



December 6, 2024

BSE Limited  
Corporate Relationship Department  
Phiroze Jeejeebhoy Towers  
Dalal Street  
Mumbai – 400 001.  
Scrip Code: 500400

National Stock Exchange of India Limited  
Exchange Plaza, C-1,Block G  
Bandra-Kurla Complex  
Bandra (East)  
Mumbai – 400 051.  
Symbol: TATAPOWER

Dear Sir/Madam,

**Sub: Presentation to Analyst/Institutional Investors**

Pursuant to Regulation 30 read with Para A of Part A of Schedule III of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended, and in continuation to our intimation dated December 2, 2024, please find attached the presentation to be made today during the physical meeting with a group of investors at the 4.3 GW Solar Manufacturing Plant in Tirunelveli, Tamil Nadu.

This information is also available on the Company's website at [www.tatapower.com](http://www.tatapower.com)

Yours Sincerely,  
For **The Tata Power Company Limited**

VISPI  
SAROSH  
PATEL

Digitally signed  
by VISPI  
SAROSH PATEL  
Date: 2024.12.06  
10:37:02 +05'30'

Vispi S. Patel  
Company Secretary  
FCS 7021

Encl: As above

**TATA POWER**

The Tata Power Company Limited

Registered Office Bombay House 24 Homi Mody Street Mumbai 400 001

Tel 91 22 6665 8282 Fax 91 22 6665 8801

Website : [www.tatapower.com](http://www.tatapower.com) Email : [tatapower@tatapower.com](mailto:tatapower@tatapower.com) CIN : L28920MH1919PLC000567



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**TATA POWER**



ANALYST MEET 2024

# The Tata Power Company Limited (TPCL)

*Powering India Today and Tomorrow*

6 DECEMBER 2024



# Agenda

Indian power sector:  
Witnessing strong tailwinds

09



The Tata Power story



03

Spotlight:  
4.3 GW Cell and Module manufacturing

36



16



Key growth drivers



42



What sets us apart

Sustainability:  
At the core of all that we do

48



TATA POWER



# The Tata Power story





# India's largest vertically integrated and diversified power company

## Generation

**~25.6 GW**

Total capacity  
(Including 10.1 GW in pipeline)

**~8.9 GW**

Thermal energy generation  
(Installed capacity)



**~16.7 GW**

Clean & Green Energy capacity  
(Including 10.1 GW in pipeline)

## New-age and Other Energy Solutions

**2.8 GW**

MoU signed for Pumped  
Hydro Project (PSP)

**~4.9 GW**

Manufacturing capacity for Cell &  
Module each (including 0.3 GW Cell  
Capacity under commissioning)

**>5,675**

Public EV charging points  
energised across 590+ cities  
and towns

**~₹15,000 Cr**

Solar EPC order book-  
Large Scale Utility, Group  
Captive and Rooftop EPC

## Transmission

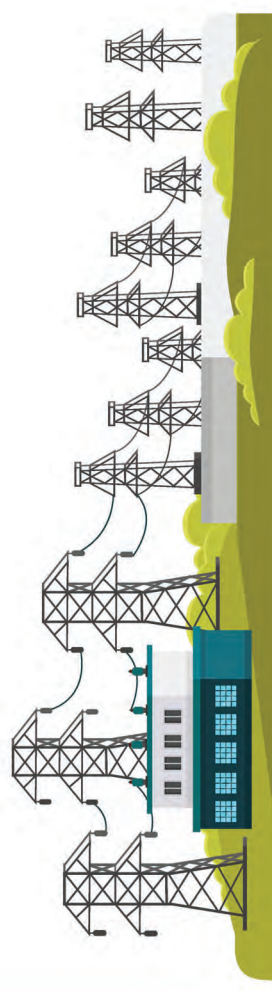
**7,049 Ckm**

Transmission capacity  
(Including 2,416 Ckm in pipeline)

## Distribution

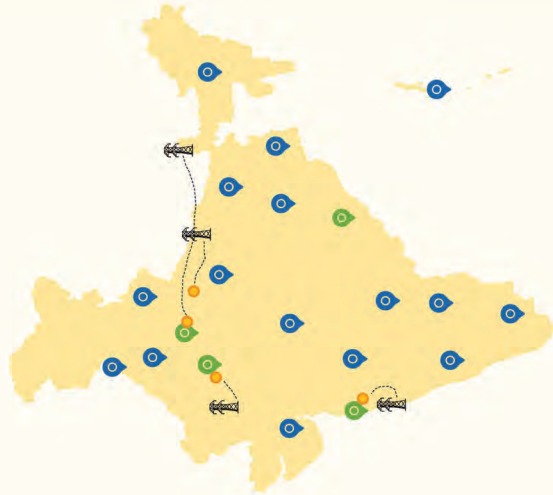
**12.5 Mn**

Total distribution customers served



# Generation, Transmission and Distribution assets spread across India

- Transmission
- Distribution
- Generation



**Capacity mix**  
(Domestic + International)

**25,605 MW**

**Total capacity**  
(Operational + Under construction)

<b>8,860 MW</b> Thermal	<b>1,034 MW</b> Wind
<b>443 MW</b> Waste Heat Recovery/BFG	<b>4,335 MW</b> Solar
<b>880 MW</b> Hydro	

**10,053\* MW**  
Clean & Green capacity under construction

**Distribution of installed capacity (Domestic + International) (%)**

<b>Transmission and Distribution</b>	<b>7,049 Ckm</b> Total transmission lines (Operational + Under construction)
	<b>4,633 Ckm</b> Operational transmission lines

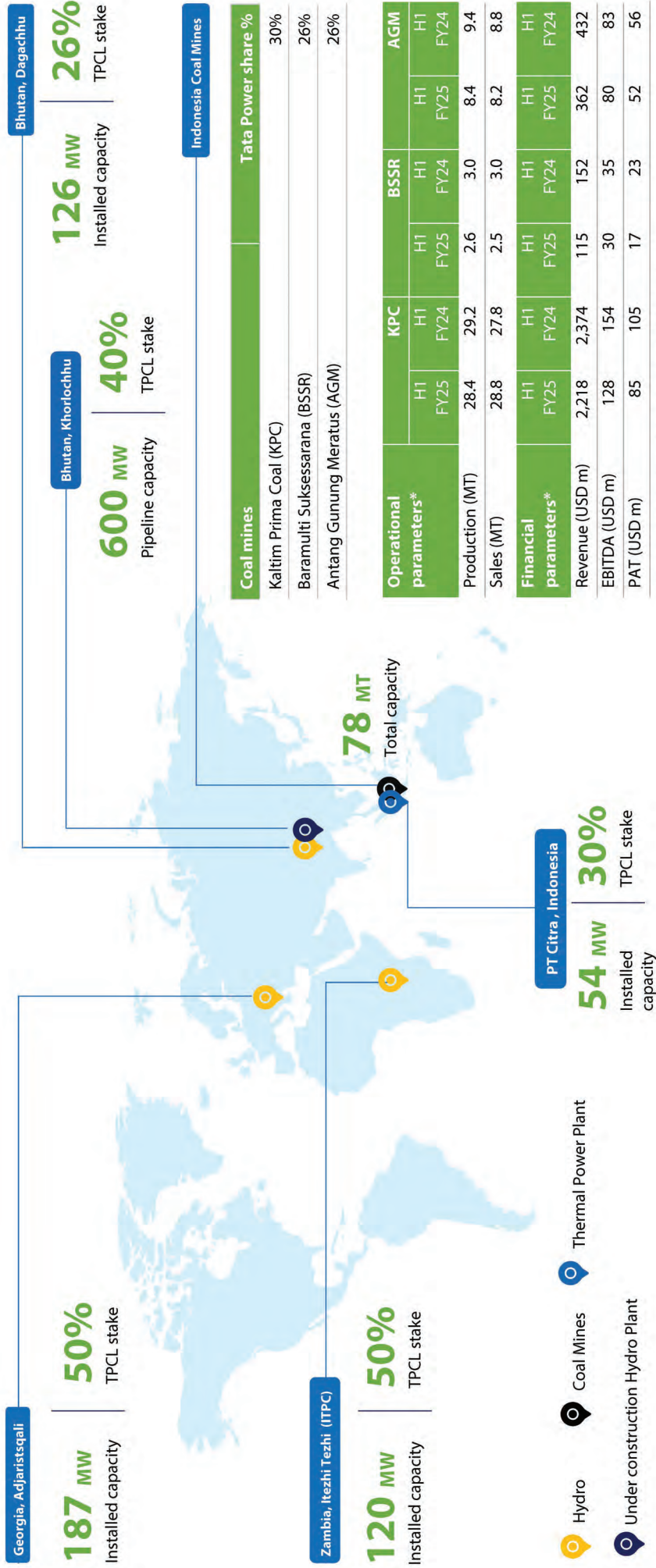
**12.5 Mn**  
Customers in distribution

**2,416 Ckm**  
Transmission pipeline under construction

\*Includes 15 MW of IEL and excludes Rooftop under-pipeline capacities



## Assets located outside India



Coal mines		Tata Power share %	
Kaltim Prima Coal (KPC)		30%	
Baramulti Suksessarana (BSSR)		26%	
Antang Gunung Meratus (AGM)		26%	

Operational parameters*	KPC		BSSR		AGM	
	H1 FY25	H1 FY24	H1 FY25	H1 FY24	H1 FY25	H1 FY24
Production (MT)	28.4	29.2	2.6	3.0	8.4	9.4
Sales (MT)	28.8	27.8	2.5	3.0	8.2	8.8
Financial parameters*	H1 FY25		H1 FY24		H1 FY25	
	Revenue (USD m)	2,218	2,374	115	152	362
EBITDA (USD m)	128	154	30	35	80	83
PAT (USD m)	85	105	17	23	52	56

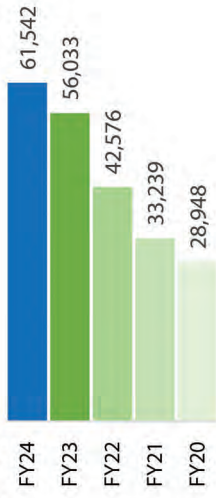
\*Operational and financial numbers on a 100% basis.

## Generating consistent value over the years...

Revenue (₹ Cr)

**32,057**

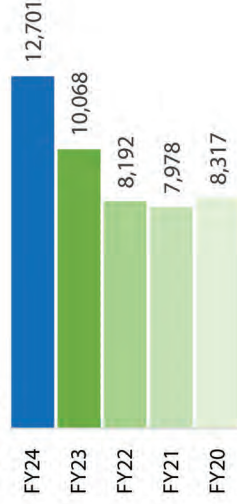
H1 FY25



EBITDA\* (₹ Cr)

**7,158**

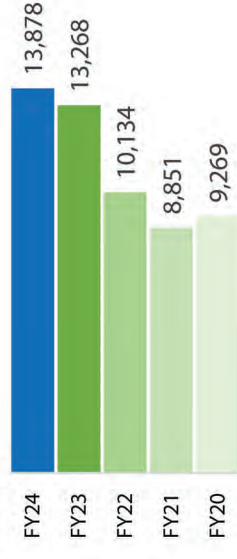
H1 FY25



Underlying EBITDA\*\* (₹ Cr)

**7,682**

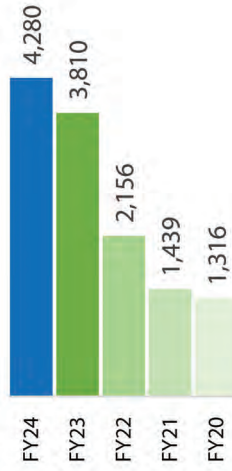
H1 FY25



Reported PAT<sup>^</sup> (₹ Cr)

**2,282**

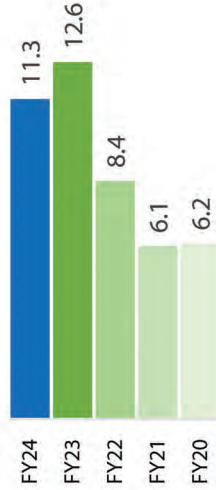
H1 FY25



ROE (%)#

**13.9**

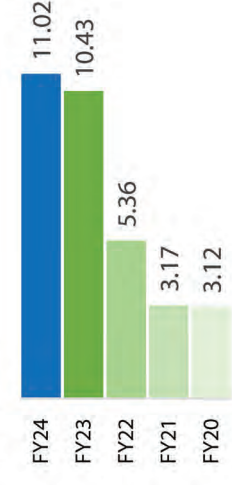
H1 FY25



EPS (₹) ^^

**7.15**

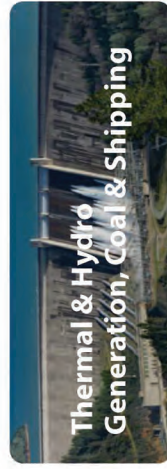
H1 FY25



Note: As on 30<sup>th</sup> September 2024 | \*Including other income | \*\*Including share of JV's and Associates | ^ Before minority interest | #Excluding Exceptional Items | ^^Adjusted EPS (excluding exceptional items)



## ...with rising contribution from our Core businesses<sup>^</sup>



	Revenue (₹ Cr)		EBITDA (₹ Cr)		Reported PAT (₹ Cr)	
	H1 FY24	H1 FY25	H1 FY24	H1 FY25	H1 FY24	H1 FY25
Thermal & Hydro Generation, Coal & Shipping	9,800	9,526	2,107	1,940	1,370	1,193
	-3% <sup>**</sup>		-8% <sup>*</sup>		-13% <sup>*</sup>	
Renewables	4,235	4,297	1,720	1,956	426	573
	1% <sup>▲</sup>		14% <sup>▲</sup>		35% <sup>▲</sup>	
Transmission and Distribution	18,731	20,681	2,180	2,874	683	1,013
	10% <sup>▲</sup>		32% <sup>▲</sup>		48% <sup>▲</sup>	
Eliminations/ Others	(2,320)	(2,447)	84	388	(555)	(57)
<b>Consolidated performance</b>	30,446	32,057	6,092	7,158	1,924	2,721
	5% <sup>▲</sup>		17% <sup>▲</sup>		41% <sup>▲</sup>	

<sup>\*\*</sup>Impact of favourable order in MPL in H1 FY24 and loss of revenue due to breakdown in Mundra during H1 FY25

<sup>\*</sup>Impact of favourable order in MPL in H1 FY24

<sup>^</sup>Stake in overseas Coal and Hydro assets, stake in Tata Projects (30.8%) & Nelco (50%) considered as Non-core



**TATA** POWER

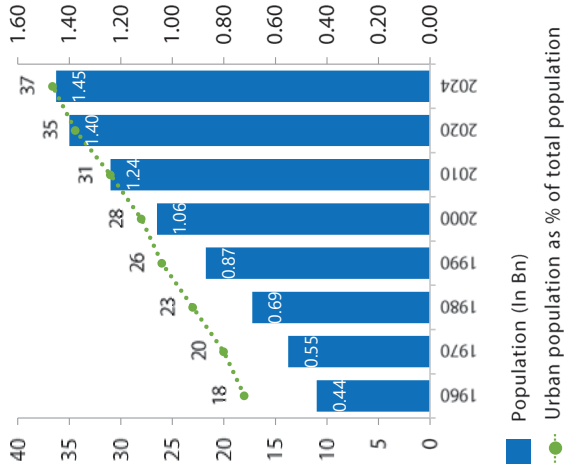
# India power sector Witnessing strong tailwinds





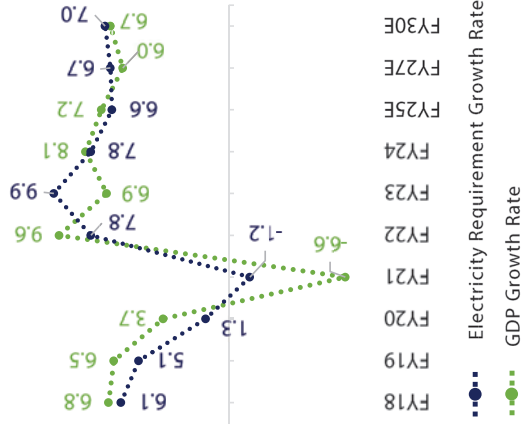
# The power sector is set to grow as Indian economy grows

**Rising population and urbanisation to drive demand**



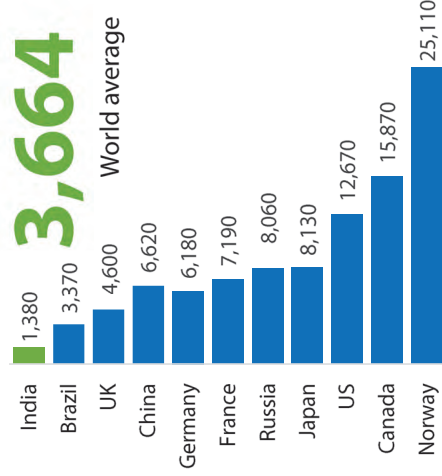
Source: Worldometer

**Strong correlation seen between GDP and power demand growth (%)**



Source: CEA, RBI, IMF, S&P

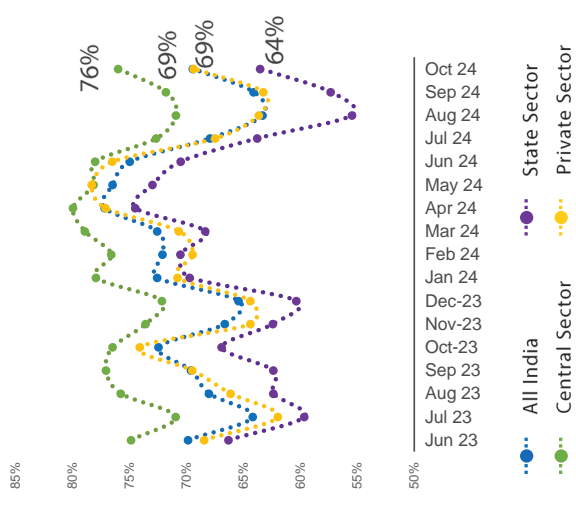
**India has one of the lowest power consumption per capita (in units)**



Data represents per capita power consumption for CY23

Source: Ember-climate.org

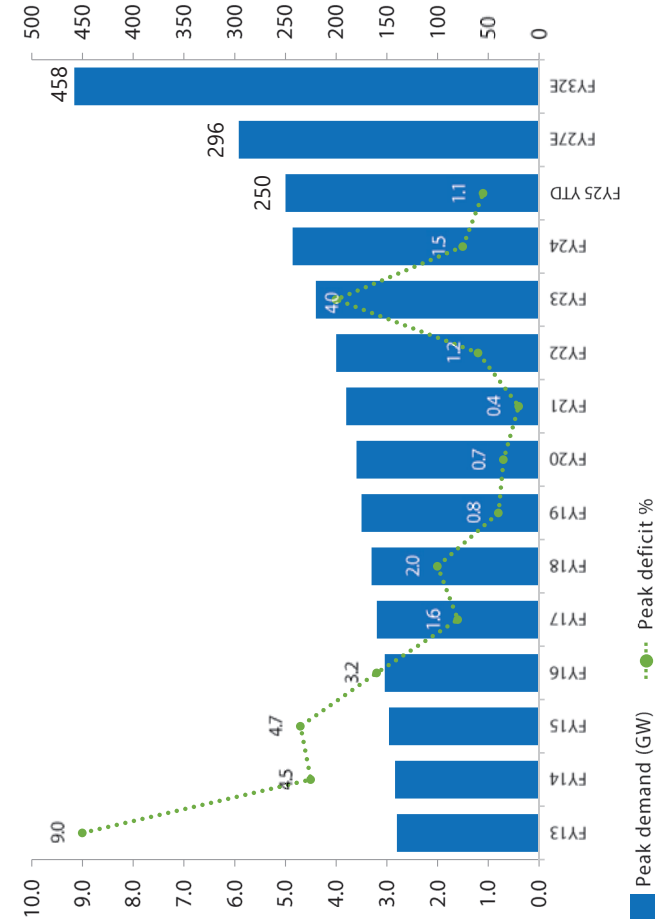
**All India coal-based generation Plant Load Factor (PLF) (%)**



Source: NPP

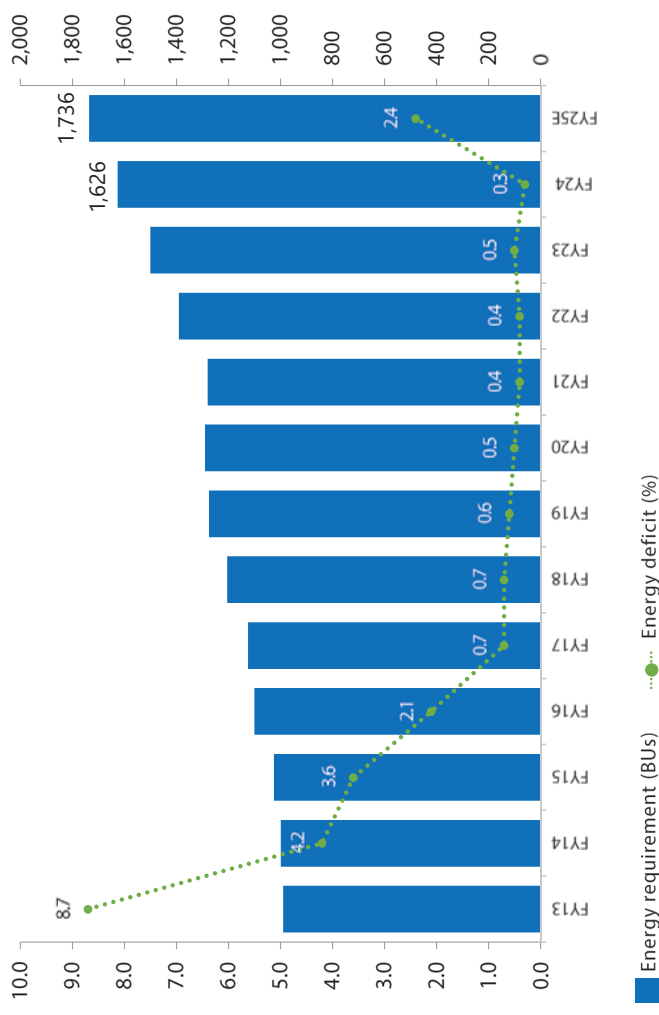
## Rising power demand has resulted in power deficit inching up

**Peak demand (GW) and peak power deficit (%)**



Source: CEA, EPS

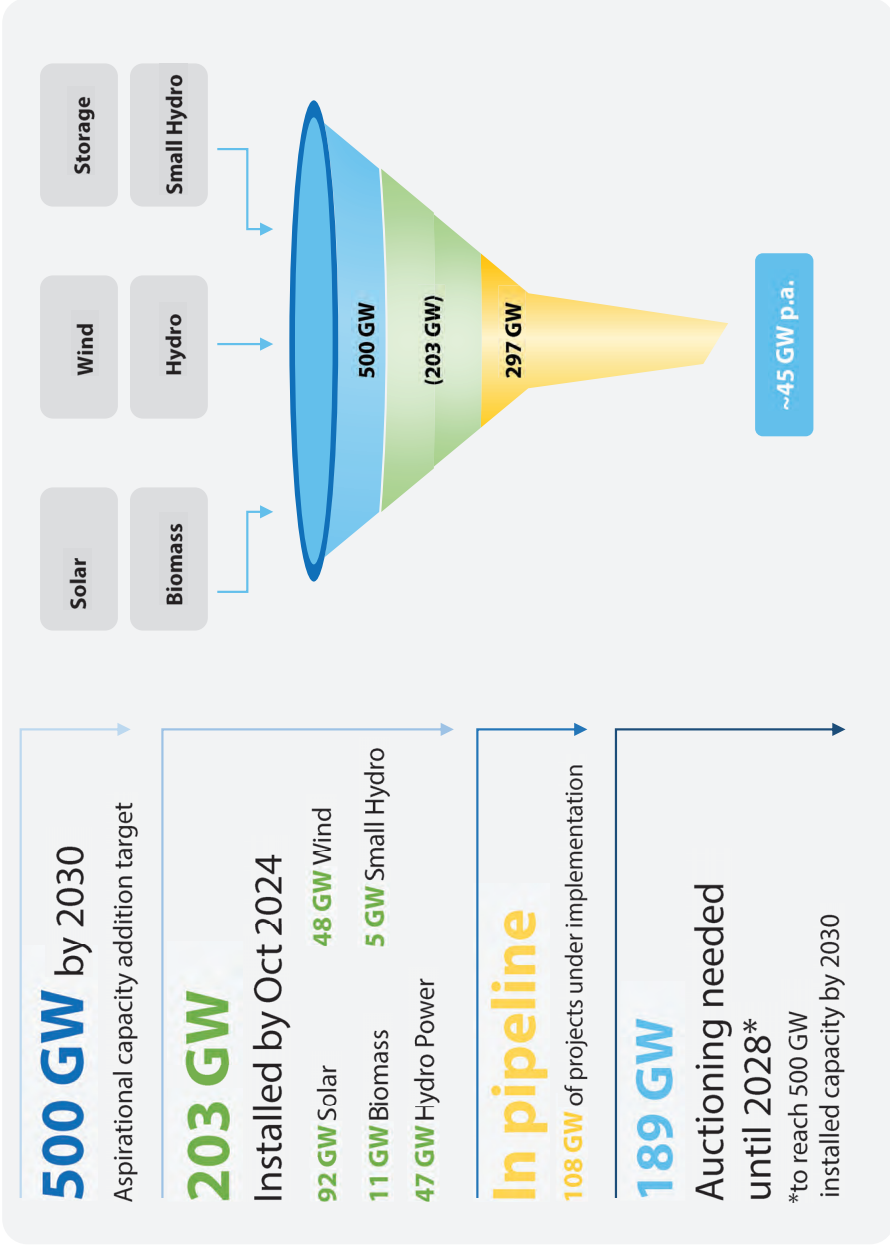
**Energy requirement (BUs) and energy deficit (%)**



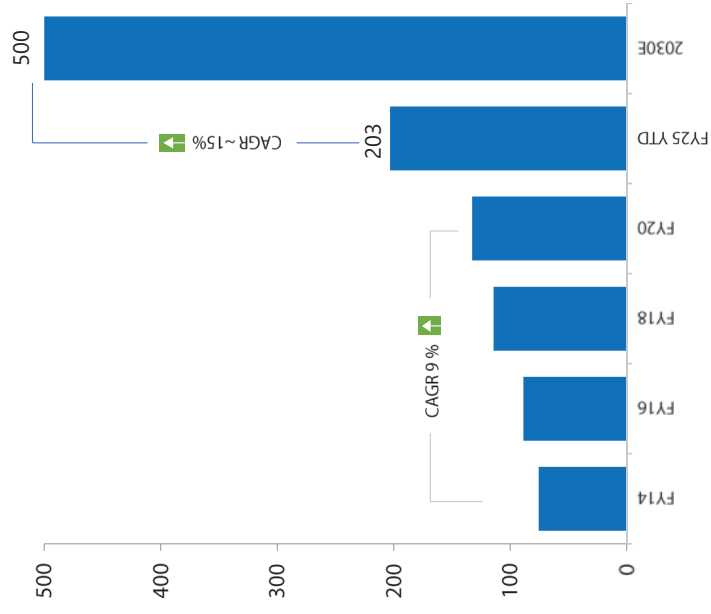
Source: CEA



# Strong pipeline: 500 GW 2030 target implies ~45 GW capacity additions each year



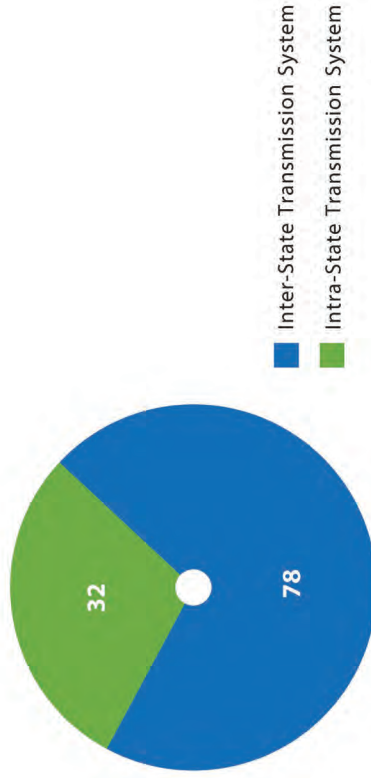
**Renewable energy capacity target of 500 GW by 2030E**



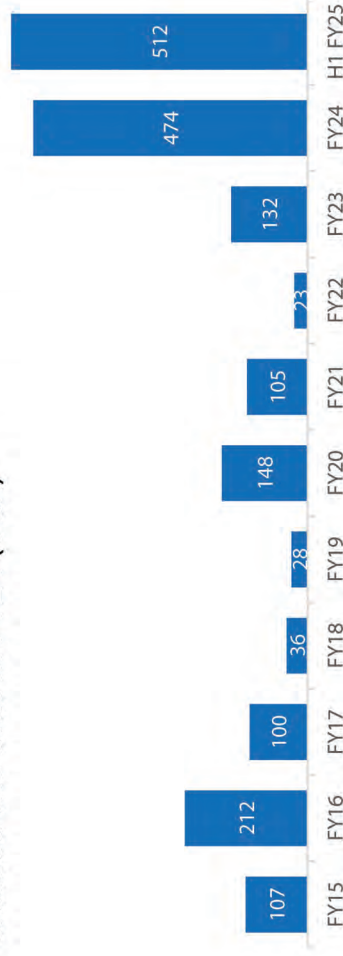
Source: CEA, Nuvama Research

## Transmission auction bids continue to surge in H1 FY25

USD110 Bn transmission capex anticipated in India between FY25-32E (USD Bn)

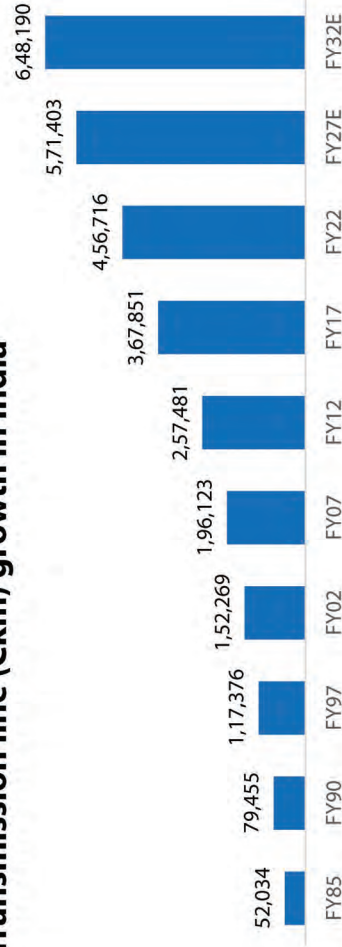


Transmission auction bids in H1 FY25 have already crossed the bids in FY24 (₹ Bn)



Source: Tata Power Estimates, IICI/Securities

## Transmission line (Ckm) growth in India



Source: CEA, Nomura research

Sr.No.	Key highlights	Current	2032E
1	Transmission lines length (Ckm)	4.85 Lakh	6.48 Lakh
2	Transformation capacity (GVA)	1,241	2,342
3	Peak electricity demand	250 GW	458 GW
4	Inter-regional transmission capacity	119 GW	168 GW

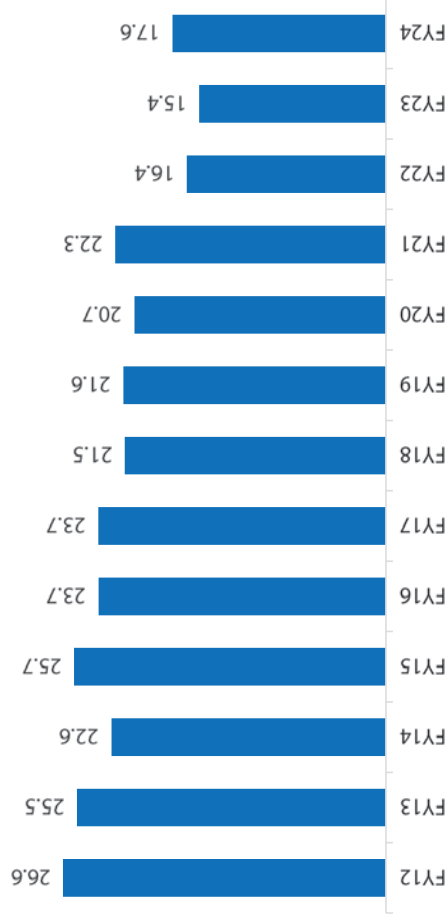
Source: National Electricity Plan (NEP) –Oct'24



## India Distribution: On the mend but concerns remain

All India AT&C losses (%) have risen in FY24 after declining in the past two years

All India basis



■ AT&C (Aggregate Technical & Commercial) Losses (%)

Source: PFC Report

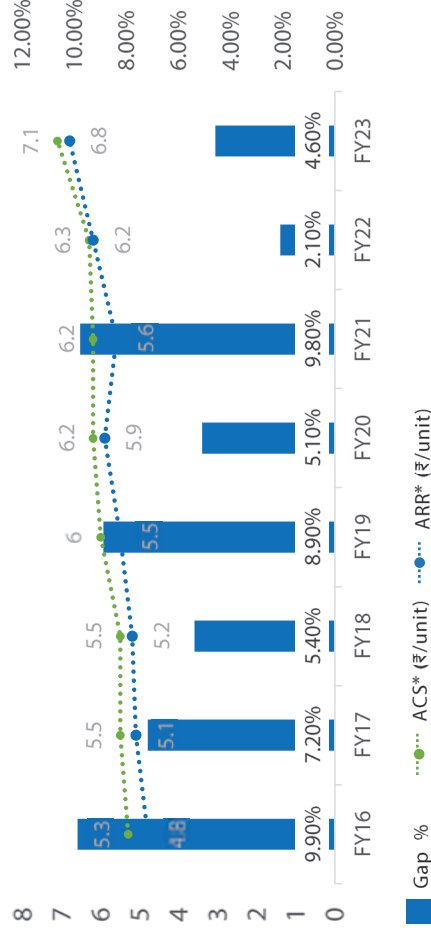
\*Abbreviations:

ACS – Average Cost of Supply

ARR – Average Revenue Realised

ACS-ARR gap has narrowed but continues to persist

Overall ACS-ARR gap

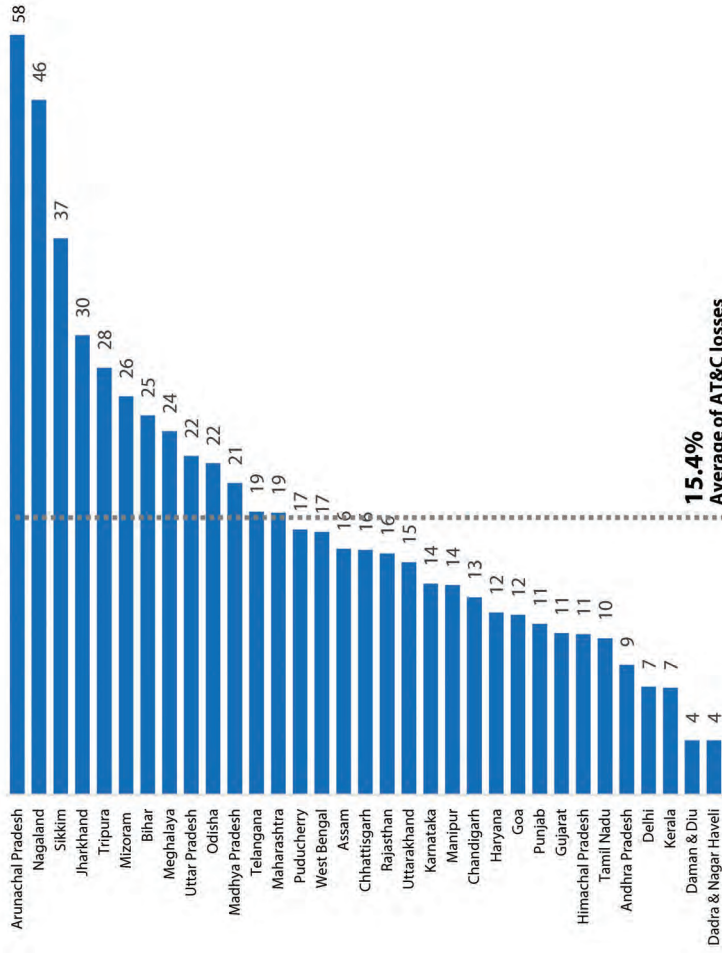


Source: PFC Report

- Periodic and targeted measures taken by the Union Government helped DISCOMS improve their performance
- Implementation of Late Payment Surcharge Rules inculcated a discipline amongst DISCOMS to make timely payment to Generating Co's, thereby reducing overdue amount
- Increased smart metering implementation helped improve the billing efficiency

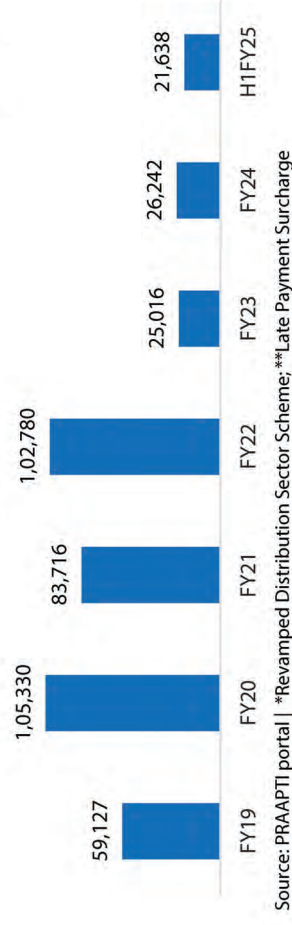
# India Distribution: Several states continue to display high AT&C losses and remain in financial stress

**State-wise AT&C losses (%) for FY23**



Source: MOP

**RDSS\* and LPS\*\* have helped reduce DISCOM dues (₹ Cr)**



**Financial performance of DISCOMs**

Parameters	Unit	FY20	FY21	FY22	FY23
Total losses (on accrual basis)	₹ Cr	30,203	46,521	26,947	57,223
Debt	₹ Lakh Cr	5.0	5.8	6.1	6.8
Regulatory assets	₹ Cr	65,414	76,496	76,094	96,699
Accumulated losses	₹ Lakh Cr	5.1	5.5	5.8	6.5

Source: PFC Report

**While green shoots are visible in power distribution sector, major concerns remain**

**Key challenges for State DISCOMs**

- Increased power purchase cost
- Shift of subsidising C&I customers to options of OA/GC/RTS
- Limitation on taking RE benefits



# Key growth drivers

- ▶ Renewable Energy
- ▶ Transmission and Distribution
- ▶ Pumped Storage & Hydro Projects



Key growth driver 

# Renewable Energy





# Targeting 33 GW of Clean & Green energy, including 23 GW operational by FY30

## What we have achieved

**~6.7 GW**

Clean & Green capacity

**~10.1 GW**

Under construction



## What we aim to achieve

**~23 GW**

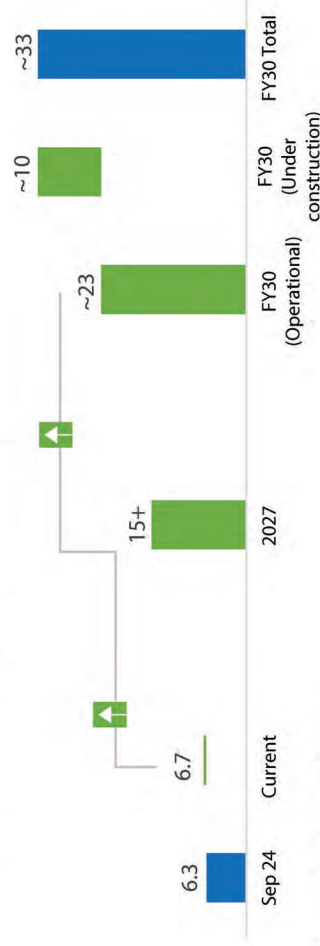
Operational Clean & Green capacity by FY30

**~33 GW**

Including under construction Clean & Green capacity

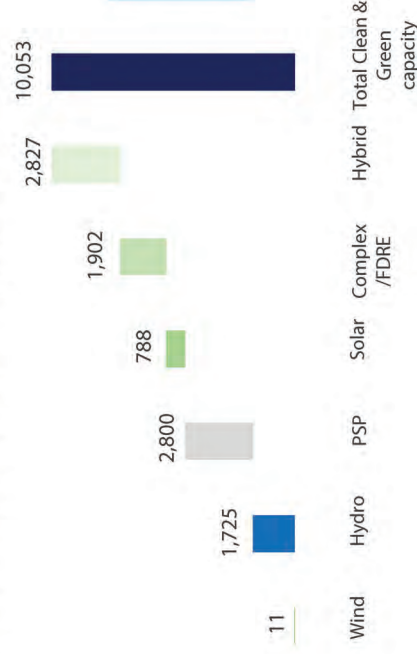


## Clean & Green capacity roadmap (GW)

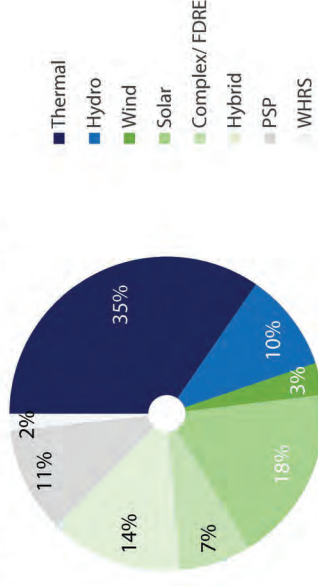


Source: Tata Power Estimates

## Clean & Green capacity pipeline (MW)



## Clean & Green to account for 65% of total capacity post project completions



WHRS: Waste Heat Recovery System |  
FDRE: Firm and Dispatchable Renewable Energy

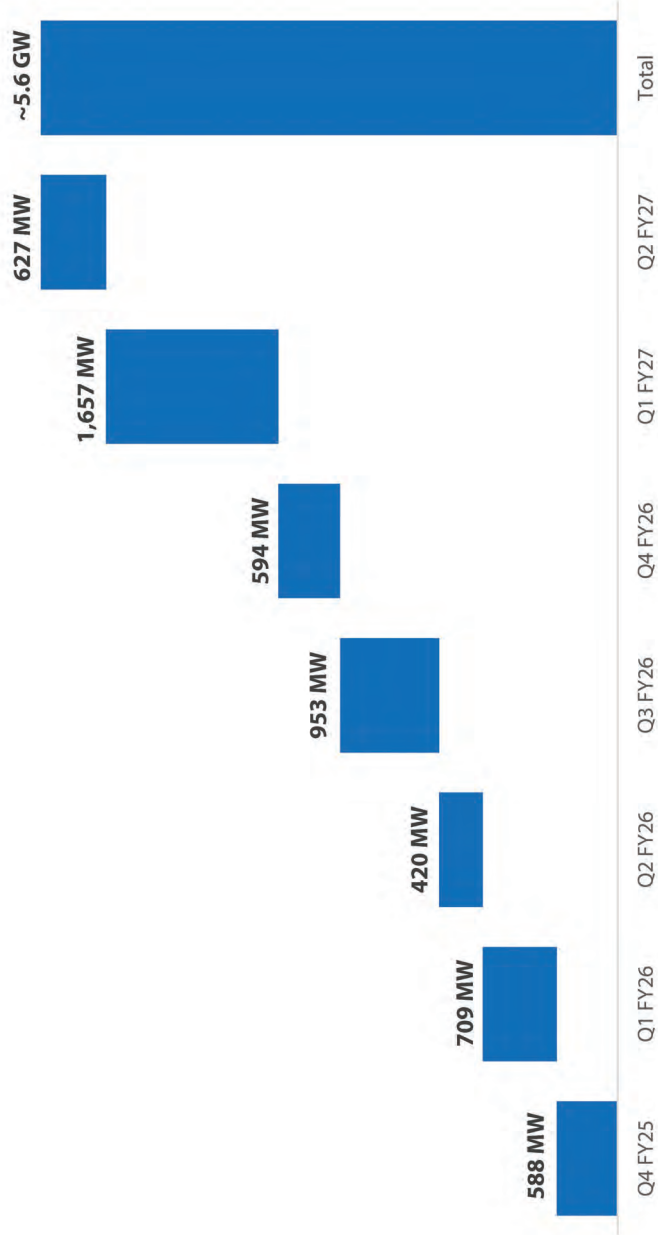


# PPA's for majority of ~5.6 GW RE pipeline with 100% visibility of land and transmission

**100%**  
Land visibility  
(~40% already acquired and remaining will be acquired over the next 12 months)

**90%**  
PPA's signed  
(remaining expected to be signed in Q4 FY25)

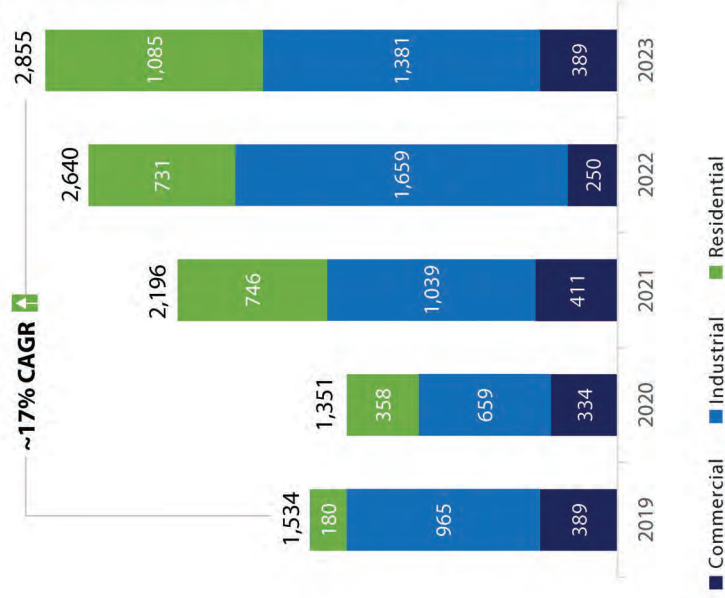
**80%**  
Transmission line secured  
(remaining expected to be secured in Q4 FY25)





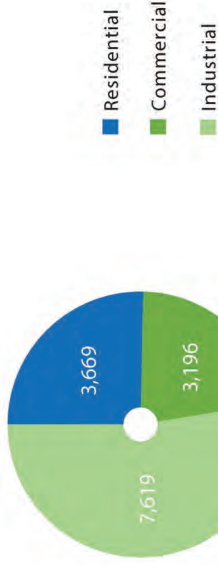
# Tata Power is the market leader in Solar Rooftop EPC

Solar Rooftop has grown at 17% CAGR in the past 4 years (MW)



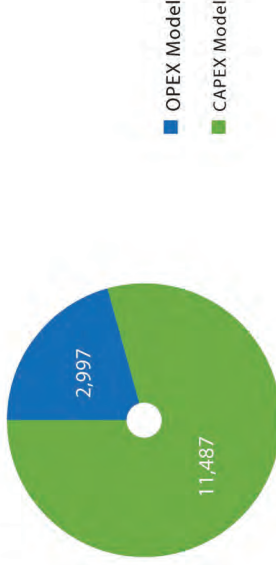
Source:- Bridge to India

India has 14.5 GW of installed Solar Rooftop capacity (MW)



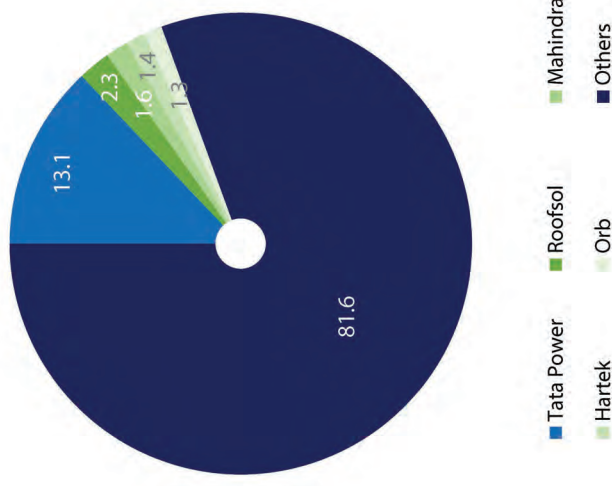
Split by business model

Total installed capacity (MW)

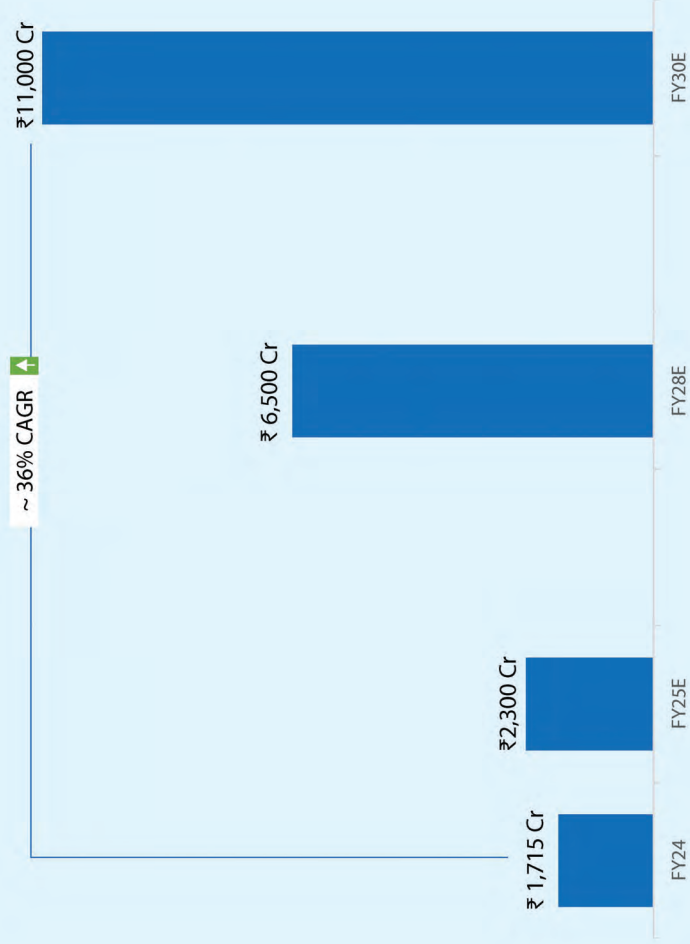


Tata Power has 13.1% market share in Solar Rooftop EPC

Market size: 2,855 MW in CY23



## Solar Rooftop revenue estimated to grow at a CAGR of ~36% between FY24-30E



# PM Surya Ghar Yojna (PMSGY): A focus area as Tata Power targets 3 Mn households

## Salient features of PMSGY Scheme

**1 Cr households**

GOI's target under PMSGY

**₹75,000 Cr**

Financial outlay approved by GOI

**₹6,500 Cr**

Budget for FY25

**3 Mn households**

Tata Power's target for next 3 years

**Advance payment by customer to installer, subsidy later to customer**

Type of residential segment	Central Financial Assistance (CFA)
Up to 2 kW	₹30,000 per kW or part thereof
Between 2 kW and 3 kW	₹18,000 for additional kW or part thereof
Capacity beyond 3 kW	No additional CFA
Group Housing Societies/ Residential Welfare Associations (GHS/RWA) etc., for common facilities, including EV Charging, up to 500 kW (@3 kW per house), with the upper limit being inclusive of individual rooftop plants installed by individual residents in the GHS/RWA	₹18,000 per kW

## Why PMSGY Scheme works

### Cost to customer

- Attractive subsidies till 3 kW
- The programme is beneficial for developers also as the process requires front ending of payment by customer to vendor

### Easy process

- Feasibility check by DISCOM - simple requirements and online process
- Short inspection and disbursement timelines
- National portal for simplification of registration process ([link](#)). **1.28 Cr** registrations done

### Finance cost

- Cheap loans at ROI of ~7%
- PSU banks given disbursement targets
- Push to lenders from the GOI and RBI

### Awareness

- Central government – leading the campaign
- Vendors offline campaigns
- Awareness programmes

**Programme re-designed to simplify, fast track implementation and lower the cost of ownership**





**TATA** POWER



Key growth driver →

# Transmission and Distribution



# Transmission capacity to cross 7,000 Ckm post completion of ongoing projects, targeting 10,500 Ckm by FY30

**4,633 Ckm**

Operational capacity

**2,416 Ckm**

Under construction  
Total capex: ₹12,350 Cr

**What we aim to achieve**

**~10,500 Ckm**

By FY30 requiring an additional capex of ₹12,500 Cr for 3,500 Ckm

Year	Project	Tata Power stake	Under construction	Capex	Date of commissioning	Revenue
2027	ERES XXXIX Transmission	100%	377 Ckt Kms	₹2,500 Cr	December, 2027	₹289.7 Cr
	Paradeep Transmission	100%	384 Ckt Kms	₹2,300 Cr	November, 2026	₹256.2 Cr
	Rajasthan Phase IV Part C	100%	682 Ckt Kms	₹1,544 Cr	December, 2026	₹162.7 Cr
2026	Jalpura Khurja Power Transmission Limited	100%	164 Ckt Kms	₹756 Cr	October, 2026	₹92 Cr
	Northern Region System Strengthening Scheme	26%	77 Ckt Kms	₹500 Cr	March, 2025	₹49.47 Cr
2025	South East U. P. Power Transmission Company Limited	26%	732 Ckt Kms	₹4,750 Cr	March, 2025	₹292.58 Cr



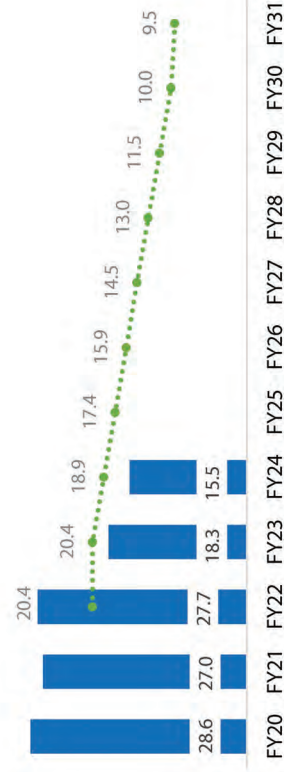
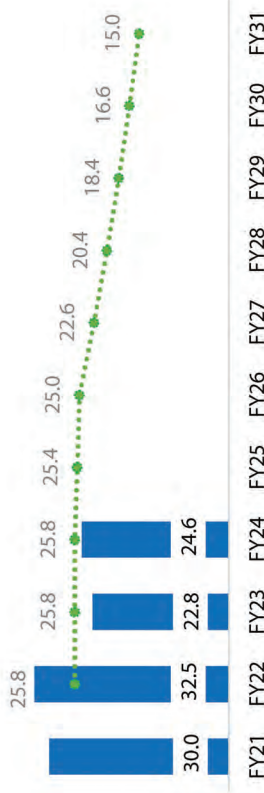
# Odisha DISCOMs: Significant improvement in AT&C losses in a short span of time

**Tata Power Central Odisha Distribution Ltd. (TPCODL)**

**Tata Power Northern Odisha Distribution Ltd. (TPNODL)**


●●●●● Tariff determination trajectory for AT&C losses ■ AT&C Actual

TPCODL acquired in June'20 | TPNODL acquired in Jan'21 | TPNODL acquired in Apr'21 | TPSODL acquired in Jan'21

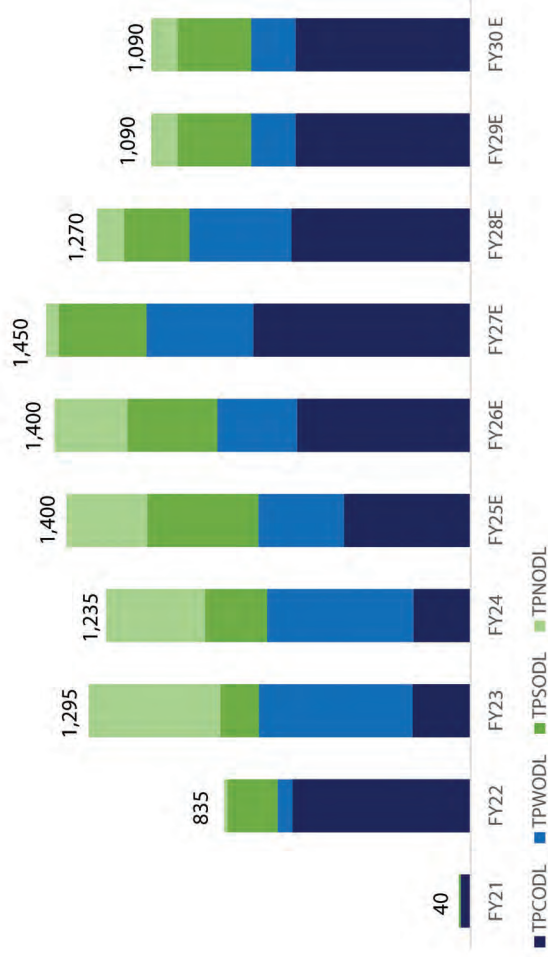
**Tata Power Western Odisha Distribution Ltd. (TPWODL)**

**Tata Power Southern Odisha Distribution Ltd. (TPSODL)**


Source: OERC, Tata Power

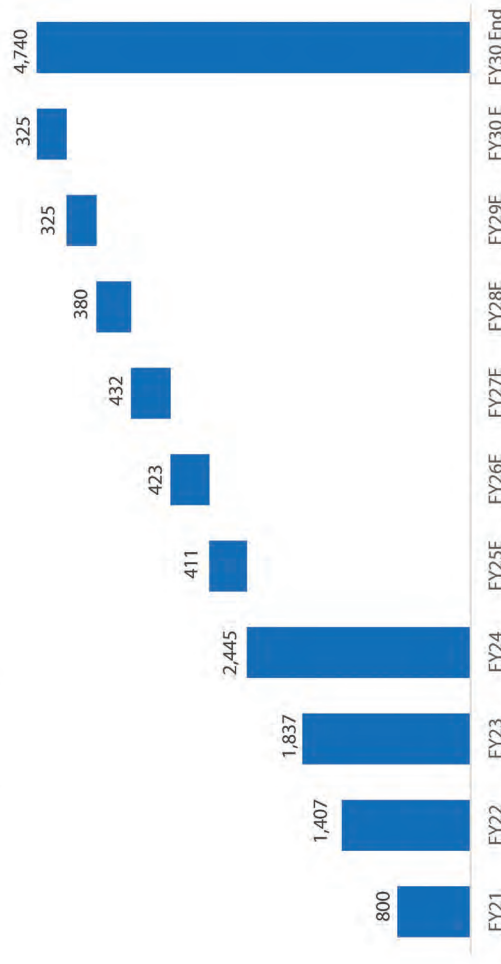


# Capex and regulated equity build-up for Odisha over the next few years

**Odisha capex (~₹ Cr)**

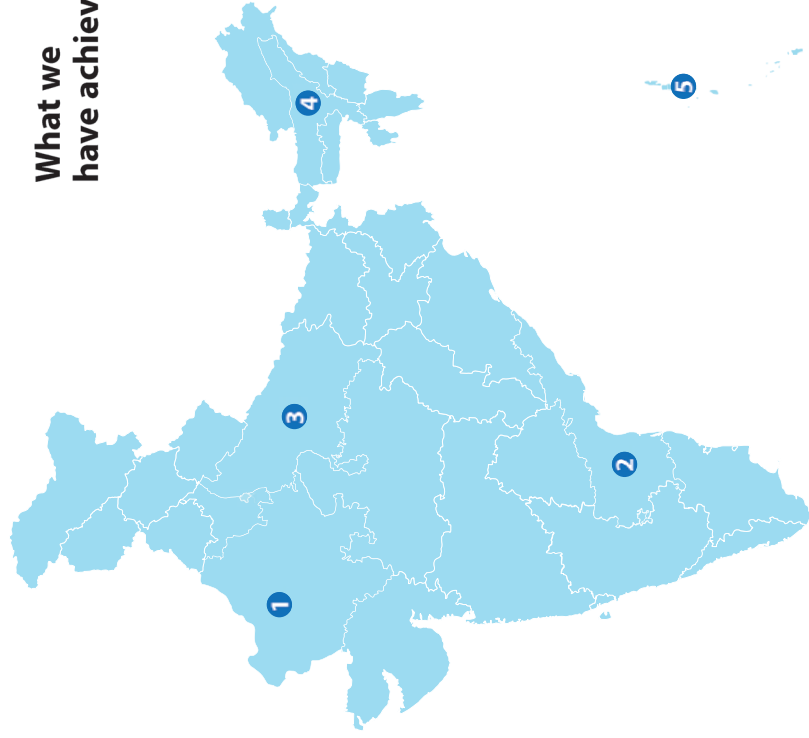


**Odisha regulated equity to rise by 94% between FY24-30E**



TPCODL acquired in June'20 | TPWODL acquired in Jan'21 | TPNODL acquired in Apr'21 | TPSODL acquired in Jan'21

# Emerging Distribution business opportunities across India



**What we have achieved**

**12.5 Mn**

Customers across 7 DISCOMS

**What we aim to achieve**

**~40 Mn**

Customers by FY30

## 1 Rajasthan

**Geography covered:** Pan Rajasthan

**Business model:**

- Development of distribution infrastructure for feeder segregation (AG & Non-AG) works
- Development of decentralised solar power plants in the vicinity of 33/11kV s/s on HAM basis
- MBC for all connected consumers (AG & Non-AG) along with O&M of 33/11kV s/s and downstream network for **10 years**

**Current status:** Request for Proposal (RFP) under formulation

## 2 Andhra Pradesh

**Consumers:** 193.46 Lakh

**Energy sales:** 71,463 MU

**Revenue:** ₹59,143 Cr

**Current status:** Policy advocacy being done for PPP in cluster mode

## 3 Uttar Pradesh

**Consumers:** 3.29 Cr

**Energy sales:** 1,08,410 MU

**Revenue:** ₹90,085 Cr

**Current status:** PuVVNL and DVVNL being considered for Public Private Participation (PPP) in clusters (1.6 Cr consumers, ₹38,000 Cr revenue)

## 4 Assam

**Consumers:** 67.7 Lakh

**Energy sales:** 10,290 MU

**Revenue:** ₹9,519 Cr

**Proposed model:** Clustering of high loss-making areas namely Lower and Central Assam Region (54 Lakh consumers, ₹6,000 Cr revenue)

## 5 Andaman & Nicobar Islands

**Consumers:** 1.46 Lakh

**Energy sales:** 264 MU

**Revenue:** ₹166 Cr

**Current status:** Tender floated for privatisation (100% shares in electricity distribution and retail supply)

AG: Agricultural I MBC; Metering, Billing & Collection I HAM; Hybrid Annuity Model

Sources: PFC Report on Performance of Power Utilities 2022-23, RFP for A&N Islands, E Procurement Tender Notice for Rajasthan

Key growth driver 

# Pumped Storage (PSP) & Hydro Power Plant (HPP)





**TATA POWER**

## 1,000 MW Bhivpuri PSP: Construction to begin in early 2025 with COD around mid-2028

**1,000 MW**

Bhivpuri PSP

Type  
Existing Off-stream

Upper Reservoir  
Thokarwadi ~348 MCM  
(Mn cubic meters)

Lower Reservoir  
New ~4.6 MCM

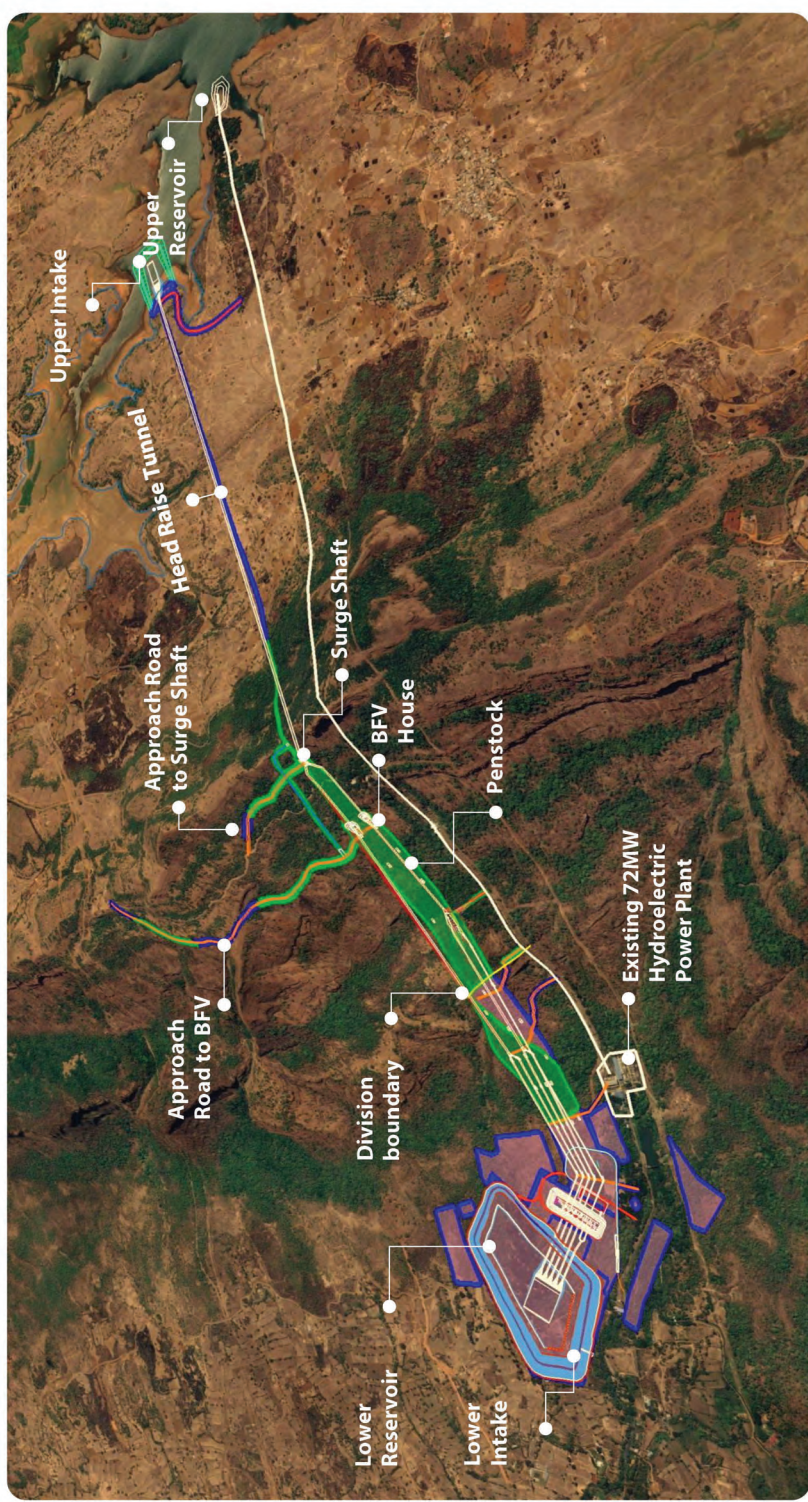
Daily generation  
8,000 MWhr

Capital investment  
₹5,666 Cr

Timeline

Construction to begin: Jan-2025

Completion: Aug-2028





## Shirwata PSP: Construction expected to begin in Mid-2025



**1,800 MW**

Shirwata PSP

Type

**Off-stream**

Upper Reservoir

**New -15 MCM**

Lower Reservoir

**Existing Shirwata Dam**

197 MCM

Daily generation

**10,800 MWhr**

Capital investment

**₹7,850 Cr**

Timeline

**Start by Mid-2025**

**Completion by 2029**



## Additional 9 GW PSP potential can support round-the-clock power of ~30 GW



**573 MCM Mulshi dam**

**3,000 MW**

**Nenavali, Mulshi dam Upper Reservoir**



**72 MCM Walwhan dam, Raigad**

**3,000 MW**

**Kataldhara, Walwhan dam Upper Reservoir**



**348 MCM Thokarwadi dam, Bhiwपुरi**

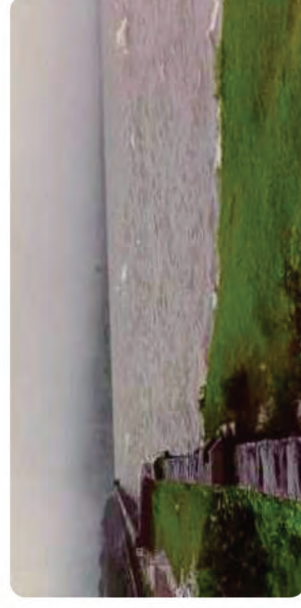
**3,000 MW**

**Potalpali, Thokarwadi dam Upper Reservoir**

**Other reservoir sites of Tata Power**



**6 MCM Kundali dam, Khopoli**



**12 MCM Lonavala dam, Khopoli**



# MoU with Druk Green Power to develop 5,100 MW clean energy projects in Bhutan

**15 GW**

Bhutan's vision 2040 for hydro

**5 GW**

Bhutan's vision 2040 for solar

**2,444 MW**

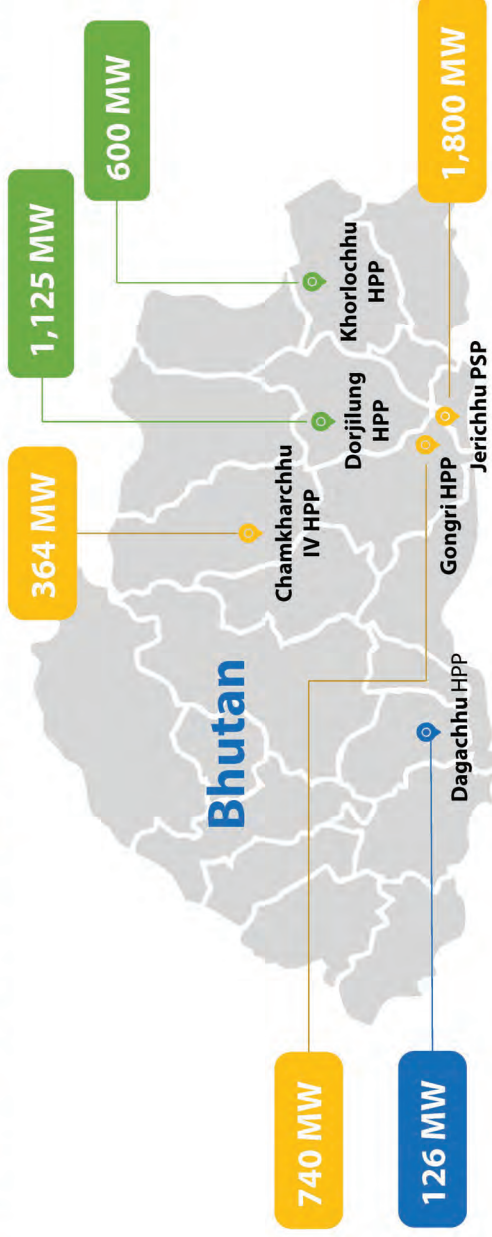
Total installed capacity

**2,820 MW**

Project under execution

**10,950 MW**

Upcoming capacities



- Existing hydro station
- Proposed Hydro Power Plants (HPP)
- Potential Plants (HPP/ PSP)

Plant name	Installed capacity (MW)	Design energy (GWh)	Project status
Khorlochhu HPP	600	2,524	Construction started
Dorjilung HPP	1,125	4,504	Pre-construction (Jan 2025)
Gongri HPP	740	2,721	DPR in progress
Jeri Pumped Storage	1,800	3,942	DPR in progress
Chamkharchhu-IV HPP	364	1,501	PFS (2015)
Solar project	500		
<b>Total</b>	<b>5,129</b>	<b>15,192</b>	

## Construction has begun at the ₹6,900 Cr Khorlochhu HPP that is expected to commission in Sept 2029



### Khorlochhu hydro power project details

<b>600 MW</b> Total project capacity	<b>1.12%</b> Aux power consumption
<b>40%</b> Tata Power Stake	<b>&gt;95%</b> Availability
<b>90.62%</b> Average TG efficiency	<b>48%</b> Plant load factor
<b>752.20 M</b> Minimum head	<b>145 KM</b> (to be constructed by Bhutan Power corporation) Transmission line
<b>Double circuit 400 KV line to Goling through Yangbari s/s</b> Proposed power evacuation	<b>Vertical Pelton @ 375 RPM</b> Type of turbine

**59 Months**  
Project completion period

Construction  
commenced

October  
**2024**

September  
**2029**

Project expected  
to commission



# Pre-construction work will commence at Dorjilung\* in January 2025



**Dorjilung hydro power project details**

**1,125 MW**  
Total project capacity

**Underground**  
Powerhouse

**8,782 Km<sup>2</sup>**  
Catchment area

**January 2025**  
Pre-construction

**14,974 M long,  
11 M diameter**  
Head race tunnel

**Mongar &  
Lhuentse**  
Project location

**4,504 GWh**  
Design Energy

**451 Cumecs\*\***  
Design discharge

**276 M**  
Design head

\*\* cubic meter per second

**60 Months**

Project completion period

**Project construction** **Mid 2026**

**Mid 2031** **Project will be commissioned**

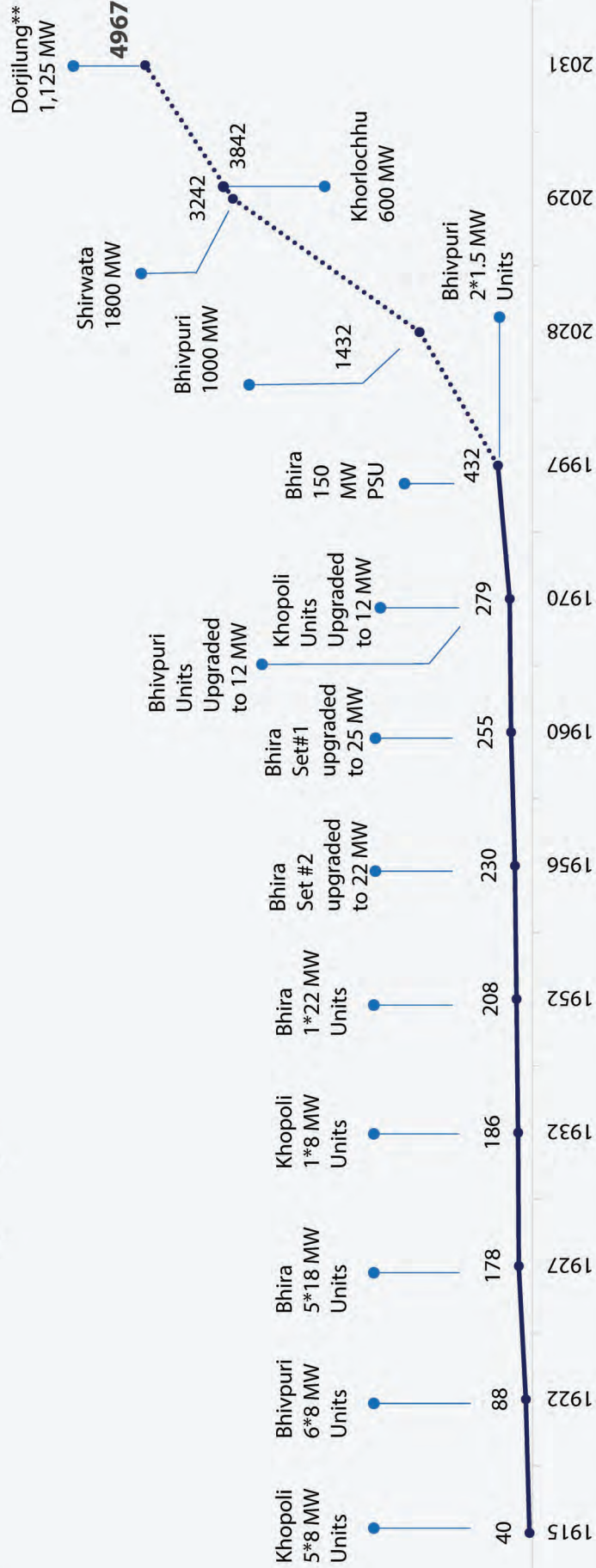
\*MoU signed with Druk Green Energy Corporation in November 2024





# Hydro capacity to rise to ~5 GW once PSP and Bhutan hydro projects come online

### Hydro overview: Plant capacity addition (MW)



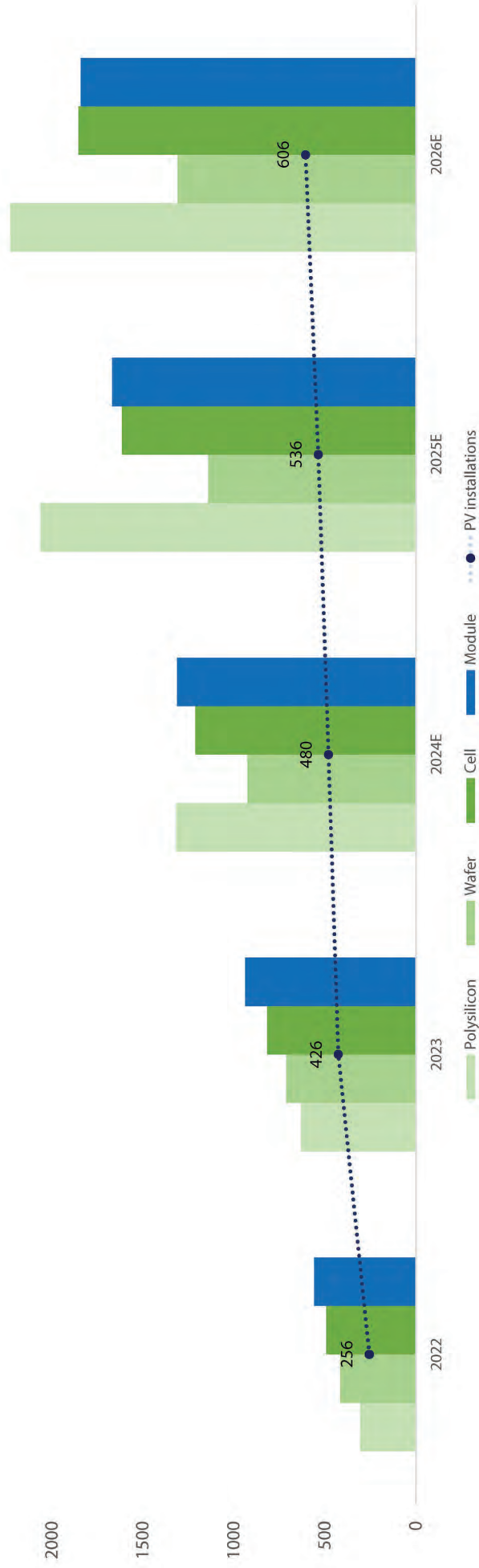
\*\*MoU signed with Druk Green Energy Corporation in November 2024

Spotlight  
**4.3 GW**  
**Cell and Module**  
**manufacturing**



# Global solar module industry will continue to face overcapacity in the medium term

**Global PV component manufacturing capacity vs installation volume (GW)**



- Global trends indicate that massive overcapacity in PV value chain will continue, with consolidation possibilities due to some players going bankrupt
- Share of TOP Con cells has shot up to 48% within a year (Q2 FY23 to Q1 FY24), with more PERC lines getting retrofitted at lower incremental capex
- TPREL's strategy remains to focus only on cell and module part of the PV value chain

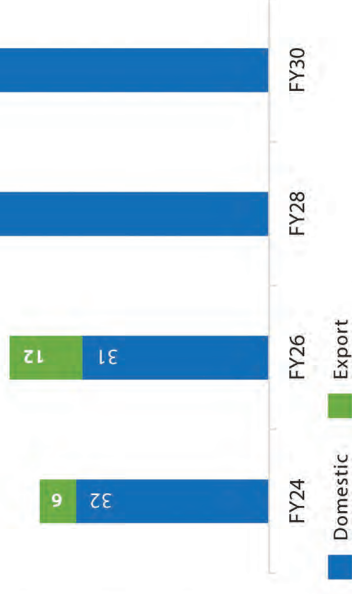
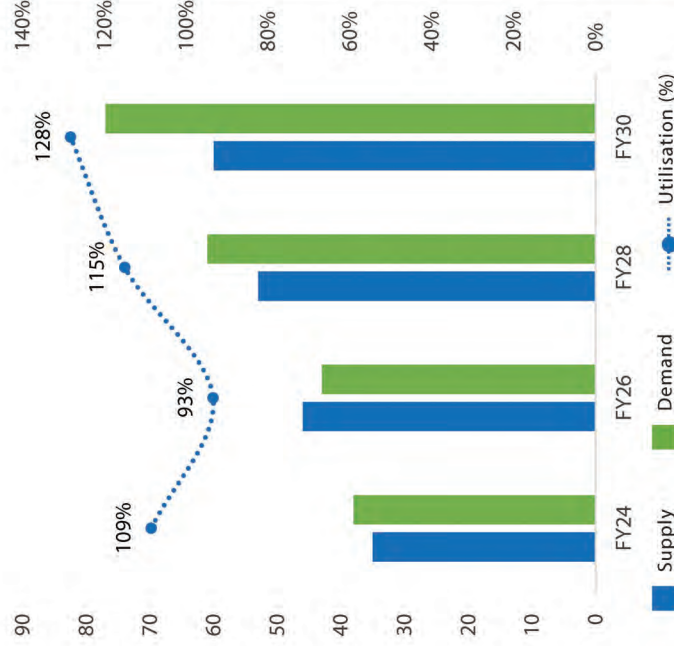
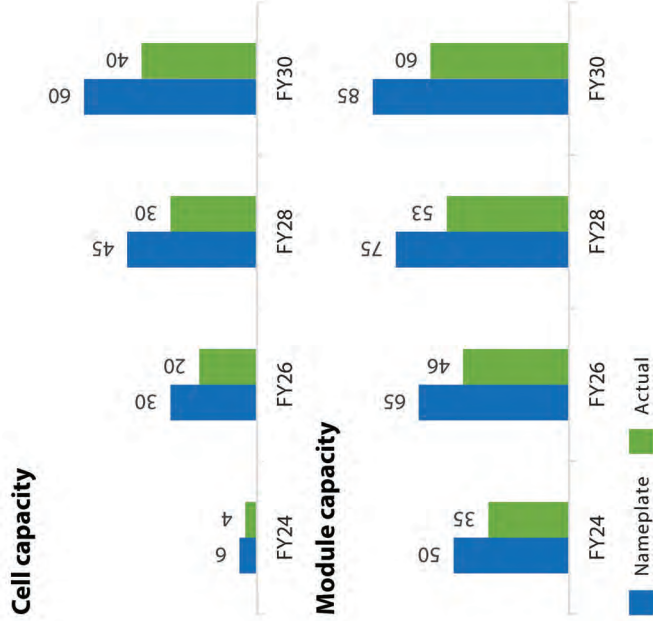


# India's module & cell industry fundamentals are robust despite rising supply

**Actual cell & module capacity in India to be lower than nameplate capacity (GWp)\***

**India's module capacity utilisation to remain high due to exports**

**12-14 GW module exports are expected from FY26 onwards**



\*The actual capacities are lower than nameplate due to variation in order type, production slippages, as well as obsolete technology lines  
Source: Premier DRHP, MNRE, internal estimates

# ~5 GW of integrated solar module manufacturing capacity across two locations in India

## Our competitive advantage

State-of-the-art new manufacturing facility enables us to focus on cost-effective and high-quality output



Bengaluru manufacturing plant has been a pioneer in solar cell and module manufacturing



With 4.3 GW cell and module manufacturing capacity, our Tirunelveli plant (TP Solar) is the first PLI granted integrated solar cell and module manufacturing plant

### Module manufacturing

Bengaluru facility **682 MW**  
Tirunelveli facility **4.3 GW**

Module manufacturing capacity

## 30+ years

Legacy in solar module manufacturing

# >1500 MW

Modules produced at TP Solar in H1 FY25

### Cell manufacturing

Bengaluru facility **530 MW**  
Tirunelveli facility **4.3 GW**

Cell manufacturing capacity

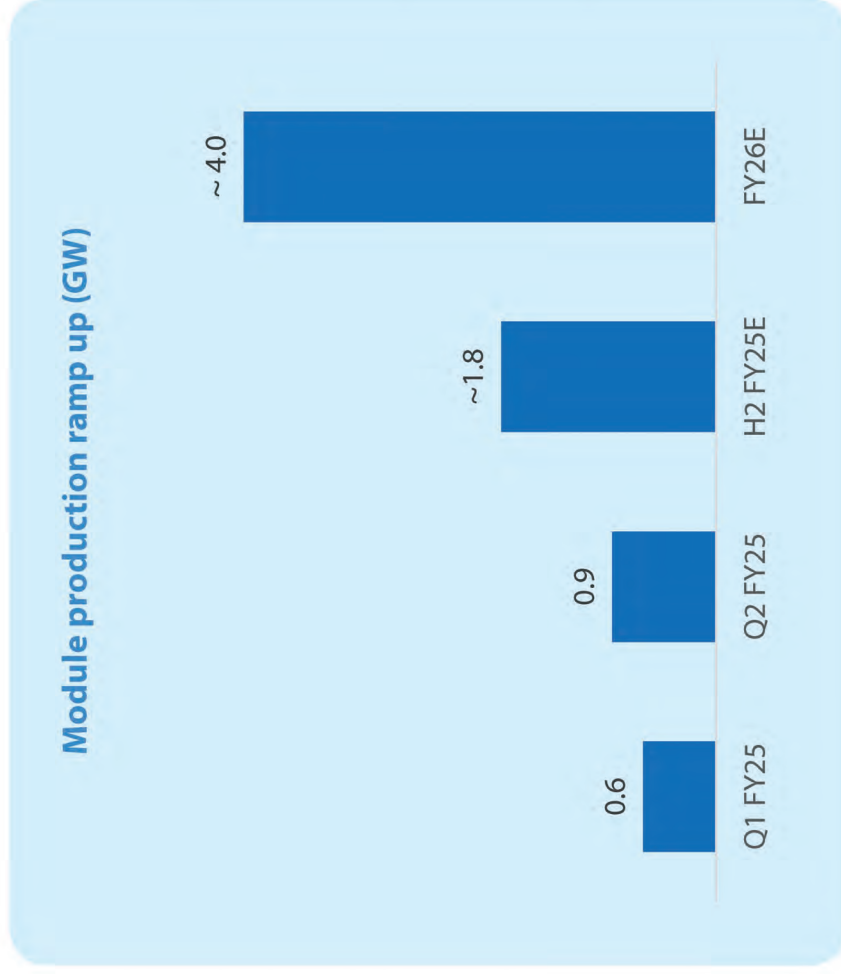
## Mono PERC + TOPCon

Cell lines upgradable to TOPCon

# 4.0 GW

Cell line commissioned in TP Solar in Sept'24 and balance 0.3 GW Cell line is expected to be commissioned in Dec' 24

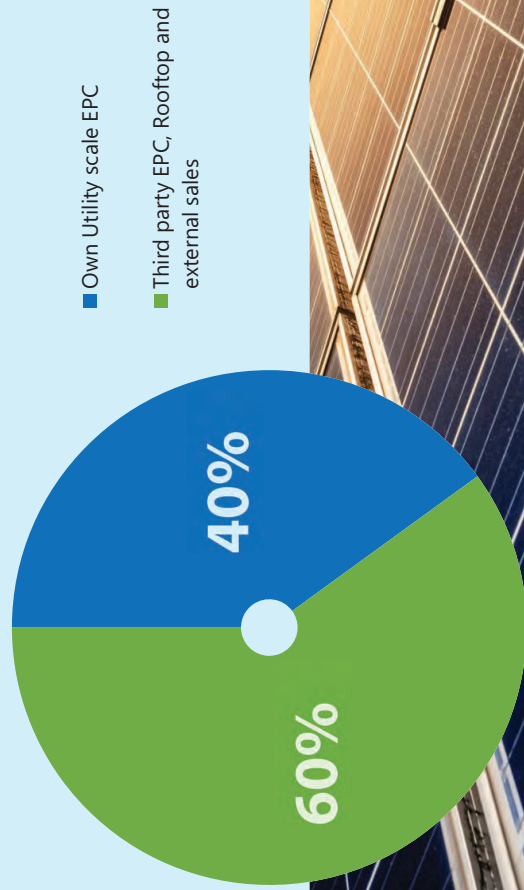
## Both cell and module production facilities are expected to produce 4.0 GW in FY26E



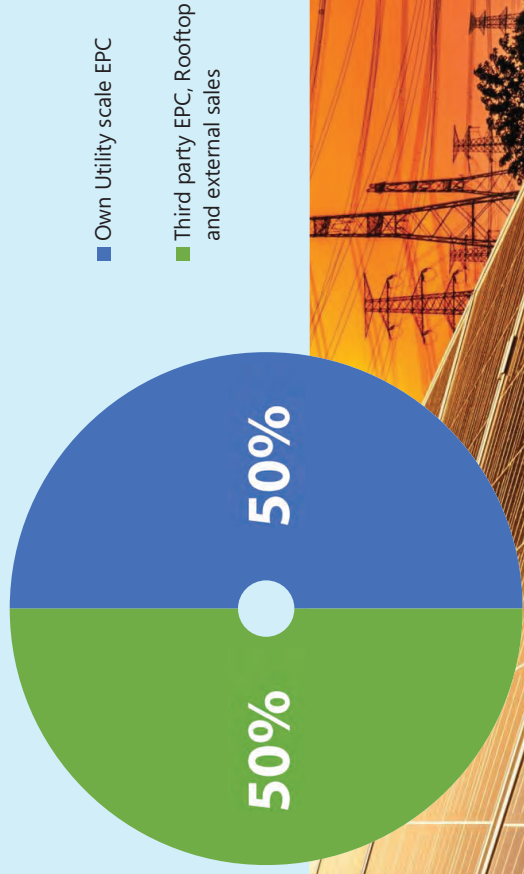


## Expect to use 50% of modules internally and sell 50% to 3<sup>rd</sup> parties between FY26-30

Expected split of module sales in FY25



Expected split of module sales between FY26-FY30



# What sets us apart

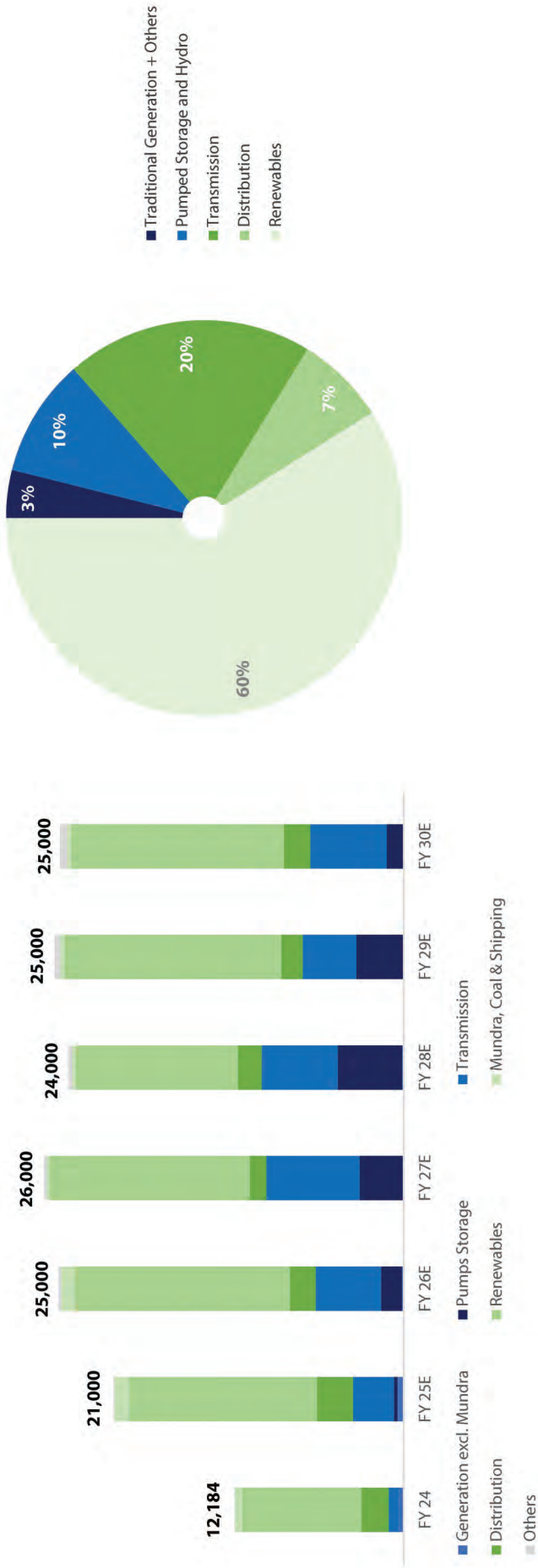




# ₹1.46 tn capex is estimated between FY25-30 with ~60% in renewable sector

**Estimated capex of ~₹1,46,000 Cr between FY25-30E**  
(~₹ Cr)

**~60% of the capex to be spent on renewables between FY25-30E**



Source: Tata Power Estimates

Source: Tata Power Estimates

# Confident of strong financial performance continuing till FY30E

**FY24**
**FY30E**
**Revenue**
**₹61,542 Cr**

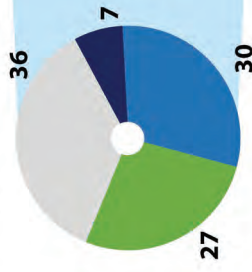
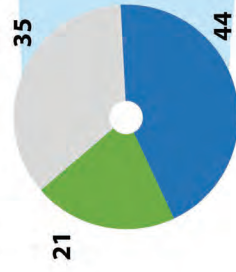
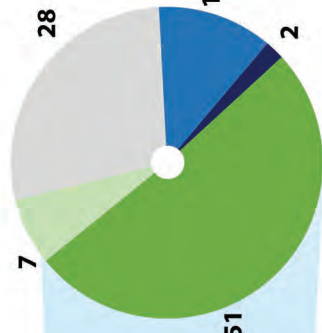
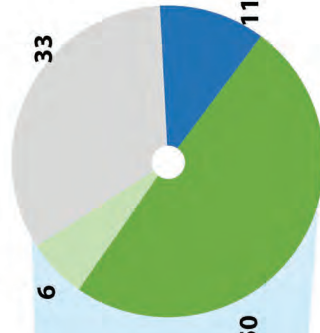
**₹1,00,000 Cr**  
 ~1.6x growth

**EBITDA**
**₹12,701 Cr**

**₹30,000 Cr**  
 ~2.4x growth

**PAT (before minority)**
**₹4,109Cr**

**₹10,000 Cr**  
 ~2.5x growth

**Share of EBITDA (%)**

**FY24**
**Renewables** **PSP** **T&D** **Conventional Generation, Coal & Shipping** **Others\***
**Share of PAT (%)**

**FY24**
**Renewables** **PSP** **T&D** **Conventional Generation, Coal & Shipping & Others\***

**FY30E**

**FY30E**

\*Others include eliminations



# Deeply entrenched power company with history of more than 100 years

## 1910-1955

- **1910:** Incorporated as Tata Hydroelectric Power Supply Company
- **1915:** 1<sup>st</sup> Hydro power generating station (40 MW) commissioned at Khopoli; followed by Bhivpuri (1922) and Bhira (1927)
- **1956-65:** 3 units of 62.5 MW each and 4<sup>th</sup> thermal unit of 150 MW capacity at Trombay commissioned
- **1977:** 150 MW pumped storage at Bhira upgraded
- **1984:** 500 MW-5<sup>th</sup> Unit established at Trombay, to supply uninterrupted supply to Mumbai
- **1991:** 1<sup>st</sup> Solar cell manufacturing capacity set up by TPS&L in collaboration with BP Solar

## 2007

- Completed acquisition of 30% stake in Indonesian Coal Mines: KPC Arutmin & Indo Coal for \$1.15 Bn
- Tata Power - Mundra signed PPA with 5 states (Gujarat, Maharashtra, Punjab, Haryana & Rajasthan)
- Industrial Energy Limited (IEL), a JV formed between Tata Power (74%) and Tata Steel (26%) to meet power requirements for Tata Steel

## 2001-2005

- **2001:** Commissioned first wind asset of 17 MW at Supa Maharashtra
- **2002:** Took over distribution of Delhi, later renamed as TPDDL, a JV between Tata Power (51%) and Delhi Government (49%)
- **2003:** Entered a JV with PGCL, to develop a 1,200 Km long transmission line to bring electricity from Bhutan to Delhi

## 2011

- Commissioned first solar asset of 3 MW at Mulshi, Maharashtra
- Unit 1 of 525 MW Maithon Power Limited (MPL) commissioned

## 2012-2013

- **2012:** Commissioned 2nd unit of 525 MW in MPL
- **2013:** 5 units of 800 MW each at Mundra UMPP commissioned, the first super critical technology in India
- **2013:** Acquired 26% share in the Indonesian coal mine BSSR for \$ 152 Mn

## 2014-2015

- **2014:** Entered into agreement to sell 30% stake in Arutmin for \$401 Mn
- **2015:** Commissioned the 126 MW Dagachhu Hydro Power Corporation in Bhutan

## 2018-2019

- Resurgent Power Ventures acquired 75.01% equity stake of Prayagraj Power Generation Limited (PPGCL)
- Announced the sale of South African JV Cenmergi for \$84 Mn
- Won bid for the installation of 105 MWp largest floating solar plant in Kayamkulam, Kerala

## 2016-2017

- **2016:** Acquired 1,010MW operational RE assets of Welspun, renamed it to Walwhan Renewable Energy Ltd (WREL)
- **2016:** Resurgent Power JV formed by Tata Power and ICIICI Venture to acquire stressed assets in Indian Power Sector. Tata Power holds 26% stake in Resurgent Power
- **2017:** Tata Power Ajmer Distribution Limited (TPADL) formed to take over supply and distribution of Ajmer

## 2020

- Sold 3 ships for \$213 Mn
- Tata Sons infuse ₹2,600 Cr; raise promoter holding to 47% from 37%
- Completed sale of Defence business to Tata advanced Systems Ltd. for ₹1,076 Cr
- Took over the distribution in Central Odisha TPCODL formed as JV between Tata Power (51%) and Odisha Government (49%)

## 2021

- Took over the distribution in North-Eastern Odisha, Western and Southern Odisha, TPNODL, TPWODL and TPSODL formed as JV between Tata Power (51%) and Odisha Government (49%)

## 2022

- Mundra (CGPL) amalgamated into Tata Power
- Tata Power Renewable Energy Limited (TPREL) entered into an agreement to raise ~₹4,000 (\$525 Mn) Cr by issuing shares to a consortium of Blackrock and Mubadala
- Resurgent announces acquisition of 100% stake in NRSS XXXVI (Transmission Company)

## 2024

- TPREL received a Letter of Award (LOA) for developing a 585 MW Firm and Dispatchable Renewable Energy (FDRE) project with NTPC Limited
- Tata Power Solar, commissioned India's largest solar PV Project of 100 MW coupled with 120 MWh Battery Energy Storage project in Chhattisgarh
- Won bids for Paradeep & Gopalpur Transmission Project of 761 Ckt km in Odisha
- Won MSEDCL Hybrid Project of 501 MW (400 MW PPA) with tariff of ₹3.6/unit
- TP Solar commissioned 4.3GW Module and 4.0GW Cell capacity

## 2023

- Received second tranche of ₹2,000 Cr from Blackrock and Mubadala Consortium
- TPREL Received LoA for 966 MW Hybrid RE Project from Tata Steel
- Signed MoU with Maha Govt. for development of 2.8 GW of Pumped Storage Project (PSP)
- 4.3 GW Cell & Module Plant achieved First Module Out (FMO)
- Won bids for Bikaner-Neemrana & Jalpura-Khuria transmission projects worth ₹2,300 Cr



# Diversified business and hence stable margins

Tata Power Company Limited (TPCL) H1FY25

Revenue (₹ Cr)	32,057	EBITDA (₹ Cr)	7,158	Net Debt (₹ Cr)	43,580	PAT*** (₹ Cr)	2,721
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## Thermal Generation, Coal & Hydro

Revenue (₹ Cr)	9,526	EBITDA (₹ Cr)	1,940	PAT (₹ Cr)	1,193
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THERMAL	CAPACITY	FUEL	STAKE
Mundra	4,150 MW	Coal	100%
Trombay	930 MW	Coal/Gas	100%
Mathon (MPL)	1,050 MW	Coal	74%
Prayagraj (PPGCL)*	1,980 MW	Coal	20%
Jajobera	428 MW	Coal	100%
Haldia	120 MW	WHRS	100%
IEL	483 MW	Coal/WHRS	74%
Rihala	108 MW	Gas	51%
PT CKP	54 MW	Coal	30%

### INDONESIA COAL MINES, SHIPPING & INFRA

MINE	CAPACITY	STAKE
Kalitim Prima (KPC)	60 MT	30%
BSSR & AGM	18 MT	26%
NTP (Coal Infra)	-	30%
TERPL (Coal Shipping)**	-	100%

HYDRO	CAPACITY	STAKE
Bhira	300 MW	100%
Bhupuri	75 MW	100%
Khopoli	72 MW	100%
Dagachhu	126 MW	26%
Itazhi Trezhi	120 MW	50%
Agjeristsqalli	187 MW	50%

UNDER CONSTRUCTION	CAPACITY	STAKE
Khorlochhu HPP	600 MW	40%
Bhupuri PSP	1,000 MW	100%
Shirwata PSP	1,800 MW	100%
Dorjlung HPP	1,125 MW	-

## Renewables<sup>^</sup>

Revenue (₹ Cr)	4,297	EBITDA (₹ Cr)	1,956	PAT*** (₹ Cr)	573
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RENEWABLES	CAPACITY
Solar Power	4,335 MW
Wind Energy	1,034 MW

UNDER CONSTRUCTION	CAPACITY
Solar Power	788 MW <sup>^</sup>
Hybrid	4,729 MW

EV CHARGING POINTS	CAPACITY
Public	5,675
Home	1,10769
E-Bus	1,154

### SOLAR EPC ORDER BOOK

PARTICULARS	CAPACITY/ ORDER BOOK
Utility Scale & Group Captive Solar EPC	₹ 15,264 Cr
Rooftop EPC	₹ 684 Cr

### SOLAR CELL AND MIDDLE CAPACITY

Module	CAPACITY
Cell	4,982 MW
Under Construction	4,530 MW
Cell	300MW

## Transmission and Distribution

Revenue (₹ Cr)	20,681	EBITDA (₹ Cr)	2,874	PAT (₹ Cr)	1,013
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DISTRIBUTION LICENSE	CUSTOMERS	STAKE
Mumbai	0.77 Mn	100%
Tata Power Delhi (TPDDL)	2.06 Mn	51%
Odisha	9.48 Mn	51%

DISTRIBUTION FRANCHISE	CUSTOMERS	STAKE
Almer (TPADD)	0.17 Mn	100%

POWER TRADING COMPANY	STAKE
TPCL	100%

### TRANSMISSION

CIRCUIT KM	STAKE
Mumbai	1,291
Powerlinks	2,328
SEUPPTCL	789
NRSS-XXXVI	225

### UNDER CONSTRUCTION

SEUPPTCL	STAKE
NRSS-XXXVI	782
Jaipura Khurja	77
Bikaner Neemrana	164
Paradeep Transmission	682
Gopalpur Transmission	384
	377

## Eliminations/ Others

(Incl. corporate taxes, expenses and interest)

Revenue (₹ Cr)	388	EBITDA (₹ Cr)	388	PAT (₹ Cr)	(57)
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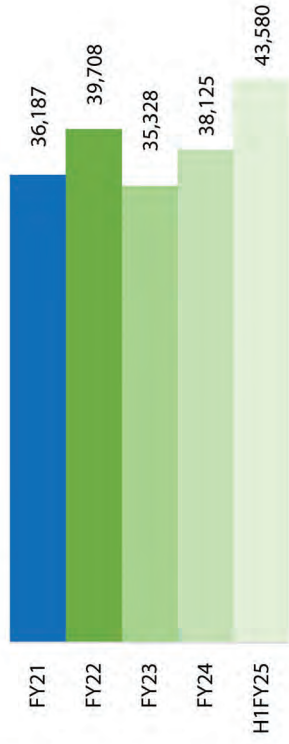
ENTITY	BUSINESS MODEL	STAKE
Tata Projects	EPC	31%
Nelco	Communication	50%
Corporate		

\*Resurgent owns 75% in Prayagraj | \*\*TERPL is a wholly owned subsidiary of Tata Power International Pte Ltd., which is wholly owned by Tata Power | \*\*\*Adjusted PAT before Minority Interest and exceptional items | ^Tata Power currently owns 88.57% stake in Renewables (TPREL), ^^^15 MW is for IEL

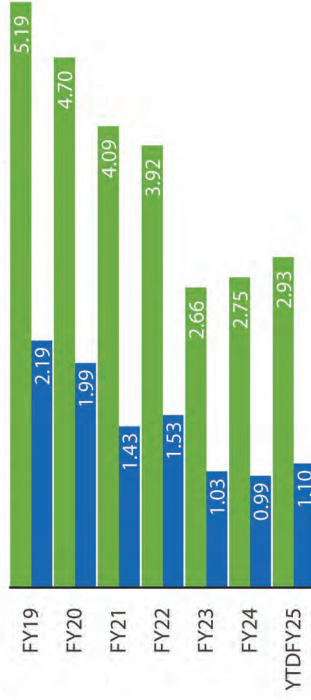


# Well-capitalised with one of the strongest Balance Sheets

## Net Debt (₹ Cr)



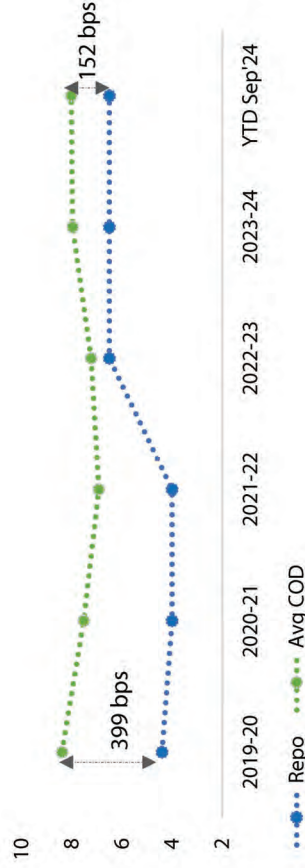
## Balance Sheet continues to strengthen



■ Net Debt to Equity ■ Net Debt to Underlying EBITDA

\*Trailing twelve months

## Relatively smaller rise in Tata Power's Cost of Debt (CoD) compared to rise in repo rate (%)



## Credit rating continues to improve

Credit Rating* (Consolidated)	FY21	FY22	FY23	FY24	Current
CRISIL	AA /Stable	AA /Stable	AA /Stable	AA /Positive	AA+ /Stable
India Ratings	AA /Stable	AA /Stable	AA /Stable	AA+ /Stable	AA+ /Stable
ICRA	AA- /Positive	AA /Stable	AA /Stable	AA /Positive	AA+ /Stable
CARE	AA /Stable	AA /Stable	AA /Stable	AA /Positive	AA+ /Stable
S&P Global	B+ /Positive	BB /Stable	BB+ /Stable	BB+ /Stable	BBB- /Positive
Moody's	Ba3 /Stable	Ba2 /Stable	Ba2 /Stable	Ba1 /Stable	Ba1 /Stable

\*Credit upgrades indicated by deepening shades of blue



Sustainability

At the core of  
everything  
we do







## Our sustainability goals



Become carbon Net Zero before 2045

Become water neutral before 2030

Zero waste to landfill before 2030

No Net Loss to Biodiversity

Leverage technology to create the 'Utility of the Future' (IOT, Smart Grids, BESS, Green H2, robotic panel cleaning etc.)




Education - Train 35 Lakh+ youth as conservation and STEM education champions by 2028

Employability and employment - 20 Lakh+ youth trained and made employable by 2028

Entrepreneurship - Enable 1 Lakh+ community collectives (Self Help Groups) by 2028

Improve overall gender diversity ratio to 20% by 2028

Leverage technology to create the 'Utility of the Future' (IOT, Smart Grids, BESS, Green H2, robotic panel cleaning etc.)



Improve Sustainability Disclosures and get listed in DJSI Emerging Markets list by 2027

Inclusion in S&P Global Emerging Market List by 2027

## Taking leaps towards our ESG goals

Particulars	Description	Baseline		Target		On going actions
		Value (FY24)	Year	Value	Year	
	Clean & Green portfolio	16%*	2015	70%	2030	<ul style="list-style-type: none"> <li>43% Clean &amp; Green portfolio currently; 57% Clean &amp; Green capacity post completion of projects in pipeline</li> </ul>
	Net Zero (Absolute Carbon Emissions) Scope 1 and 2	41.5 MT	2024	100%	2045	<ul style="list-style-type: none"> <li>SBTi commitment</li> <li>Renewable portfolio growth</li> <li>Thermal plant phase-out plan</li> <li>Annual plantation of more than 1 Mn saplings</li> </ul>
<b>Environment</b>	Water consumption (Total Water Consumption)	320 Mn m <sup>3</sup>	2024	100%	2030	<ul style="list-style-type: none"> <li>3% Fresh water reduction</li> <li>17% Rainwater harvesting</li> <li>80% by offsets</li> </ul>
	Zero Waste to Landfill	7.59 MT non-hazardous waste; 243 MT hazardous waste	2024	100%	2030	<ul style="list-style-type: none"> <li>Waste utilisation of ash</li> </ul>
	Total Non-Hazardous Waste (Including Ash)	7.59 MT				<ul style="list-style-type: none"> <li>Waste Management Plan for biodegradable waste, plastic, and e-waste</li> </ul>
	Education	26.25 Lakh	2024	28.5 Lakh	2028	<ul style="list-style-type: none"> <li>CSR initiatives made a positive impact on 62.67 Lakh lives across 18 Indian states during FY24</li> </ul>
	Employability & Employment	2.76 Lakh beneficiaries	2024	3.76 Lakh	2028	<ul style="list-style-type: none"> <li>2 flagships enhanced with long-term focus in association with GOI and Tata Group synergies</li> </ul>
<b>Social</b>	Entrepreneurship	30,000 beneficiaries	2024	35,000	2028	<ul style="list-style-type: none"> <li>Special outreach made in 15 aspirational districts</li> <li>Over 20 Cr CSR investments in H1 made across 100 neighbourhoods of Tata Power Group</li> </ul>
	Gender diversity (%)	10%	2024	20%	2028	<ul style="list-style-type: none"> <li>Women employees across roles</li> <li>59% - Campus hires</li> <li>Policies supporting women in all life stages and mentorship programme</li> </ul>
<b>Governance</b>	DJSI Emerging Markets List (Absolute Score)	67/100	2023	80/100	2027	<ul style="list-style-type: none"> <li>ESG Action Plan and gap analysis</li> </ul>

\*Ease year 2015 for Clean & Green portfolio in alignment with Paris Agreement



## Gradually improving our ESG ratings

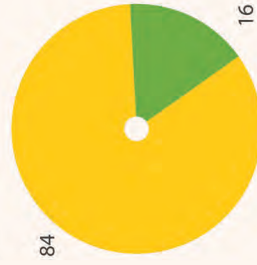
	2024	2023	2022	2021
<p>CDP – Climate Change</p>	B	B	B	C
<p>CDP – Water</p>	B	B	B	B
<p>Dow Jones Sustainability Indexes DJSI <i>(Higher score is better)</i></p>	67	67	67	67
<p>MSCI</p>	A	BBB	BBB	BB
<p>SUSTAINALYTICS Sustainalytics <i>(Lower score is better)</i></p>	37.7	38.5	41.2	38.6

Dates of last published ratings: CDP – Water : October 2023; CDP – Climate Change : October 2023; DJSI – November 2023; MSCI – April 2024; Sustainalytics\*\* – August 2024

## Achieving 100% Clean & Green power generation by FY45

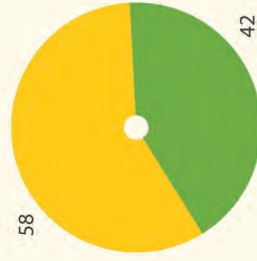
**2015**

Largely a coal-based company, having capacities to fulfil the energy demands of a developing India



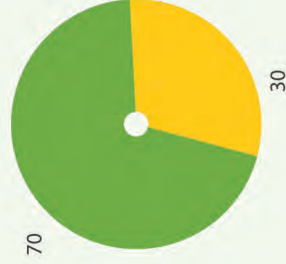
**2024**

Transitioning towards a clean and green portfolio through renewable energy capacity expansion



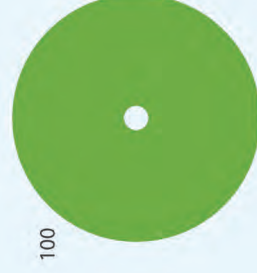
**2030**

Clean & Green capacity will account for at least 70% of our overall capacity in 2030



**2045**

Phasing out thermal portfolio before 2045\* as Power Purchase Agreements (PPAs) for our thermal capacities expire



■ Clean & Green (%) ■ Thermal (%)

\*Subject to completion of contractual obligations and useful life



# Tata Power becomes the first integrated power company in India with approved Science-Based Target initiatives (SBTi)



## Achievement

Tata Power's near-term targets validated by SBTi, marking a significant milestone

## Ambitious goals



Reduce Scope 1 GHG emissions by 70.5% per MWh by FY37 from FY22



Reduce Scope 1 and 3 GHG emissions from sold electricity generation by 70.5% by FY37



Reduce absolute Scope 2 GHG emissions by 12.5% by FY27 from FY22



## Pioneering status

Sole Indian integrated power company with validated SBTi targets, aligning with the well-below 2°C trajectory

## SBTi collaboration

SBTi collaboration drives ambitious corporate climate action globally

## Leadership statement

Tata Power sees alignment with science-based criteria as a responsibility and a testament to dedication towards all sustainable future

## Validation process

Tata Power's targets rigorously validated against SBTi's criteria and recommendations

## Continued mission

Tata Power committed to leading by example and contributing to addressing the global climate crisis

## Approved science-based target

The Science Based Targets initiative has validated that the corporate greenhouse gas emissions reduction target(s) submitted by

### The Tata Power Company

have been deemed to be in conformance with the SBTi Criteria and Recommendations (version 4.2). The SBTi's Target Validation Team has classified your company's scope 1 and 2 target ambition and has determined that it is in line with a well-below 2°C trajectory.

The official target wording is:

Tata Power commits to reduce scope 1 GHG emissions 70.5 % per MWh by FY2037 from a FY2022 base year. Tata Power commits to reduce scope 1 and 3 GHG emissions from the generation of all sold electricity 70.5% within the same timeframe. Tata Power commits to reduce absolute scope 2 GHG emissions 12.5 % by FY2027 from a FY2022 base year. Tata Power also commits to continue active annual sourcing of 100% renewable electricity through FY2030.



Date of issue: February 2024  
Certificate Number: TATP-IND-001-OFF

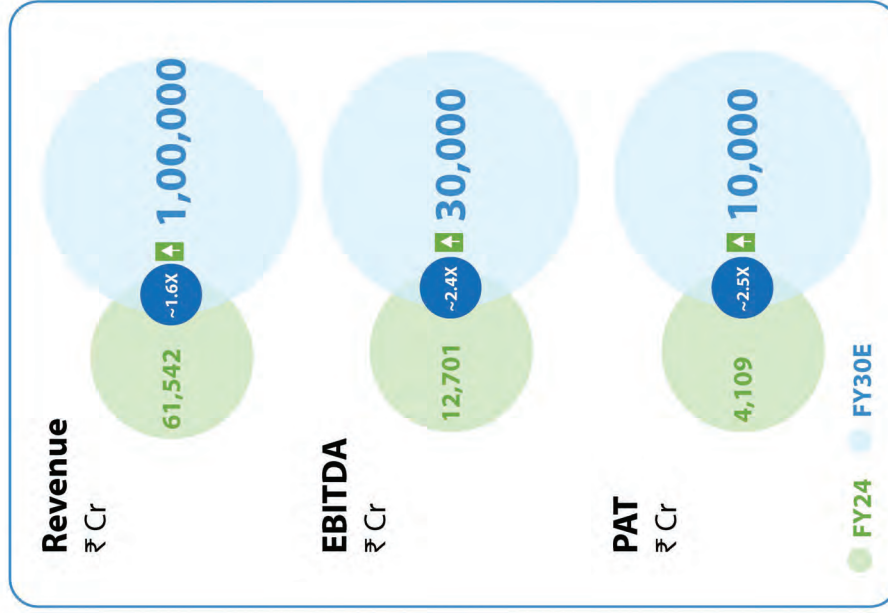
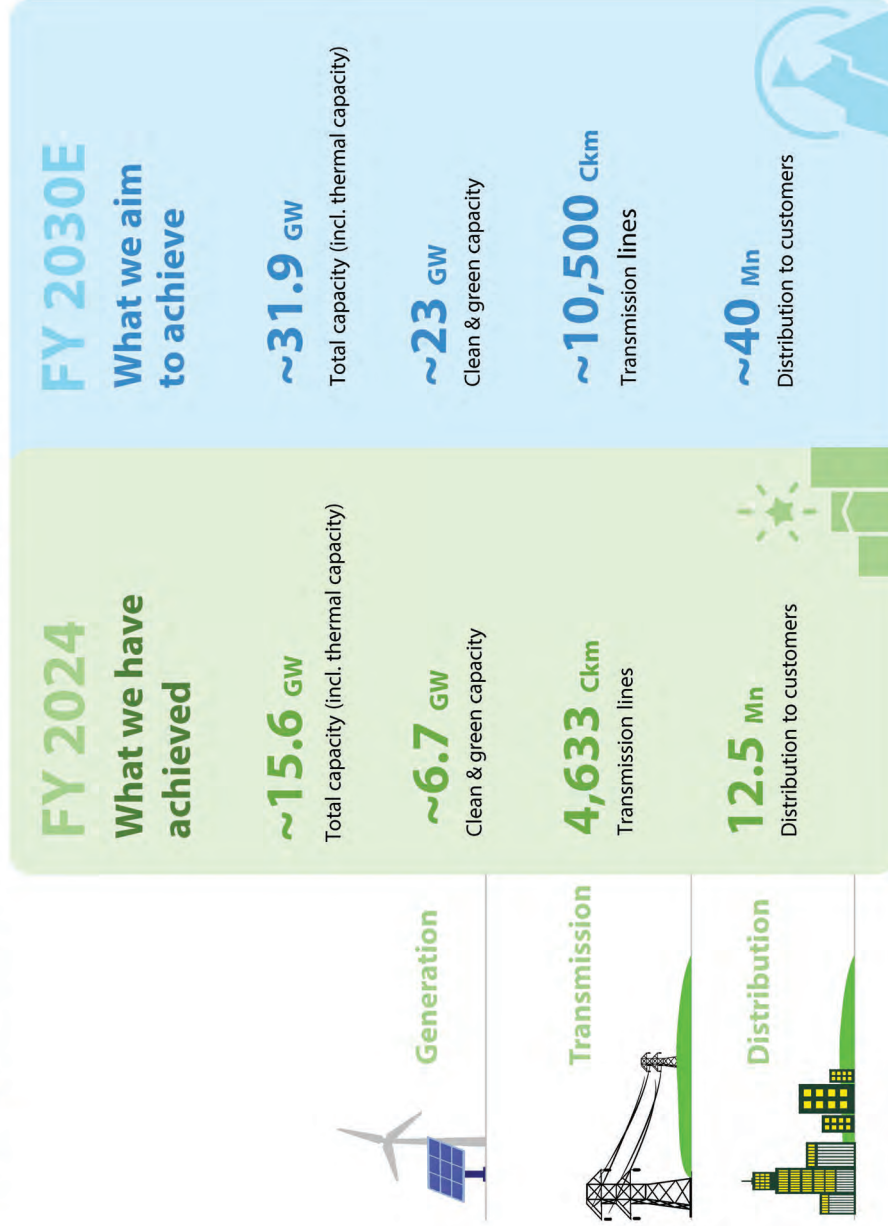
### Scope 1+2 Targets

Target ID	Scope Coverage	Type	Base Year	Target Year	Ambition	Boundary Coverage	Method	Validation Result
INT1	Scope 1	Intensity	FY2022	FY2037	70.5%	100.0%	SDA	Approved
INT2	Scope 1+3	Intensity	FY2022	FY2037	70.5%	94.0%	SDA	Approved
REL	Scope 2	Renewable Electricity	FY2022	FY2030	100.0%	1.7%	RE	Approved
ABS1	Scope 2	Absolute	FY2022	FY2027	12.5%	98.3%	Absolute Contraction	Approved

### Scope 3 Targets

Target ID	Scope Coverage	Type	Base Year	Target Year	Ambition	Boundary Coverage	Method	Validation Result
INT2	Scope 1+3	Intensity	FY2022	FY2037	70.5%	94.0%	SDA	Approved

# Well poised to achieve our aspirations





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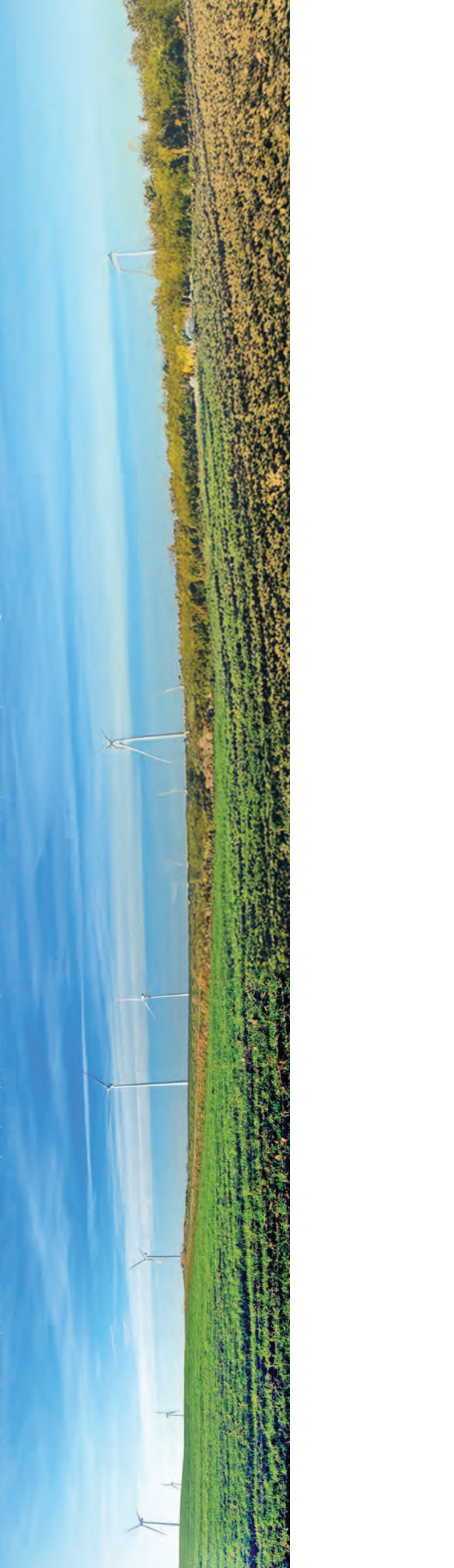
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## Investor Relations Team

### **Mr. Soundararajan Kasturi**

Chief – Treasury & Investor Relations  
Email: [kasturis@tatapower.com](mailto:kasturis@tatapower.com)

### **Mr. Rajesh Lachhani**

Head – Investor Relations  
Email: [rajesh.lachhani@tatapower.com](mailto:rajesh.lachhani@tatapower.com)

[www.tatapower.com](http://www.tatapower.com)

