

# **MANUFACTURED CAPITAL**

At JSW Energy, we maintain an unwavering dedication to foster a culture of innovation to reduce our operational expenditure and maintain high standards of operational efficiency at all our power plants. Our organisational priorities guiding our business operations are - minimising emissions, producing power at the lowest cost, and optimising our operational potential.

Our investments are directed towards advancements in cutting-edge technologies, innovative solutions and eco-conscious infrastructure that can steer us towards achieving our new stated goal of 30 GW power generation capacity by FY 2030 and remaining at



CAPITALS AND MD&A



Barmer Plant

#### **Description**

Our Manufactured Capital encompasses a range of tangible and diverse portfolio of assets which are utilised for power generation and for carrying out our business activities and operations. We navigate our investments to manage our assets and to generate and deliver value, and foster an environmentallyconscious and sustainable future.

#### **Management Approach**

Our objective is to offer reliable and affordable supply of power to our customers. We strive to optimise the efficiency of our power generation capabilities by implementing practices that prioritises long-term sustainability of the manufacturing ecosystem. We enhance the performance of our manufacturing infrastructure by harnessing technology advancements and practicing resource management responsibly.

We are aligning our approach to combat climate change and environmental preservation by gradually increasing the share of renewables in our generation portfolio, fuelling our drive for sustainable practices in our business operations.

#### Significant Aspects

- Power generation
- Power transmission
- Power distribution
- · Enabling RTC power through efficiency



#### **Key Performance Indicators**

- Total installed capacity
- Renewable capacity
- Investment in renewable assets
- Operational Presence in 12 states

#### **Material Topics**

10,875 MW

Installed capacity

Efficiency of plants

Increase in renewable portfolio

#### **Strategy Linkage**

S01, S04, S05

**5,217** MW: **5,658** MW

Renewable

Thermal

(48% : 52%)Installed capacity

## 12 states

Operational Presence

## **Key Highlights:**

Net generation increased by 16% at 32.4 BUs in FY 2025, driven by higher thermal and hydro generation and organic wind capacity additions. Total RE generation increased by 24% to 11.6 BUs in FY 2025 driven by contribution from acquired and greenfield RE capacity additions. Total thermal generation is up 12% YoY at 20.8 BUs. Total generation from long-term Thermal PPAs rose 10% YoY to 16.7 BUs in FY 2025. Meanwhile, long term renewable generation saw a significant 21% YoY increase, reaching 11.2 BUs, underscoring our strong growth across both conventional and renewable sources.

The total capacity addition of 3.6 GW during the year resulted in total installed capacity of 10.8 GW at the end of FY 2025. It is driven by organic wind capacity addition of 1.3 GW and strategic acquisition of KSK Mahanadi having 1.8 GW generation capacity. Our total locked-in generation capacity increased to 29.8 GW from 13.2 GW in FY 2024.

Thermal generation increased 12% YoY, driven by strong performance from KSK Mahanadi and higher long term volumes from Vijayanagar thermal plant, aided by an incremental contribution of 1,935 MU from JSW Utkal-Unit 1. Hydro generation was up 19% YoY in FY 2025.

Our power generation capacity has grown from 260 MW in 2000 to 10,800 MW in FY2025. Our power plants are reputed for efficient operations and capabilities enabling optimum utilisation of resources for power generation, transmission and trading.

#### **Gross Generation by Source (MUs)**

**22,804** MU Thermal

**5,903** MU Hydro

**1,295** MU Solar

**4,574** MU



CAPITALS AND MD&A

#### **Increase in Power Generation Capacity**

	Capacity in FY 2025	Locked in capacity (Installed + UC)
Thermal	5,658 MW	9,058 MW
Hydro	1,391 MW	1,631 MW
Solar	680 MW	6,411 MW
Wind	3,146 MW	6,009 MW
Hybrid	Nil	6,754 MW
Total	10,875 MW	29,863 MW (Thermal, Hydro, Solar and Wind)



Wind Project, Tuticorin

#### **Delivering Value for all our Stakeholders**

#### **Total Net Generation (MUs)**



#### Installed Capacity (MW)



#### Annual capacity growth

681 ı	МW	3,630 MW
FY 2024		FY 2025

#### Total generation capacity: 10.8 GW

Generation by source

	FY 2025	FY 2024
Thermal	5,658	3,508
Hydro	1,391	1,391
Solar	680	675
Wind	3,146	1,671
Overall	10,875	7,245



#### **Our Operational Performance**

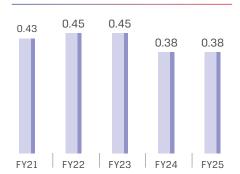
#### **Thermal**

At the core of our power generation portfolio lie our thermal assets, designed to deliver reliable baseload energy with minimal environmental footprint. Efficient utilisation of coal, lignite, and secondary fuels is achieved through robust operations and maintenance practices, including stringent adherence to standard operating procedures and regular equipment refurbishment.



#### **Key Performance Indicators**

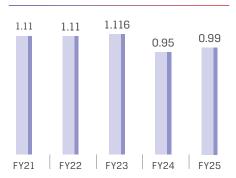
#### Specific Coal Consumption (KG/KWh)



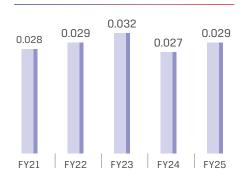
#### Specific Oil Consumption (M3/MU)



#### Specific Raw Water Consumption (M<sup>3</sup>/MWh)



#### **Specific DM Water Consumption (M³/MU)**



#### **Thermal Plants**

#### Plant Load Factor (%)

	FY 2025	FY 2024
Vijayanagar	59	58
Barmer	71	75
Ratnagiri	82	81
Utkal	65	63
Nandyal	59	60
KSK Mahanadi	79	NA

#### Power Generation in FY 2025

#### **Total Net Generation: 20,772.55 MUs (Thermal)**

	Net Generation (MU)	Gross Generation (MU)
Vijayanagar	4,084.75	4,420.47
Barmer	6,000.40	6,760.59
Ratnagiri	7,880.07	8,589.02
Utkal	1,935.35	2,092.39
Nandyal	81.66	92.30
KSK	790.32	849.03

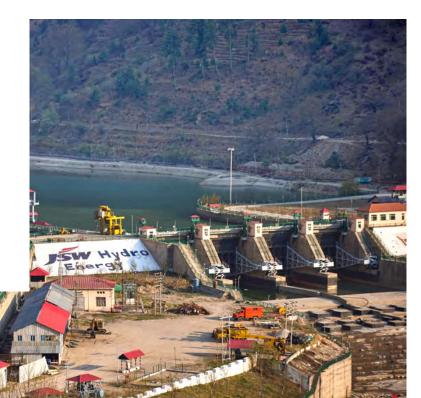


Fly ash utilisation streams	Tons	Vijaynagar	Ratnagiri	Barmer	Nandyal	Utkal	Total
Total Ash Generation	Tons	238870.8	406973.7	807620.27	22053	676642.172	2152159.942
Cement companies	Tons	148940	81732.89	529709.63	22053	1118	783553.32
Ash ponds	Tons	0	0	0			0
Brick making	Tons	21652.9	0	310467.74		253	332373.64
Reuse	Tons	35384.6	162002.81	0		575314.572	772701.982
RMC	Tons	0	0	0			0
Mines	Tons	0					0
Projects	Tons	32361.4					32361.4
Export Silo	Tons		124834				124834
Dyke raising	Tons		38404				38404
Low lying	Tons					99956.6	99956.6
Bottom Ash	Tons	532.7					532.7
Total Ash utilisation	Tons	238871	406973.7	840177.37	22053	676642.172	2184717.642
% of Ash Utilisation	%	100	100	104.03	100	100	101.51



#### **Hydro Power Plants**

Hydro power contributes 13% of our total power generation capacity, underscoring our commitment to clean and renewable energy sources. Karcham Wangtoo, with an installed capacity of 1,391 MW, is the largest private sector hydroelectric plant in India. It achieved a plant load factor (PLF) of 50% in FY 2025. Meanwhile, Baspa II (300 MW capacity) demonstrated strong operational performance with a PLF of 51.96%.



STRATEGIES FOR GROWTH

JSW Hydro Energy, Sholtu

#### Power Generated NET (MU)

	FY 2025
Baspa II	1,351.24
Karcham Wangtoo	4,510.74
Total	5,862.98

#### **Net Generation of Hydro Power Plants**

**4,913 MU** In FY 2024 **5,862** MU In FY 2025

**5,595** MU In FY 2023

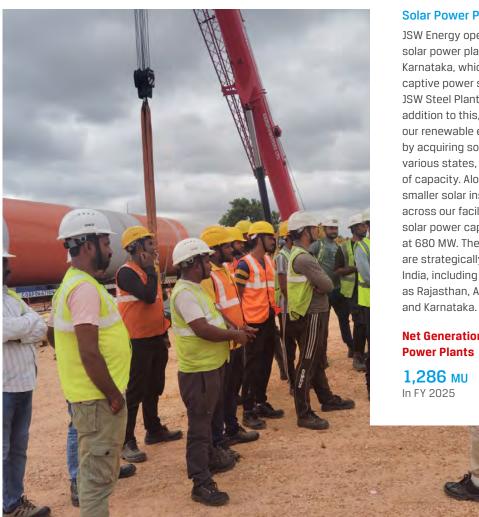
#### **Power Generation in FY 2025**

	Karcham Wangtoo	Baspa II
Gross (MU)	4 536.98	1 365.61
Net (MU)	4 510.74	1 351.24

#### **Plant Load Factor of Hydro Power Plants**

FY 2025	FY 2024
50.10%	41.89%
49.56%	41.25%
51.96%	44.12%
	50.10%





#### **Solar Power Plants**

JSW Energy operates a 225 MW solar power plant near Vijayanagar, Karnataka, which serves as a captive power source for the JSW Steel Plant at Vijayanagar. In addition to this, we have expanded our renewable energy footprint by acquiring solar plants across various states, adding 422 MW of capacity. Along with several smaller solar installations spread across our facilities, our total solar power capacity now stands at 680 MW. These solar assets are strategically located across India, including key states such as Rajasthan, Andhra Pradesh,

#### **Net Generation of Solar Power Plants**

**1,286** MU **1,311** MU In FY 2025 In FY 2024

Wind Project, Sandur

#### **Wind Power Plants**

JSW Energy has 3,146 MW of operational wind plants which includes our own greenfield as well as acquired RE Wind plants. Additionally, 2,343 MW of greenfield wind projects are under construction. These capacities are focused mainly across Tamil Nadu, Karnataka, and Maharashtra, reinforcing our commitment to expanding clean energy across key regions.

#### **Net Generation of Wind Power Plants**

**4,462** MU In FY 2025

**3,112** MU In FY 2024

#### Other Operational Assets

We are engaged in trading of power since 2006. We have a capacity of 9 mtpa of lignite mining through Barmer Lignite Mining Company Limited in Rajasthan, which is our joint venture with Rajasthan State Mines and Minerals. We also have a joint venture with Maharashtra State Electricity Transmission Company for two 400 kV transmission lines in Maharashtra.

### JSW Energy (Barmer):

ISO 50001:2018 ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

ISO 22301:2019

#### **JSW Hydro Energy:**

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 50001:2018

#### JSW Energy (Ratnagiri):

ISO 50001:2018 ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 22301:2019

#### **JSW Neo Energy:**

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

#### JSW Energy (Vijayanagar):

ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 50001:2018















