liabilities

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Deferred tax liabilities	1,560.12	1,501.72
Deferred tax assets	429.45	350.27
	1,130.67	1,151.45

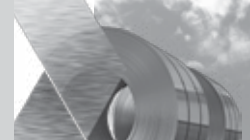
2017-18	Opening balance as at 01.04.2017	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2018
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,463.93)	(19.00)	—	(1,482.93)
FVTPL financial assets	(22.93)	25.78	—	2.85
Provision for defined benefit obligation (OCI)	(19.01)	—	(2.63)	(21.64)
Deferred tax liabilities	(1,505.87)	6.78	(2.63)	(1,501.72)


23. Deferred tax liabilities (contd.)

	Amount in ₹ Crore			
	Opening balance as at 01.04.2017	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2018
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	92.79	1.71	—	94.50
Provision for defined benefit obligation	57.11	31.44	—	88.55
Provision for doubtful debts / advances	84.86	5.36	—	90.22
Temporary Difference due to application of section 43B	—	60.12	—	60.12
MAT credit entitlement	17.46	(4.95)	—	12.51
Others	8.07	(3.70)	—	4.37
Deferred tax assets	260.29	89.98	—	350.27
Deferred tax (liabilities) / assets (net)	(1,245.58)	96.76	(2.63)	(1,151.45)
2018-19				
	Opening balance as at 01.04.2018	Recognised in profit or loss	Recognised in other comprehensive income	Closing balance as at 31.03.2019
Deferred tax liabilities relating to:				
Property, plant and equipment	(1,482.93)	(62.13)	—	(1,545.06)
FVTPL financial assets	2.85	0.09	—	2.94
Provision for defined benefit obligation (OCI)	(21.64)	—	3.64	(18.00)
Deferred tax liabilities	(1,501.72)	(62.04)	3.64	(1,560.12)
Deferred tax assets in relation to:				
Provision for compensated absences and other employee benefits	94.50	26.85	—	121.35
Provision for defined benefit obligation	88.55	(0.38)	—	88.17
Provision for doubtful debts / advances	90.22	0.02	—	90.24
Temporary Difference due to application of section 43B	60.12	65.15	—	125.27
MAT credit entitlement	12.51	(12.51)	—	—
Others	4.37	0.04	—	4.42
Deferred tax assets	350.27	79.17	—	429.45
Deferred tax (liabilities) / assets (net)	(1,151.45)	17.13	3.64	(1,130.67)

24. Other liabilities

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
A. Non-Current		
(i) Deposits under NEFFARS	67.89	62.04
Total other non-current liabilities	67.89	62.04


24. Other liabilities (contd.)

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
B.	Current		
(i)	Revenue received in advance	57.72	53.06
(ii)	Statutory and other dues		
(a)	Electricity duty [refer note: 24.1]	385.90	192.01
(b)	Tax deducted and collected at source	24.38	40.91
(c)	Contribution to NEPF trust and NPS	35.58	47.40
(d)	Disputed dues towards stamp duty	212.78	-
(e)	Others (Service tax, excise duty etc)	78.28	53.53
(iii)	Renewable energy purchase obligation [refer note 24.2]	162.71	146.87
(iv)	Deposits under NEFFARS	17.64	10.69
(v)	Grants for property, plant and equipment	0.56	0.58
(vi)	Other credit balances	0.64	0.40
Total other current liabilities		976.19	545.45

Note:

24.1 The Energy Department of Govt. of Odisha vide its notification dated May 12, 2017 has enhanced the rate of electricity duty from ₹0.30 paise per unit to ₹0.55 paise per unit of consumption. Aggrieved by the said notification, Confederation of Captive Power Plants, Odisha of which the Company is a member, has challenged the order in the Hon'ble High Court of Orissa. As an interim measure, the Hon'ble High Court in its order dated 01.06.2017 has directed the petitioner to deposit the differential electricity duty in a separate interest bearing bank account which shall be subject to the result of writ petition. Accordingly, the Company provided for electricity duty expenditure at the enhanced rate and deposited the money into a separate interest bearing bank account as per direction of the Court. Interest earned on such deposits is not recognised as income but treated as liability along with the unpaid enhanced electricity duty. The amount lying as deposit as at the reporting date against such disputed liability is ₹348.83 crore (previous year ₹155.02 crore) [refer note 16.B.1].

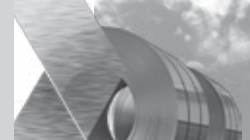
24.2 As per the provisions of Odisha Electricity Regulatory Commission (OERC) notification dated 1st August 2015, the Company, being an obligated entity has the obligation to generate power equal to 9.5% (previous year 7.5%) of its total consumption from renewable sources comprising of 4.5% (previous year 3%) from solar renewable source and 5% (previous year 4.5%) from non-solar renewable sources.

Cumulative non-solar obligation as on 31.3.2019 is ₹27.57 crore (as on 31.03.2018 ₹16.42 crore) towards 1,83,642 (previous year 1,09,444) nos of non-solar Renewable Energy Certificates (REC) valued @ ₹1,500 (previous year ₹ 1,500) per certificate. During the year 1,67,964 nos (previous year 1,49,829 nos) of non-solar REC has been retained by the Company as a compliance to Renewable Purchase Obligation.

Due to non-fulfillment of the obligation to generate required quantum of power from renewable source of solar energy, the company has provided cumulative liability up to 31.3.2019 for ₹ 135.14 crore (previous year ₹130.45 crore) towards 6,75,716 (previous year 3,72,716) nos of solar REC valued @ ₹2,000 (previous year ₹3,500) per certificate.

25. Contingent liabilities (to the extent not provided for)

		Amount in ₹ Crore	
		As at 31.03.2019	As at 31.03.2018
Claims against the Company not acknowledged as debts			
a.	Demand by statutory authority		
1.	ST/CST/VAT	376.55	366.17
2.	Excise duty	418.32	100.68
3.	Custom duty	102.77	102.77
4.	Service tax	21.92	18.11
5.	Income tax	670.09	706.40
6.	Entry tax and road tax	224.48	232.28
7.	Land acquisition and interest there on	46.98	35.49
8.	Stamp duty	0.00	204.53
9.	Demand from Dept. of mines Govt. of Odisha	136.32	136.32
10.	NPV related demand under Mining lease	92.45	93.10
11.	Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	119.24	119.24
12.	Claim From Govt. (NGT)	6.00	—
13.	Claim From PSUs	50.12	—
b.	Claim by contractors/suppliers and others		
1.	Claims of Contractor's suppliers and others	506.34	436.99
Total		2,771.59	2552.08


25. Contingent liabilities (to the extent not provided for) (contd.)

Amount in ₹ Crore

Claims against the Company not acknowledged as debt includes:

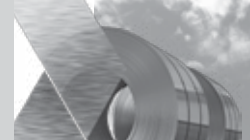
- i. Demand from various statutory authorities towards income tax, sales tax, excise duty, custom duty, service tax, entry tax and other government levies. The Company is contesting the demands before the respective appellate authorities. It is expected that the ultimate outcome of these proceedings will be in favour of the Company and will not have any material adverse effect on the Company's financial position and results of operation.
- ii. Claims of contractors for supply of materials/services pending with arbitration/courts have arisen in the ordinary course of business. The Company reasonably expects that these legal actions will be concluded and determined in favour of the Company and will not have any material adverse effect on the Company's results of operation or financial position.

25.1 Movement of contingent liabilities	As at 31.03.2018	Reduction during the year	Addition during the year	As at 31.03.2019
a. Demand by statutory authority				
1. ST/CST/VAT	366.17	(1.57)	11.95	376.55
2. Excise duty	100.68	(87.21)	404.85	418.32
3. Custom duty	102.77	—	—	102.77
4. Service tax	18.11	(0.51)	4.32	21.92
5. Income tax	706.40	(86.87)	50.56	670.09
6. Entry tax and road tax	232.28	(7.80)	—	224.48
7. Land acquisition and interest there on	35.49	—	11.49	46.98
8. Stamp duty	204.53	(204.53)	—	0.00
9. Demand from Dept. of mines Govt. of Odisha	136.32	—	—	136.32
10. NPV related demand under Mining lease	93.10	(0.65)	—	92.45
11. Demand from Water Resources Deptt., Govt. of Odisha for Water Conservation fund	119.24	—	—	119.24
12. Claim From Govt. (NGT)	—	—	6.00	6.00
13. Claim From PSUs	—	—	50.12	50.12
b. Claim by contractors/suppliers and others				
1. Claims of Contractor's suppliers and others	436.99	(3.84)	73.19	506.34
Total	2,552.08	(392.98)	612.48	2,771.59

26. Commitments

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
a) Estimated amount of Contracts remaining to be executed on capital account and not provided for	829.92	297.02
b) Other Commitments		
(1) Amount payable to the Government of India but not yet due for payment for allocation of Utkal D & E coal block.	18.11	18.11
(2) Export obligation for import of capital goods under Export Promotion Capital Goods Scheme.	168.75	107.80
Total	1,016.78	422.93


27. Revenue from operations

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Sale of products (including excise duty)		
1) Export:		
i) Alumina	4,222.41	3,047.36
ii) Aluminium	570.30	1,028.10
2) Domestic:		
i) Alumina	212.67	152.01
ii) Aluminium	6,253.33	5,188.28
(b) Sale of power		
i) Thermal power	1.57	3.40
ii) Wind Power	126.04	85.97
(c) Other operating income		
1) Export Incentives		
i) Alumina	45.91	33.06
ii) Aluminium	16.72	30.24
2) Incentives on Renewable Energy		
i) Renewable Energy certificates	39.37	33.84
ii) Generation based incentives	8.53	6.94
3) Own manufactured goods internally used /capitalised	2.47	9.11
Revenue from operations	11,499.32	9,618.31

Note:

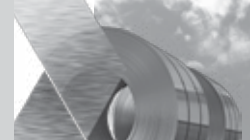
- 27.1 Domestic sale of alumina and aluminium during 2017-18 includes excise duty amounting to Rs.4.22 crore and Rs.124.74 crore respectively applicable upto 30.06.2017.
- 27.2 Goods and service taxes collected under Goods and Service Tax Act effective from 01.07.2017 are not included in sales.

28. Other income

	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Interest income		
(i) Interest income earned from financial assets that are not designated as at fair value through profit or loss:		
— Bank deposits	224.28	171.89
— Loans to employees	9.69	12.46
— Other financial assets carried at amortised cost	3.17	0.44
(ii) Interest income earned towards Income tax refund	—	—
(b) Dividend income		
— Dividends from current investments	30.61	33.65
(c) Net gain/(loss) on disposal of property, plant and equipment		
(d) Net foreign exchange gain/(loss)	8.62	(2.55)
(e) Net gain/(loss) on financial assets designated as at FVTPL	(2.16)	2.96
(f) Net gain/(loss) on sale of other non-current investments	-	13.91
(g) Write back of liabilities no longer required [refer note: 28.1]	12.04	20.56
(h) Income from internally generated scrap	19.47	22.68
(i) Others	20.15	23.65
Total other income	325.87	299.65

Note:

- 28.1 Unclaimed liability lying in books for a period of more than 3 years as on the reporting date are written back and recognized as income.


29. Cost of materials consumed

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
A. Raw material		
(1) Caustic soda	941.02	795.39
(2) C.P. coke	645.43	403.70
(3) C.T. pitch	176.41	127.80
(4) Aluminium flouride	75.43	62.67
(5) Lime	50.00	45.06
(6) Others	31.39	30.69
Total raw materials consumed	1,919.68	1,465.31
B. Power and Fuel		
(1) Coal [Refer Note 29.1]	1,525.72	1,757.22
(2) Fuel oil	708.06	523.66
(3) Duty on own generation [refer note: 24.1]	406.51	400.70
(4) Purchased power	283.64	60.36
(5) Power transmission charges	3.19	5.98
Total Power and Fuel consumed	2,927.12	2,747.92

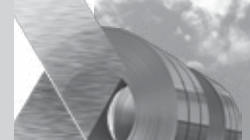
Note:

- 29.1 Subsequent to clarification by GST Board vide circular dated 30th May 2018, the Company claimed refund including arrear since 01.07.2017 towards GST compensation cess on coal. Total amount claimed upto 31-03-2019 is Rs 231.58 crore is adjusted against coal expenditure of the current year.

30. Changes in inventories of finished goods, intermediaries and work-in-process

Amount in ₹ Crore

	As at 31.03.2019	As at 31.03.2018
Finished goods		
Opening stock		
(1) Bauxite	9.20	3.07
(2) Chemical	114.18	154.15
(3) Aluminium	19.83	41.52
Opening stock	143.21	198.74
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	—	18.22
(3) Aluminium	—	5.76
Excise duty on opening stock	—	23.98
Total opening stock of finished goods	143.21	222.72
Less:		
Closing stock		
(1) Bauxite	18.12	9.20
(2) Chemical	91.48	114.18
(3) Aluminium	12.68	19.83
Closing stock	122.28	143.21
Add: Excise duty		
(1) Bauxite	—	—
(2) Chemical	—	—
(3) Aluminium	—	—
Excise duty on closing stock	—	—
Total Closing stock of finished goods	122.28	143.21
(Accretion)/Depletion in finished goods	20.93	79.51



30. Changes in inventories of finished goods, intermediaries and work-in-process (contd.)	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Intermediaries		
Opening stock		
Anodes	66.75	82.97
Others	10.99	10.65
Total opening stock of intermediaries	77.74	93.62
Less: Closing stock		
Anodes	122.16	66.75
Others	18.97	10.99
Total closing stock of intermediaries	141.13	77.74
(Accretion)/depletion in intermediaries	(63.39)	15.88
Work in process		
Opening stock	284.33	236.37
Less: Closing stock	246.95	284.33
(Accretion)/depletion in work in process	37.38	(47.96)
Total (Accretion)/Depletion in inventory	(5.08)	47.43

31. Employee benefit expense	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Salaries and wages, including bonus	1,718.22	1,659.81
(b) Contribution to provident and other funds		
1) Provident fund	102.91	100.89
2) Gratuity	45.32	301.91
3) Post employment pension scheme	95.59	88.07
(c) Staff welfare expenses	110.24	110.52
Total employee benefit expense	2,072.28	2,261.20

Notes:

31.A. Employee benefits

Long-term wage settlement in respect of non-executive employees of the Company, effective from 01.01.2017, has been finalised during the year. In terms of the settlement, the liability for pay revision up to 31.03.2019 works out to be Rs.530 crore. A sum of Rs.275 crore was provided in the preceding year on an estimated basis. Differential amount of Rs.255 crore has been provided in the current year.

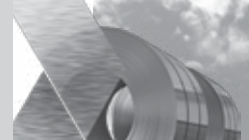
31.B. Employee benefit plans

31.B.1 Defined contribution plans

- Provident fund:** The Company pays fixed contribution to Provident Fund at predetermined rates, to a separate trust, which invests the funds in permitted securities. On contributions, the trust is required to pay a minimum rate of interest, to the members, as specified by Govt. of India.
- Pension fund:** The Company pays fixed contribution to the trustee bank of PFRDA, which in turn invests the money with the insurers as specified by the employee concerned. The company's liability is limited only to the extent of fixed contribution.

31.B.2 Defined benefit plans

- Gratuity:** Gratuity payable to employees as per The Payment of Gratuity Act subject to a maximum of Rs.20,00,000/-. The gratuity scheme is funded by the Company and is managed by a separate trust. The liability for gratuity under the scheme is recognised on the basis of actuarial valuation.
- Post retirement medical benefit:** The benefit is available to retired employees and their spouses who have opted for the benefit. Medical treatment as an in-patient can be availed from the Company's hospital/Govt.Hospital/ hospitals as per company's rule. They can also avail treatment as out patient subject to ceiling limit of expenses fixed by the Company. The liability under the scheme is recognised on the basis of actuarial valuation.
- Settling-in-benefit:** On superannuation/retirement/termination of service, if opted for the scheme, the transfer TA is admissible to the employees and / or family from the last head quarters to the hometown or any other place of settlement limited to distance of home town. Transport of personal conveyance shall also be admissible. The liability for the same is recognised on the basis of actuarial valuation.



- d) **NALCO Benevolent Fund Scheme** : The objective of the scheme is to provide financial assistance to families of the members of the scheme who die while in employment of the Company. As per the scheme there will be contribution by members @ Rs.30/- per member per death, in the event of death of a member while in the service of the company and matching contribution by the Company. The liability for the same is recognised on the basis of actuarial valuation.
- e) **NALCO Retirement Welfare Scheme** : The objective of the scheme is to provide financial assistance as a gesture of goodwill for post retirement support to employees retiring from the services of the company. As per the scheme the recovery form each employee member would be Rs. 10/- per retiring member. The Company would provide equivalent sum as matching contribution. The liability for the same is recognised on the basis of actuarial valuation.
- f) **Superannuation gift scheme**: The objective of the scheme is to recognise the employees superannuating or retiring on medical ground from the services of the Company. The scheme includes a gift item worth of Rs. 25000/- per retiring employees to be presented on superannuation/ retirement. The liability for the same is recognised on the basis of actuarial valuation.

31.B.3 Other long term employees benefits

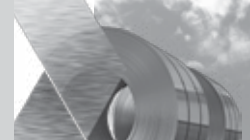
- a) **Compensated absences** : The accumulated earned leave, half pay leave & sick leave is payable on separation, subject to maximum permissible limit as prescribed in the leave rules of the Company. During the service period encashment of accumulated leave is also allowed as per company's rule. The liability for the same is recognised on the basis of actuarial valuation.
- b) **Long Service Reward** : The employee who completes 25 years of service are entitled for a long service reward which is equal to one month basic pay and DA. The liability for the same is recognised on the basis of actuarial valuation.
- c) **NEFFARS** : In the event of disablement/death, the Company pays monthly benefit to the employee/ nominee at their option and on deposit of prescribed amount as stipulated under the scheme upto the date of notional superannuation. The liability for the same is recognised on the basis of actuarial valuation.

The employee benefit plans typically expose the Company to actuarial risks such as actuarial risk, investment risk, interest risk, longevity risk and salary risk:-

- i. **Actuarial risk**: It is the risk that employee benefits will cost to the Company more than expected. This can arise due to one of the following reasons:
- Adverse Salary Growth Experience**: Salary hikes that are higher than the assumed salary escalation will result into an increase in obligation at a rate that is higher than expected.
 - Variability in mortality rates**: If actual mortality rates are higher than assumed mortality rate assumption then the gratuity benefits will be paid earlier than expected. Since there is no condition of vesting on the death benefit, the acceleration of cashflow will lead to an actuarial loss or gain depending on the relative values of the assumed salary growth and discount rate.
 - Variability in withdrawal rates**: If actual withdrawal rates are higher than assumed withdrawal rate assumption then the gratuity benefits will be paid earlier than expected. The impact of this will depend on whether the benefits are vested as at the resignation date.
- ii. **Investment risk**: For funded plans that rely on insurers for managing the assets, the value of assets certified by the insurer may not be the fair value of instruments backing the liability. In such cases, the present value of the assets is independent of the future discount rate. This can result in wide fluctuations in the net liability or the funded status if there are significant changes in the discount rate during the inter-valuation period.
- iii. **Interest risk**: The defined benefit obligation calculated uses a discount rate based on government bonds. If bond yields fall, the defined benefit obligation will tend to increase.
- iv. **Longevity risk**: The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.
- v. **Salary risk**: The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

The principal assumptions used for the purposes of the actuarial valuations were as follows:

	Valuation as at	
	31/03/2019	31/03/2018
Discount rate(s)	7.50%	7.50%
Expected rate(s) of salary increase	8%	6%
Mortality	IALM 2006-2008 ULTIMATE	IALM 2006-2008 ULTIMATE
Attrition Rate	1%	1%


31 Employee benefit expense (contd.)

Amount in ₹ Crore

Amounts recognised in statement of profit and loss in respect of these defined benefits plans are as follows:-

	Year ended 31.03.2019	Year ended 31.03.2018
Service Cost:		
— Current Service cost	(48.58)	(35.47)
— Past Service Cost and (gain)/loss from settlements	6.21	(225.93)
— Net Interest expense	(29.38)	(28.89)
Components of defined benefit costs recognised in profit or loss	(71.75)	(290.29)
Remeasurement of the net defined benefit liability:		
Return on the net defined benefit liability	(10.98)	(0.88)
Actuarial (Gains)/losses arising from changes in financial assumptions	(17.24)	71.41
Actuarial (Gains)/losses arising from experience assumptions	28.28	(17.89)
Others (describe)		
Adjustments for restrictions on the defined benefit asset		
Components of defined benefit costs recognised in other comprehensive income	0.06	52.64
Total	(71.69)	(237.65)

The amount included in the balance sheet arising from the entity's obligation in respect of its defined benefit plans is as follows:

	Post retirement medical benefit	Settling-in- benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
March 31, 2018						
Present value of defined benefit obligation	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)
Fair value of plan assets	—	—	—	—	—	302.48
Net liability arising from defined benefit obligation	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(271.05)
March 31, 2019						
Present value of defined benefit obligation	(123.44)	(22.42)	(3.04)	(11.90)	(6.93)	(604.90)
Fair value of plan assets	—	—	—	—	—	547.80
Net liability arising from defined benefit obligation	(123.44)	(22.42)	(3.04)	(11.90)	(6.93)	(57.10)

Movements in the present value of the defined benefit obligations are as follows:

	Post retirement medical benefit	Settling-in- benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super- annuation gift scheme	Gratuity (Funded)
Opening defined benefit obligations as at April 01, 2017	(64.31)	(2.41)	(3.86)	(13.84)	(7.34)	(314.03)
Current service cost	—	(0.41)	—	—	—	(35.06)
Interest Cost	(4.66)	(0.16)	(0.26)	(0.97)	(0.54)	(22.30)
Remeasurement						
Actuarial (Gains)/losses arising from changes in demographic assumptions	—	—	—	—	—	—
Actuarial (Gains)/losses arising from changes in financial assumptions	5.76	0.03	0.04	0.18	0.13	65.27
Actuarial (Gains)/losses arising from experience assumptions	16.52	0.23	(0.30)	(0.72)	0.26	(33.88)
Past Service Cost, including losses/(gains) on curtailment	(84.10)	—	—	—	—	(267.07)
Liabilities extinguished as settlements	—	—	—	—	—	—
Liabilities assumed in a business combination	—	—	—	—	—	—

31. Employee benefit expense (contd.)

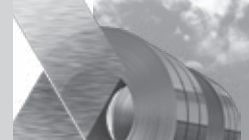
	Amount in ₹ Crore					
	Post retirement medical benefit	Settling-in-benefit	NALCO benevolent fund scheme	NALCO retirement welfare scheme	Super-annuation gift scheme	Gratuity (Funded)
Exchange differences on foreign plans	—	—	—	—	—	—
Benefits paid	4.27	0.45	0.76	1.71	0.41	33.54
Others	—	—	—	—	—	—
Closing defined benefit obligation as at March 31, 2018	(126.52)	(2.27)	(3.62)	(13.64)	(7.08)	(573.53)
Current service cost	—	(3.35)	—	—	—	(45.23)
Interest Cost	(9.29)	(0.15)	(0.25)	(0.96)	(0.50)	(40.96)
Remeasurement						
Actuarial (Gains)/losses arising from changes in demographic assumptions	—	—	—	—	—	—
Actuarial (Gains)/losses arising from changes in financial assumptions	—	—	—	—	—	(17.24)
Actuarial (Gains)/losses arising from experience assumptions	7.07	2.96	0.27	0.96	(0.16)	17.18
Past Service Cost, including losses/(gains) on curtailment	—	(20.16)	—	—	—	—
Liabilities extinguished as settlements	—	—	—	—	—	—
Liabilities assumed in a business combination	—	—	—	—	—	—
Exchange differences on foreign plans	—	—	—	—	—	—
Benefits paid	5.31	0.55	0.56	1.74	0.81	54.88
Others (describe)	—	—	—	—	—	—
Closing defined benefit obligation as at March 31, 2019	(123.43)	(22.42)	(3.04)	(11.90)	(6.93)	(604.90)

Movements in the fair value of the plan assets are as follows:

	Gratuity (Funded)
Opening fair value of plan assets as at April 01, 2017	302.10
Interest income	22.64
Remeasurement	
Return on plan assets (excluding amounts included in net interest income)	(0.88)
Others (describe)	(0.25)
Contribution from the employer	12.40
Benefits paid	(33.53)
Closing fair value of plan assets as at March 31, 2018	302.48
Interest income	22.73
Remeasurement	
Return on plan assets (excluding amounts included in net interest income)	(10.98)
Others (describe)	0.59
Contribution from the employer	287.86
Contribution from plan participant	-
Assets distributed on settlements	-
Assets acquired in a business combination	-
Exchange differences on foreign plans	-
Benefits paid	(54.88)
Others (describe)	-
Closing fair value of plan assets as at March 31, 2019	547.80

The fair value of the plan assets at the end of the reporting period for each category, are as follows

	Fair value of plan assets as at	
	31/03/2019	31/03/2018
Investments in Funds:		
1. Insurance Companies	547.80	302.48
Total	547.80	302.48



31 Employee benefit expense

31.C. Sensitivity analysis of defined benefit plans

Significant actuarial assumption for determination of defined benefit plan are discount rate, expected salary growth, attrition rate and mortality rate. The sensitivity analysis below have been based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period while holding all other assumptions constant.

Sensitivity Analysis

Particulars	Amount in ₹ Crore					
	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2017-18						
Impact on amount due to change in Discount rate (-/+0.5%)	3.87	3.74	0.07	0.07	0.08	0.07
% Change compared to base due to sensitivity [+ /(-)%]	3.06%	2.95%	3.19%	3.02%	2.14%	2.07%
Impact on amount due to change in Salary growth (+/-0.5%)	0.00	0.00	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	—	—	—	—
Impact on amount due to change in Attrition rate (+/-0.5%)	0.07	0.15	—	—	—	—
% Change compared to base due to sensitivity [+ /(-)%]	0.05%	0.12%	0.06%	0.06%	0.07%	0.07%
Impact on amount due to change in Mortality rate (-/+10%)	0.73	0.81	0.01	0.01	-	-
% Change compared to base due to sensitivity [+ /(-)%]	0.58%	0.64%	0.51%	0.51%	0.03%	0.03%

Particulars	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
	2017-18					
Impact on amount due to change in Discount rate (-/+0.5%)	0.39	0.37	0.27	0.26	17.74	16.77
% Change compared to base due to sensitivity [+ /(-)%]	2.86%	2.71%	3.82%	3.62%	3.09%	2.92%
Impact on amount due to change in Salary growth (+/-0.5%)	-	-	-	-	4.27	4.31
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	-	-	0.74%	0.75%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.01	0.01	-	-	0.49	0.49
% Change compared to base due to sensitivity [+ /(-)%]	0.04%	0.04%	0.05%	0.05%	0.09%	0.09%
Impact on amount due to change in Mortality rate (-/+10%)	-	-	-	-	3.49	3.49
% Change compared to base due to sensitivity [+ /(-)%]	0.03%	0.03%	0.03%	0.03%	0.61%	0.61%

Particulars	Post retirement medical benefit		Settling-in-benefit		NALCO benevolent fund scheme	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
	2018-19					
Impact on amount due to change in Discount rate (-/+0.5%)	3.57	3.64	0.65	0.66	0.08	0.08
% Change compared to base due to sensitivity [+ /(-)%]	2.89%	2.95%	2.89%	2.95%	2.71%	2.76%
Impact on amount due to change in Salary growth (+/-0.5%)	-	-	-	-	-	-
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.15	0.15	0	0	-	-
% Change compared to base due to sensitivity [+ /(-)%]	0.12%	0.12%	0.12%	0.12%	0.15%	0.15%
Impact on amount due to change in Mortality rate (-/+10%)	0.57	0.57	0.10	0.10	0	0
% Change compared to base due to sensitivity [+ /(-)%]	0.46%	0.46%	0.46%	0.46%	0.26%	0.26%

Sensitivity Analysis (contd.)

Particulars	Amount in ₹ Crore					
	NALCO retirement welfare scheme		Superannuation gift scheme		Gratuity (Funded)	
	Increase by	Decrease by	Increase by	Decrease by	Increase by	Decrease by
2018-19						
Impact on amount due to change in Discount rate (-/+0.5%)	0.32	0.33	0.19	0.19	20.06	18.84
% Change compared to base due to sensitivity [+ /(-)%]	2.71%	2.76%	2.71%	2.76%	3.32%	3.11%
Impact on amount due to change in Salary growth (+/-0.5%)	—	—	—	—	3.22	3.67
% Change compared to base due to sensitivity [+ /(-)%]	0.00%	0.00%	0.00%	0.00%	0.53%	0.61%
Impact on amount due to change in Attrition rate (+/-0.5%)	0.02	0.02	0	0	0.10	0.10
% Change compared to base due to sensitivity [+ /(-)%]	0.15%	0.15%	0.15%	0.15%	0.02%	0.02%
Impact on amount due to change in Moratlity rate (-/+10%)	—	—	—	—	0.63	0.63
% Change compared to base due to sensitivity [+ /(-)%]	0.26%	0.26%	0.26%	0.26%	0.10%	0.10%

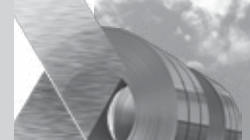
The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using projected unit credit method at the end of the reporting period, which is same as that applied in calculating the defined benefit obligation liability recognised in the balance sheet.

There is no change in the methods and assumptions used in preparing the sensitivity analysis from prior years.

32. Finance cost

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Finance cost		
a. Interest cost	2.38	1.95
Total finance cost	2.38	1.95


33. Other expenses

Amount in ₹ Crore

	Year ended 31.03.2019	Year ended 31.03.2018
(a) Stores and spares consumed	365.52	344.52
(b) Repair and maintenance to		
(1) Buildings	49.11	38.75
(2) Machinery	166.14	155.94
(3) Others	31.44	24.82
(c) Other Manufacturing Expenses		
(1) Water charges	29.37	26.71
(2) Royalty	147.36	127.70
(3) Contribution to District Mineral Fund and National Mineral Exploration Trust	47.16	40.88
(4) Continuous Technical Assistance expenses	10.54	8.76
(5) Others	80.13	72.35
(d) Freight and handling charges		
(1) Incoming materials (Alumina)	120.01	113.45
(2) Outgoing materials	146.45	152.97
(e) Auditors remuneration and out-of-pocket expenses		
(i) As Auditors	0.35	0.26
(ii) For Taxation matters	0.06	0.08
(iii) For Other services	0.29	0.22
(iv) For reimbursement of expenses	0.20	0.12
(f) Payment to Cost Auditors	0.03	0.03
(g) Security and fire fighting expenses	133.90	117.77
(h) Corporate social responsibility expenses [refer note 33.1]	30.35	29.01
(i) Administrative and general expenses	118.86	109.90
(j) Renewable purchase obligation	55.22	120.37
(k) Provision towards disputed Government dues and others	0.05	7.06
(l) Selling and distribution expenses	23.01	28.16
(m) Write off of Inventories, Claims etc	12.52	15.98
(n) Bad and doubtful Provisions/ (write back)	(3.51)	13.43
(o) Others	128.23	40.90
(1) Rent	79.31	5.68
(2) Rates and Taxes	8.01	3.35
(3) Net (gain)/ loss on disposal of property, plant and equipment	7.50	(0.44)
(4) Insurance charges	11.81	6.69
(5) Other miscellaneous expenses	21.60	25.62
Total other expenses	1,692.79	1,590.14

Note:

33.1 Expenditure on Corporate Social Responsibility.

- a) Gross amount to be spent by the company during the year ended March 31, 2019 is ₹27.38 crore (March 31, 2018 ₹27.88 crore)
- b) Amount spent during the year ended March 31, 2019
- | | |
|---------------------------------------|---|
| i) Construction/acquisition of assets | ₹ Nil (previous year ₹Nil) |
| ii) On purpose other than (i) above | ₹ 30.35 crore (previous year ₹29.01 crore) |
| Total | ₹ 30.35 crore (previous year Rs.29.01 crore) |

34. Exceptional items	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Exceptional items		
a. Write back of provision against disputed interest on water charges	—	(785.71)
b. Reversal of liability towards DMF contribution on bauxite extraction	—	(18.32)
c. Refund claim of DMF contribution on coal procurement	—	(22.37)
d. Employment benefits in the form of interest subsidy	—	46.44
e. Write back of doubtful provision against advance to employees towards (d) above	—	(44.12)
Total exceptional items	—	(824.08)

35. Income taxes	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
35.1 Income tax recognised in profit or loss		
Current tax		
In respect of current year	998.36	521.99
In respect of prior years	26.29	271.19
	1,024.65	793.18
Deferred tax		
In respect of current year	(17.13)	(101.71)
Others (MAT credit entitlement)	—	4.95
	(17.13)	(96.76)
Total income tax expense recognised in current year	1,007.52	696.42
The income tax expense for the year can be reconciled to the accounting profit as follows:		
Profit before tax	2,741.21	2,038.61
Income tax expense thereon @ 34.944% (previous year @ 34.608%) :	957.89	705.52
Tax effect of -		
i) income exempt from taxation	(11.13)	(23.63)
ii) disallowable expenses (permanent difference)	13.23	9.89
iii) expenses allowable in excess of expenditure incurred	(14.25)	(12.53)
iv) effect of concessions (research and development and other allowances)	—	(12.95)
v) difference for long-term capital gains	—	8.54
vi) Adjustment relating to earlier years	26.29	29.16
vii) others	35.51	(7.58)
Income tax expense recognised in profit or loss	1,007.54	696.42
35.2 Income tax recognised directly in equity		
Current tax		
Share buy-back costs	(1.39)	—
Income tax recognised directly in equity	(1.39)	—

35. Income taxes (contd.)	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
35.3 Income tax recognised in other comprehensive income		
Tax on remeasurement gain or loss of defined benefit obligations		
— Current Tax	3.85	—
— Deferred Tax	(3.64)	2.63
Total income tax recognised in other comprehensive income	0.21	2.63
Bifurcation of the income tax recognised in other comprehensive income into:		
Items that will be reclassified to profit or loss	—	—
Items that will not be reclassified to profit or loss	0.21	2.63

36. Segment information

36.1 Products from which reportable segments derive their revenues

Information reported to the chief operating decision maker (CODM) for the purpose of resource allocation and assessment of segment performance focuses on the types of goods delivered. The directors of the company have chosen to organise the Company around differences in products. No reporting segment have been aggregated in arriving at the reportable segments in the Company. Specifically, the Company's reportable segment under Ind AS 108- Operating Segments are as follows:

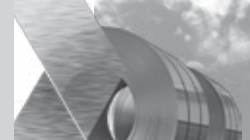
- i) Chemical segment
- ii) Aluminium segment

The Company has considered Chemicals and Aluminium as the two primary operating business segments. Chemicals include Calcined Alumina, Alumina Hydrate and other related products. Aluminium includes aluminium ingots, wire rods, billets, strips, rolled and other related products. Bauxite produced for captive consumption for production of alumina is included under chemicals and power generated for captive consumption for production of Aluminium is included under Aluminium segment. Wind Power Plant commissioned primarily to harness the potential renewable energy sources is included in the unallocated Common segment.

36.2 Segment revenues and results

The following is an analysis of the Company's revenue and results from operations by reportable segment

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Operating Segments		
Chemical segment	5,680.07	4,339.76
Aluminium segment	6,875.72	6,323.93
Unallocated	173.95	126.75
Total for operations	12,729.74	10,790.44
Less: Intersegment revenue	1,230.42	1,172.13
Revenue from operations	11,499.32	9,618.31
Operating Segments		
Chemical segment	1,819.81	783.46
Aluminium segment	778.38	370.30
Segment result before exceptional items, interest and tax	2,598.19	1,153.76
Exceptional Income/(Expenses)	—	824.08
Interest & financing charges	2.37	1.95
Interest and dividend income	256.34	240.37
Other unallocated income net of unallocated expenses	(112.24)	(177.43)
Share of Profit/(loss) of Joint Ventures	1.29	(0.22)
Profit before tax	2,741.21	2038.61


36.3 Segment assets and liabilities

Amount in ₹ Crore

	Segment Assets		Segment Liabilities	
	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
Chemical segment	4,040.88	4,041.84	1806.17	1,041.48
Aluminium segment	5,579.21	5,117.43	1,337.01	1,606.60
Total segment assets and liabilities	9,620.09	9,159.27	3,143.18	2,648.08
Unallocated	5,527.30	5,453.67	388.60	309.46
Total assets and Liabilities	15,147.39	14,612.94	3,531.78	2,957.54

36.4 Other segment information

Amount in ₹ Crore

	Depreciation and amortisation		Additions to non-current assets	
	Year ended 31.03.2019	Year ended 31.03.2018	Year ended 31.03.2019	Year ended 31.03.2018
Chemical segment	180.03	174.36	250.77	256.64
Aluminium segment	236.18	248.31	53.23	(119.74)
Unallocated	59.89	57.74	139.23	161.24
Total for operations	476.10	480.40	443.23	298.14

	Material non-cash expenditure	
	Year ended 31.03.2019	Year ended 31.03.2018
Chemical segment	66.96	45.70
Aluminium segment	52.82	85.53
Unallocated	2.26	7.56
Total	122.04	138.79

36.5 Revenue from major products

Amount in ₹ Crore

The following is an analysis of the Company's revenue from continuing operations from its major products and services

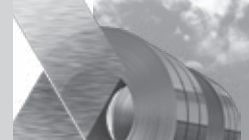
	Year ended 31.03.2019	Year ended 31.03.2018
Chemical segment (Hydrate and Alumina)	4,435.08	3,199.37
Aluminium segment (Aluminium)	6,823.63	6,216.38
Total	11,258.71	9,415.75

36.6 Geographical information

The Company operates mainly in principal geographical areas-India (country of domicile) and Outside India

Amount in ₹ Crore

	Revenue from external customers		Non-current assets	
	Year ended 31.03.2019	Year ended 31.03.2018	As at 31.03.2019	Year ended 31.03.2018
India	6,466.00	5,340.29	9,546.69	9,103.46
Outside India	4,792.71	4,075.46	—	—
Total	11,258.71	9,415.75	9,546.69	9,103.46



Note:

i) The Company has changed the pricing of inter-segment transactions for intersegment transfers of Alumina from average export sales realisation net of freight and intersegment transfer of power from periodic average purchase price for the purpose of segment reporting to cost basis. The effect of such change, causing increase (+) or decrease (-) in the measurement of segment revenue and results, are stated below:

Particulars	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Segment Revenue :		
— Chemical Segment	(-) 1628.33	(-) 822.26
— Aluminium Segment	(-) 48.24	(-) 84.88
Segment Results :		
Profit before tax, exceptional items and interest		
— Chemical Segment	(-) 1580.09	(-) 737.37
— Aluminium Segment	(+) 1580.1	(+) 737.37

ii) Revenue and expenses have been identified to segments on the basis of their relationship to the operating activities. Revenue, expenses, assets and liabilities, which relate to the enterprise as a whole and are not allocable on a reasonable basis, have been included under Unallocated Common segment.

37. Earnings per share

37.1 Basic Earnings per share (₹)	Year ended 31.03.2019 (₹ per share)	Year ended 31.03.2018 (₹ per share)
From total operations	9.07	6.94
Total Basic earnings per share	9.07	6.94

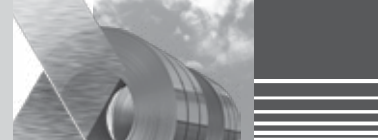
37.2 Basic Earnings per Share

The Earnings and weighted average number of equity shares used in the calculation of basic earnings per share are as follows

	Amount in ₹ Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Profit for the year attributable to Owners of the Company	1,733.69	1,342.19
Earnings used in the calculation of basic earnings per share	1,733.69	1,342.19
Weighted average number of equity shares used in calculation of basic earnings per share (in crore)	191.17	193.29

38. Financial Instruments

38.1 Categories of financial instruments	Amount in ₹ Crore	
	As at 31.03.2019	As at 31.03.2018
Financial Assets		
Measured at fair value through profit or loss (FVTPL)		
(a) Mandatorily measured:		
(i) Investments in mutual funds	80.81	592.96
(ii) Forward contract on foreign currency	Nil	(0.44)
Measured at Amortised cost		
(a) Cash and bank balances	171.60	25.35
(b) Other financial assets at amortised cost	3,853.57	3,388.86
	4,105.98	4,006.73
Financial Liabilities		
Measured at Amortised cost	1,791.26	1,538.08



38.2 Financial risk management objectives

In the course of its business, the Company is exposed primarily to fluctuations in foreign currency exchange rates, interest rates, equity prices, liquidity and credit risk, which may adversely impact the fair value of its financial instruments. The Company has a risk management policy which not only covers the foreign exchange risks but also other risks associated with the financial assets and liabilities such as interest rate risks and credit risks.

The objectives of the Company's risk management policy are, inter-alia, to ensure the following:

- i) Sustainable business growth with financial stability;
- ii) Provide a strategic framework for Company's risk management process in alignment with the strategic objectives including the risk management organisation structure;
- iii) That all the material risk exposures of Company, both on and off-balance sheet are identified, assessed, quantified, appropriately mitigated and managed and
- iv) Company's compliance with appropriate regulations, wherever applicable, through the voluntary adoption of international best practices, as far as may be appropriate to the nature, size and complexity of the operations.

The risk management policy is approved by the board of directors. The Internal Control Team would be responsible to evaluate the efficacy and implementation of the risk management system. It would present its findings to the Audit Committee every quarter. The Board is responsible for the Company's overall process of risk management. The Board shall, therefore, approve the compliance and risk management policy and any amendments thereto, and ensure its smooth implementation.

38.3 Market risk

Market risk is the risk of any loss in future earnings (spreads), in realizable fair values (economic value) or in future cash flows that may result from a change in the price of a financial instrument. The value of a financial instrument may change as a result of changes in the interest rates, foreign currency exchange rates, liquidity and other market changes. The Company may also be subjected to liquidity risk arising out of mismatches in the cash flows arising out of sales proceeds and funds raised and loan repayments/prepayments. Future specific market movements cannot be normally predicted with reasonable accuracy.

38.4 Foreign currency risk management

Foreign currency risk emanates from the effect of exchange rate fluctuations on foreign currency transactions. The overall objective of the currency risk management is to protect the Company's income arising from changes in foreign exchange rates. The policy of the Company is to avoid any form of currency speculation. Hedging of currency exposures shall be effected either naturally through offsetting or matching assets and liabilities of similar currency, or in the absence of thereof, through the use of approved derivative instruments transacted with reputable institutions. The Currency risk is measured in terms of the open positions in respective currencies vis-à-vis the Company's operating currency viz. INR. A currency gap statement shall be prepared to find the gap due to currency mismatch.

The fluctuation in foreign currency exchange rates may have impact on the income statement and 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.

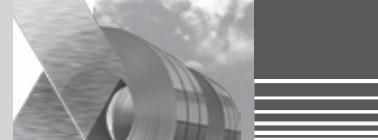
The Company undertakes transactions denominated in foreign currency; consequently, exposures to exchange rate fluctuations arise. Exchange rate are managed within approved policy parameters utilising forward foreign exchange contracts.

The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities at the end of the reporting period are as follows:-

	Liabilities as at		Assets as at	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
USD	0.81	33.96	241.69	173.98
EURO	15.34	15.13	—	—

38.4.1 Foreign currency sensitivity analysis

The Company evaluates the impact of foreign exchange rate fluctuations by assessing its exposure to exchange rate risks. It hedges a part of these risks by using derivative financial instruments in accordance with its risk management policies.



The foreign exchange rate sensitivity is calculated for each currency by aggregation of the net foreign exchange rate exposure of a currency and a simultaneous parallel foreign exchange rates shift in the foreign exchange rates of each currency by 10%.

The following analysis is based on the gross exposure as of the relevant balance sheet dates, which could affect the income statement. There is no exposure to the income statement on account of translation of financial statements of consolidated foreign entities.

The following table sets forth information relating to foreign currency exposure as at March 31, 2019 and March 31, 2018.

	USD impact		EURO impact	
	Year ended 31.03.2019	Year ended 31.03.2018	Year ended 31.03.2019	Year ended 31.03.2018
Impact on profit or loss for the year	24.1	14.0	1.53	1.51

38.5 Other price risks

38.5.1 Equity price sensitivity analysis

The Company is not exposed to equity price risk arising from equity instruments as all the equity investments are held for strategic rather than trading purposes.

38.6 Credit risk management

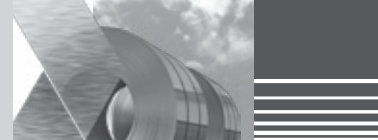
Credit risk is the risk of financial loss arising from counterparty failure to repay or service debt according to the contractual terms or obligations. Credit risk encompasses both the direct risk of default and the risk of deterioration of creditworthiness as well as concentration risks. There is no significant credit exposure as advance collection from customer is made.

Financial instruments that are subject to concentrations of credit risk, principally consist of investments classified as loans and receivables, trade receivables, loans and advances and derivative financial instruments. None of the financial instruments of the Company result in material concentrations of credit risks.

38.7 Liquidity risk management

Liquidity risk refers to the risk that the Company cannot meet its financial obligations. The objective of liquidity risk management is to maintain sufficient liquidity and ensure that funds are available for use as per requirements.

Company has established an appropriate liquidity risk management framework for the management of the Company's short-term, medium-term and long-term funding liquidity management requirements. The Company manages liquidity risk by maintaining adequate reserves and banking facilities by continuously monitoring forecast and actual cashflows and by matching the maturity profiles of financial assets and financial liabilities.



39. Related party disclosures

39.1 Related parties

A. Key Managerial Personnel:

I) Whole time Directors

(a) Dr. T K Chand	Chairman-Cum-Managing Director
(b) Shri K C Samal	Director (Finance) (upto 31.08.2018)
(c) Shri V Balasubramanyam	Director (Production)
(d) Shri B K Thakur	Director (HR)
(e) Shri S K Roy	Director (Proj & Tech)
(f) Shri P K Mishra	Director (Commercial)
(g) Shri S. Patra	Director (Finance) (w.e.f 01.09.2018)

Others

Shri N K Mohanty	Company Secretary
------------------	-------------------

II) Part time Official Directors: (Nominee of Govt. of India):

- (a) Dr. K Rajeswara Rao, IAS
- (b) Shri Anil Kumar Nayak, IOFS

III) Part time non official (Independent) Directors:

- (a) Ms. Kiran Ghai Sinha
- (b) Shri N N Sharma
- (c) Smt. Achla Sinha
- (d) Shri Dipankar Mahanta
- (e) Shri S. Sankararaman
- (f) Shri Pravat Keshari Nayak
- (g) Shri Maheswar Sahu
- (h) Prof. Damodar Acharya

B. Post Employment Benefit Plan

- (a) Nalco Employees Provident Fund Trust
- (b) Nalco Employees Group Gratuity Trust

C. Entity controlled by a person identified in (A) as KMP

- (a) Nalco Foundation

D. Government that has control or significance influence:

- (a) Govt. of India

E. Entities on which Govt. of India has control or significant influence (CPSEs)

The Company has major business transactions during the year with the following CPSEs.

i) Purchase of Goods and Services

- a) Indian Oil Corporation Ltd.
- b) Bharat Petroleum Corporation Ltd.
- c) Hindustan Petroleum Corporation Ltd.
- d) Mahanadi Coal Fields Ltd.
- e) Northern Coal Fields Ltd.
- f) Singareni Collieries Ltd.
- g) Western Coal Fields Ltd.
- h) Eastern Coal Fields Ltd.
- i) Numaligarh Refinery Ltd.
- j) Bharat Earthmovers Ltd.
- k) Bharat Heavy Electrical Ltd.
- l) Mineral Exploration Corporation Ltd.
- m) Balmer Lawrie & Co.
- n) East Coast railways
- o) Vizag Port Trust
- p) MECON Limited.
- q) Engineers India Ltd.

ii) Sale of Goods

- a) National Small Industries Corporation (NSIC)
- b) Steel Authority of India Ltd.
- c) Rashtriya Ispat Nigam Ltd.
- d) National Thermal Power Corporation Ltd.

39.2 Related Party Transactions

I. Key Managerial Personnel

Amount in ₹ Crore

Remuneration to Key Managerial Personnel

Particulars	Year ended 31.03.2019	Year ended 31.03.2018
Short-term employee benefits		
— Salaries	3.79	3.22
— Contribution to Provident Fund	0.24	0.21
— Medical Benefits	0.01	0.01
— Other Benefits	0.03	0.03
Post employment benefits #	(0.09)	(0.01)
Other long term benefits	0.09	0.03
Total	4.07	3.49

Since actuarial valuation of employee benefit expenses under post-employment benefits and other long-term benefits are done on an overall basis for all employees, these expenses for the key managerial persons is considered on a proportionate basis.

Loans / advances due from Key Managerial Personnel

Particulars	As at 31.03.2019	As at 31.03.2018
Outstanding at the end of the year	0.01	0.01
Maximum amount due at any time during the year	0.01	0.07

II. Post Employment Benefit Plan

Transactions during the year

Amount in ₹ Crore

Name of Trust	Nature of Transaction	Year ended 31.03.2019	Year ended 31.03.2018
NEPF Trust	PF-Contribution	333.12	332.99
NEGG Trust	Funding of shortfall	270.75	12.6
Outstanding balance at the end of the year			
Name of Trust	Nature of Transaction	As at 31.03.2019	As at 31.03.2018
NEPF Trust	PF-Contribution payable	26.59	38.45
NEGG Trust	Funding of shortfall payable	57.4	271.05

III. Nalco Foundation

Particulars	Year ended 31.03.2019	Year ended 31.03.2018
Contribution to CSR Trust	9.61	21.50

IV. Govt. Of India : Transaction during the year

Particulars	Year ended 31.03.2019	Year ended 31.03.2018
Buyback of shares	260.70	—
Final Dividend-2017-18	193.29	—
Interim Dividend-2018-19	839.53	—
Interim Dividend-2017-18	—	546.95

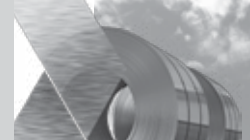

V. CPSEs/ Govt Undertakings – Transaction during the year

Amount in ₹ Crore

Particulars	Year ended 31.03.2019	Year ended 31.03.2018
Purchase of goods and services from CPSEs/ Govt undertakings	3,007.70	2,747.90
Sale of goods to CPSEs and Govt undertakings	1,245.97	1,147.49
Outstanding balance at the end of the year		
Particulars	As at 31.03.2019	As at 31.03.2018
Payable for purchase of goods and services from CPSEs/ Govt. undertakings	137.78	195.03
Receivable for sale of goods to CPSEs and Govt. undertakings	—	—

40. Regrouping of previous year's figures

Previous year's figures have been regrouped/rearranged wherever considered necessary to make them comparable.


41 Disclosure of additional information :

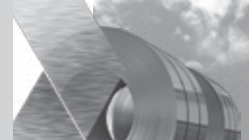
Amount in Rs. Crores

(a) As at and for the year ended March 31, 2019

Name of the entity in the Group	Net Assets i.e total assets minus total liabilities		Share in profit and loss		Share in other comprehensive income		Share in total comprehensive income	
	As % of consolidated net assets	Amount	As % of consolidated profit or loss	Amount	As % of consolidated other comprehensive income	Amount	As % of total comprehensive income	Amount
Associates (Investments as per the Equity method)								
Indian								
NPCIL-NALCO Power Company Limited	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Joint Ventures (Investments as per the Equity method)								
Indian								
Angul Aluminium Park Private Limited	0.34%	35.47	0.03%	0.47	0.00%	0.00	0.03%	0.47
GACL NALCO Alkalies & Chemicals Private Limited	3.79%	397.04	0.05%	0.82	0.00%	0.00	0.05%	0.82
Total	4.13%	432.51	0.07%	1.29	0.00%	-	0.07%	1.29

(b) As at and for the year ended March 31, 2018

Name of the entity in the group	Net Assets i.e total assets minus total liabilities		Share in profit and loss		Share in other comprehensive income		Share in total comprehensive income	
	As % of consolidated net assets	Amount	As % of consolidated profit or loss	Amount	As % of consolidated other comprehensive income	Amount	As % of total comprehensive income	Amount
Associates (Investments as per the Equity method)								
- Indian								
NPCIL-NALCO Power Company Limited	0.0%	0.06	0.0%	0.00	0.0%	0.00	0.0%	0.00
Joint Ventures (Investments as per the Equity method)								
- Indian								
Angul Aluminium Park Private Limited	0.33%	34.52	0.02%	0.32	0.00%	0.00	0.02%	0.32
GACL NALCO Alkalies & Chemicals Private Limited	2.38%	249.48	-0.04%	(0.54)	0.00%	-	-0.04%	(0.54)
Total	2.70%	284.06	-0.02%	(0.21)	0.00%	-	-0.02%	(0.21)



42. Salient features of associates and joint ventures

STATEMENT CONTAINING SALIENT FEATURES OF THE FINANCIAL STATEMENT OF
ASSOCIATE COMPANIES / JOINT VENTURES (FORM AOC-1)

Part "B": Associates and Joint Ventures

Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

Name of Associates/Joint Ventures	Joint ventures	
	Angul Aluminum Park Pvt. Ltd.	GACL NALCO Alkalies & Chemicals Pvt. Ltd.
1. Latest audited Balance Sheet Date	31.03.2019	31.03.2019
2. Shares of Associate/ Joint Ventures held by the company on the year end		
No.	16,223,900	159,530,934
Amount of Investment in Associates / Joint Venture (Rs.)	162,239,000	1,595,309,340
Extend of Holding %	49.00%	40.00%
3. Description of how there is significant influence	[refer note 42.2]	[refer note 42.2]
4. Reason why the associate / joint venture is not consolidated	—	—
5. Networth attributable to share holding as per latest audited Balance sheet (Rs.)	173,802,323	1,588,142,800
6. Profit /(Loss) for the year (Rs.)		
i. Considered in Consolidation	4,651,633	8,210,400
ii. Not Considered in Consolidation	—	—
Note:		
42.1 None of the associates or joint ventures have commenced operations.		
42.2 Voting power as per the percentage of equity held.		

For Guha Nandi & Co.
Chartered Accountants
FRN-302039E

(CA Dr. B S Kundu)
Partner (M No.:051221)

For Patro & Co.
Chartered Accountants
FRN-310100E

(CA Ambika Prasad Mohanty)
Partner (M No.:057820)

Place: New Delhi

Date: May 30, 2019

5 YEARS PERFORMANCE AT A GLANCE

PHYSICAL

Sl. No.	Particulars	Units	2018-19	2017-18	2016-17	2015-16	2014-15
1	Production:						
	Bauxite	MT	72,30,546	70,25,109	68,25,000	63,40,142	57,39,120
	Alumina Hydrate	MT	21,52,500	21,05,500	21,00,100	19,53,000	18,51,000
	Aluminium	MT	4,40,242	4,25,515	3,87,422	3,72,183	3,27,070
	Power (Net)	MU	6,256	6,547	6,066	5,841	5,131
	Wind Power	MU	330	243	198	156	175
2	Export Sales:						
	Alumina	MT	12,44,256	12,76,775	12,43,103	11,74,224	11,84,595
	Aluminium	MT	38,463	75,847	1,00,591	94,671	60,752
3	Domestic Sales:						
	Alumina, Hydrate and Other Chemicals	MT	73,377	60,641	51,797	45,702	40,048
	Aluminium	MT	4,02,134	3,50,469	2,84,926	2,77,753	2,65,328
	Power (Net)	MU	11	24	30	31	28
	Wind Power	MU	330	243	198	156	175

FINANCIAL

(₹ in Crore)

Sl. No.	Particulars	2018-19	2017-18	2016-17	2015-16	2014-15
A	Income Statement :					
1	Exports	4,792.71	4,075	3,625	3,247	3,307
2	Domestic Sales	6,593.61	5,429.66	4,308	3,910	4,464
3	Gross Sales (1+2)	11,386	9,505	7,933	7,157	7,771
4	Less : Excise Duty	0	128.96	495	454	509
5	Net Sales (3 - 4)	11,386	9,376	7,438	6,703	7,262
6	Other Income :					
7	Operating	113	113.19	117	113	121
8	Non-operating	325.87	299.65	408	537	673
9	Operating Expenses	8,606.79	8,092	6,476	5,879	5,677
10	Operating Profit (5+7-9)	2,893	1,397	1,080	937	1,706
11	Exceptional Items	0	(824)	40	(54)	(148)
12	Earning before interest, dep. & taxes (EBIDT)(10+8 -11)	3,218	2,521	1,447.77	1,528	2,527
13	Interest & Financing Charges	2.38	1.95	3	1	—
14	Earning before dep. & taxes (EBDT) (12-13)	3,216	2,519	1,445	1,527	2,527
15	Depreciation and Amortisation	476.1	480	480	424	414
16	Profit before Tax (PBT) (14-15)	2,740	2,039	965	1,103	2,113
17	Provision for Tax	1,007.52	696.42	296	372	791
18	Net Profit (PAT) (16 - 17)	1,732.40	1,342.41	669	731	1,322
B	Balance Sheet :					
19	Equity Capital	932.81	966	966	1,289	1,289
20	Reserves & Surplus	9,551.70	9,538	9,239	11,618	11,508
21	Networth (19+20)	10,485	10,505	10,206	12,907	12,797
C	Ratios :					
22	Operating Profit Margin (OPM) (%) (10 / 5*100)	25.40	14.90	14.51	13.98	23.50
23	Net Profit Margin (%) (18 / 5 *100)	15.21	14.32	8.99	10.91	18.21
24	Return on Networth (RONW)(%) (18/21*100)	16.52	12.78	6.55	5.66	10.33
D	Others :					
25	Book value per share of ₹5 each (in ₹)	56.20	54.35	52.80	50.08	49.65
26	Earnings per share (in ₹)	9.06	6.94	2.98	2.84	5.13
27	Dividend per share (in ₹)	5.75	5.70	2.80	2.00	1.75

RECONCILIATION OF PUBLISHED QUARTERLY (REVIEWED) FINANCIAL RESULTS AND ANNUAL (AUDITED) FINANCIAL RESULTS FOR THE YEAR 2018-19

(₹ in crore except sl.no. 11 and 12)

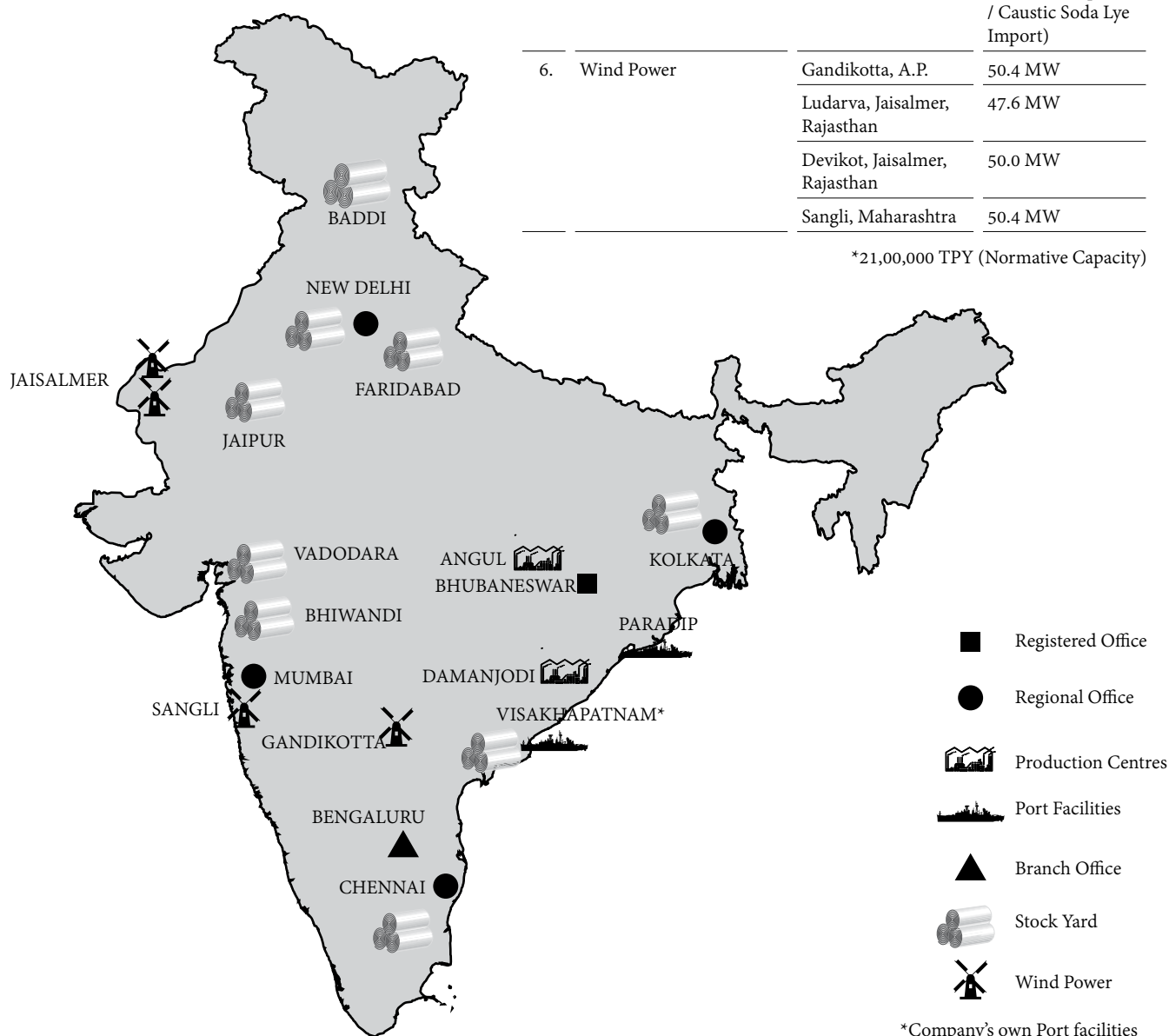
Sl. No.	Particulars	1st Quarter (Reviewed)	2nd Quarter (Reviewed)	3rd Quarter (Reviewed)	4th Quarter (Reviewed)	Total of four quarters	Full Year (Audited)	Variiances
1	2	3	4	5	6	7	8	9
1	Revenue from Operation(Gross)	2,973.31	3,040.93	2,718.88	2,766.20	11,499.32	11,499.32	—
2	Other Income	62.11	90.27	75.80	97.69	325.87	325.87	—
3	Total Expenditure Excl. Depreciation	1,962.79	2,190.61	2,206.52	2,249.25	8,609.17	8,609.17	—
4	Depreciation & Provision	121.70	115.98	118.11	120.31	476.10	476.10	—
5	Profit Before Tax & Exceptional Items	950.93	824.61	470.05	494.33	2,739.92	2,739.92	—
6	Exceptional Items	(91.01)	—	—	91.01	—	—	—
7	Profit Before Tax	1,041.94	824.61	470.05	403.32	2,739.92	2,739.92	—
8	Provision for Tax	354.89	314.61	168.29	169.73	1,007.52	1,007.52	—
9	Net Profit (PAT)	687.05	510.00	301.76	233.59	1,732.40	1,732.40	—
10	Paid up Equity Share Capital	966.46	966.46	932.81	932.81	932.81	932.81	—
11	Earning per Share (₹) (Not annualised)	3.55	2.64	1.58	1.25	9.06	9.06	—
12	Aggregate of non-promotor Shareholding							
	Number of Shares	84,71,88,863	83,91,00,604	80,65,49,658	89,55,35,981			
	Percentage of Shareholding	43.83%	43.41%	43.23%	48%			

Note: Annual Earning per Share is based on the weighted average no of share holding during the financial year 2016-17.

NALCO'S VARIOUS PRODUCTION UNITS, THEIR LOCATION & INSTALLED CAPACITIES

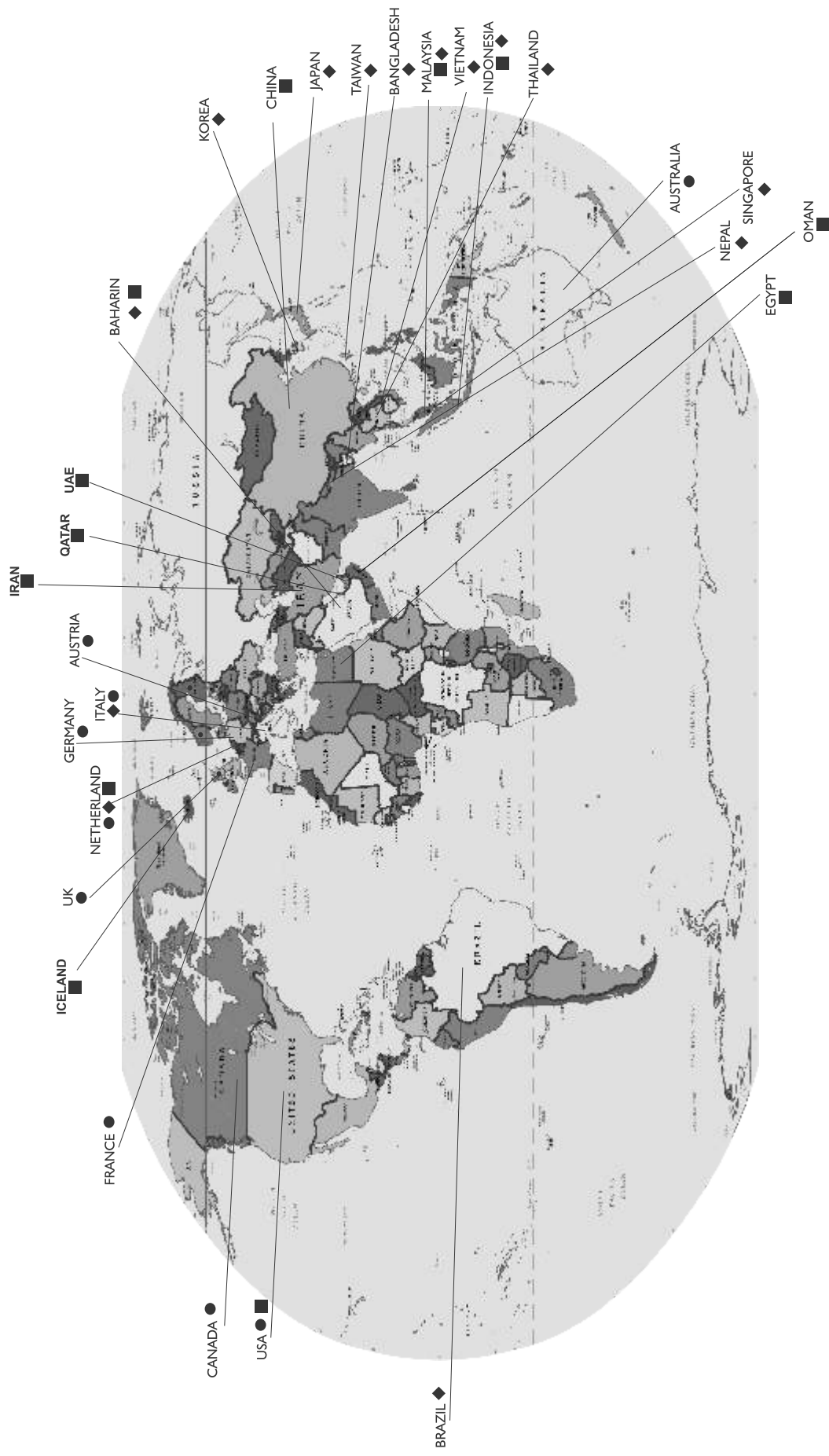
1.	Bauxite Mines	Panchpatmali	68,25,000 TPY
2.	Alumina Refinery	Damanjodi	22,75,000 TPY*
3.	Smelter Plant	Angul	4,60,000 TPY
4.	Captive Power Plant	Angul	1,200 MW
5.	Port Facilities	Visakhapatnam	14,00,000 TPY (Alumina Export / Caustic Soda Lye Import)
6.	Wind Power	Gandikotta, A.P.	50.4 MW
		Ludarva, Jaisalmer, Rajasthan	47.6 MW
		Devikot, Jaisalmer, Rajasthan	50.0 MW
		Sangli, Maharashtra	50.4 MW

*21,00,000 TPY (Normative Capacity)



*Company's own Port facilities

Global Reach



● TECHNOLOGY ASSOCIATES ■ ALUMINA EXPORT ◆ ALUMINIUM EXPORT



नालको NALCO

NATIONAL ALUMINIUM COMPANY LIMITED

(A Govt. of India Enterprise)

Nalco Bhavan, P/1, Nayapa li, Bhubaneswar - 751013, Odisha

CIN: L27203OR1981GOI000920



NALCO
Website



NALCO
Twitter



@NALCO_India



@CMCNalco



fb.com/nalcoindia



www.nalcoindia.com