



Agility & Commitment Reinforced

Supporting India in its Quest for Energy Security

Corporate Presentation | Nov 2024

Forward Looking and Cautionary Statement



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JSW Group Overview



Amongst India's leading
Conglomerates with a
turnover of US\$24 Bn¹



JSW Energy

- Power producer with 10 GW of generation portfolio by FY25,
- Targeting 20GW generation + 40GWh of Storage by FY30
- Market Cap: ~US\$ 14 Bn



Infrastructure

- Second largest commercial port operator with 170 mtpa capacity
- Operates environmental-friendly seaports & terminals
- Equity listing in Oct 2023, Market Cap: ~US\$ 8 Bn



Paints

- Capacity of 170,000 kpa
- State-of-the-art Facilities in Maharashtra and Karnataka
- Targeting 800,000 kpa capacity by FY30



Sports

- Supporting Indian sports ecosystem
- Sports Franchises: Delhi Capitals, Pretoria Capitals, Bengaluru FC and Haryana Steelers



Steel

- India's largest steel producer with capacity of 35.7 mtpa
- Growing to 43.5 mtpa by Sep'27 and 51.5 mtpa by FY31
- Market Cap: ~US\$ 28 Bn



Cement

- Capacity of 20.6 mtpa, growing to ~40 mtpa
- Lowest CO2 emission intensity in Indian cement industry and among major global companies
- Targeting 60mtpa capacity



Ventures

- Early-stage, tech-focused, VC fund
- Portfolio: Purple, LimeTray, Homelane, CureSkin and ZvloV



EV

- 35% stake in JSW MG Motors India
- Plan to build largest EV complex in India
- Targeting 300k of PV and 100k of CV capacity by 2030

JSW Energy : Transitioning towards green energy

Mission

Providing Reliable, Affordable and Sustainable power

Vision

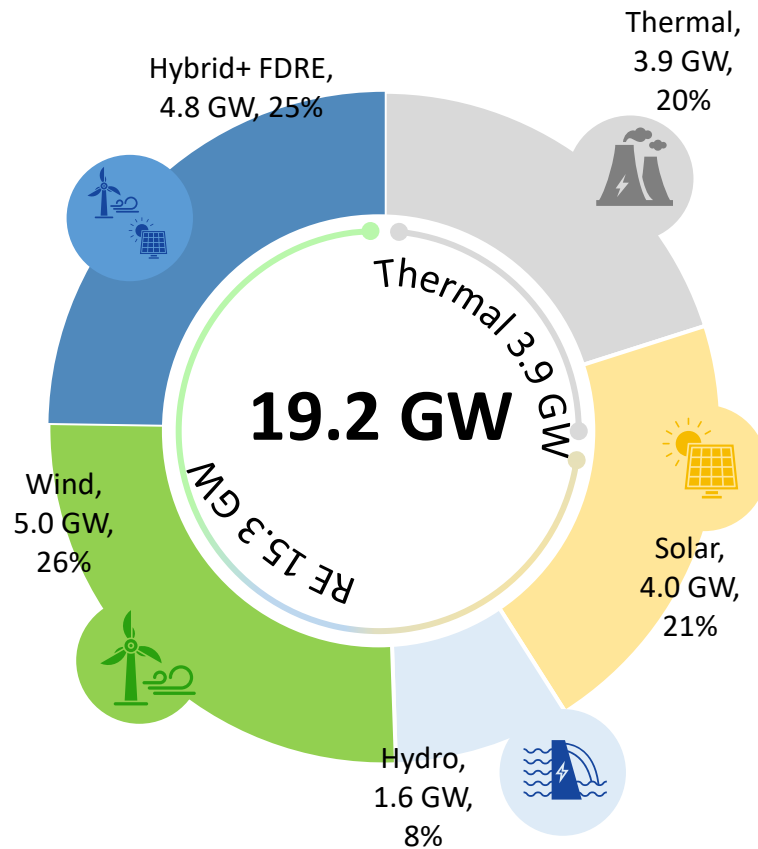
To be a leading integrated power company with presence across value chain

BEFORE FY2030 To become a 20 GW company and 40GWh Energy Storage

FY2050 To become carbon neutral by 2050

Well placed to achieve 20 GW of generation capacity ahead of stated timeline of 2030

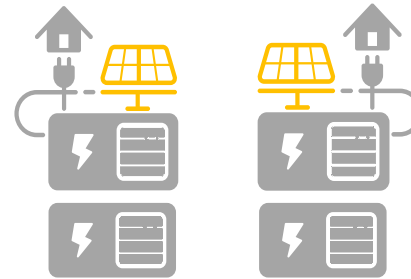
Power Generation



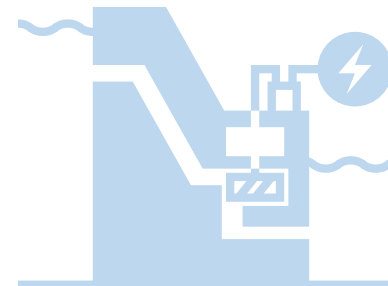
Energy Storage

16.2 GWh of locked in capacity

Battery Storage
1.8 GWh



Hydro Pump Storage
14.4 GWh



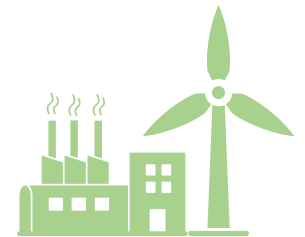
Energy Products & Services

Solar Module & Green H2

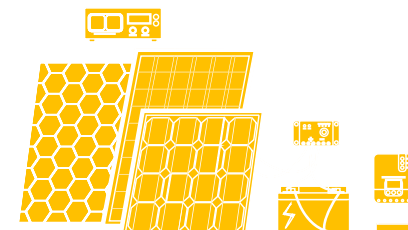


Green Hydrogen
& Derivatives
3,800 TPA

Wind Turbine
Manufacturing –
Technology licensing
agreement with SANY
Renewable Energy



Solar Module
manufacturing
1.0 GW



Opportunities

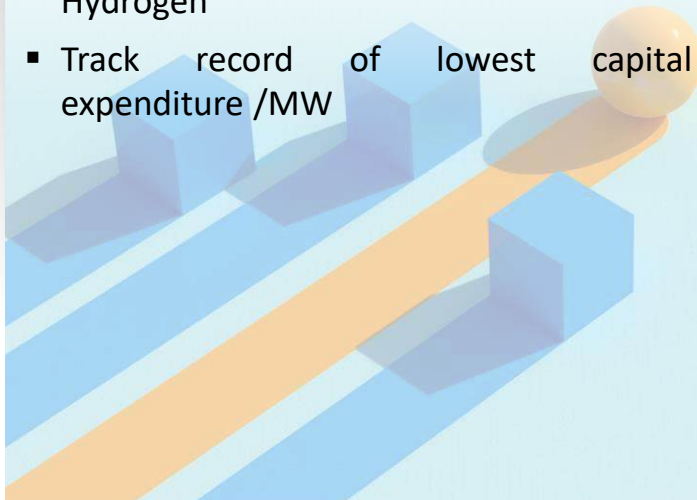
- **India's Ambitious Target**
 - 50 GW capacity bid per annum
 - JSW energy well placed to capitalize on FDRE and Energy Storage opportunities
- **Group Captive opportunities with JSW Steel**
 - Generation – 6.2 GW
 - Energy Storage – 2.7GW
 - Green Hydrogen 85,000-90,000 tpa with associated RE solution
- **Equipment Manufacturing** – WTG and Solar module manufacturing

Locked-in Generation 19.2 GW
Locked-in Energy Storage 16.2 GWh

Capability

4.6 GW Organic Capacity Addition

- Proficiency in Executing large-scale projects across diverse generation modes
- Harnessing skilled manpower and cutting-edge intelligence to drive success in project bidding and implementation
- Early mover in Energy Storage and Green Hydrogen
- Track record of lowest capital expenditure /MW



Capital

- **Financial Strength**
 - Robust balance sheet
 - Strong credit rating
 - Low borrowing cost
- Track record of prudent capital allocation
- Successfully completed ₹ 5,000 Cr QIP
 - Witnessed interest from marquee global and domestic investors



Well Diversified Portfolio – Focused on Maximising Cash Returns

Capacity Breakdown

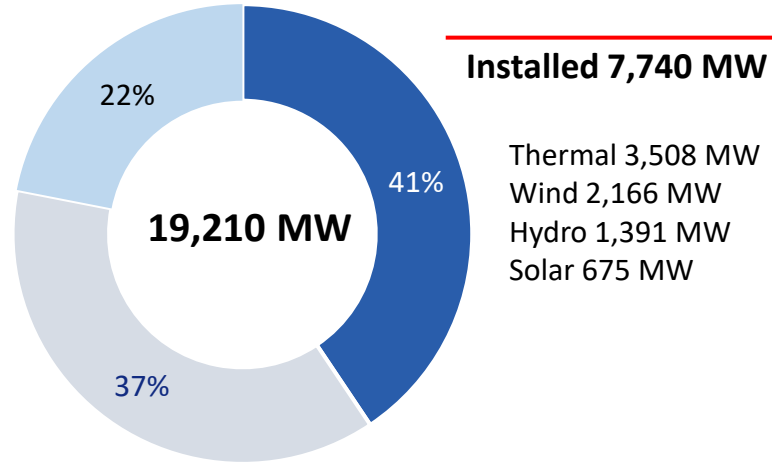
Generation

Pipeline 3,540 MW

Solar 560 MW
Wind 250 MW
Hybrid/FDRE 2,730 MW

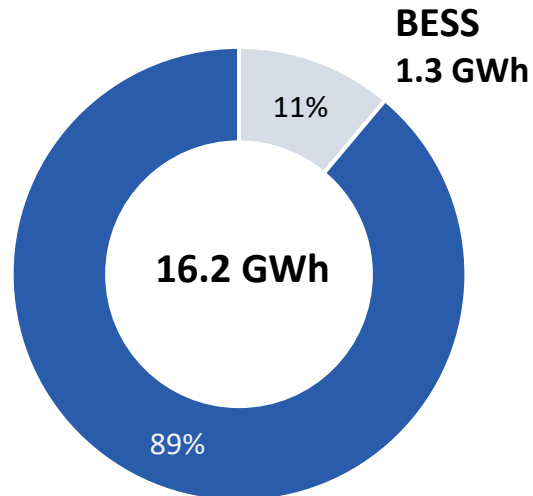
Under-construction 7,931 MW

Wind 2,536 MW
Solar 2,779
Hybrid 2,026
Thermal 350 MW
Hydro 240 MW

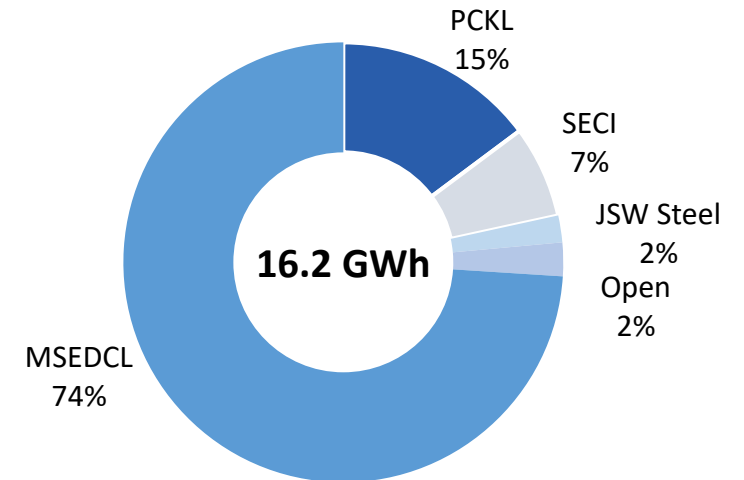
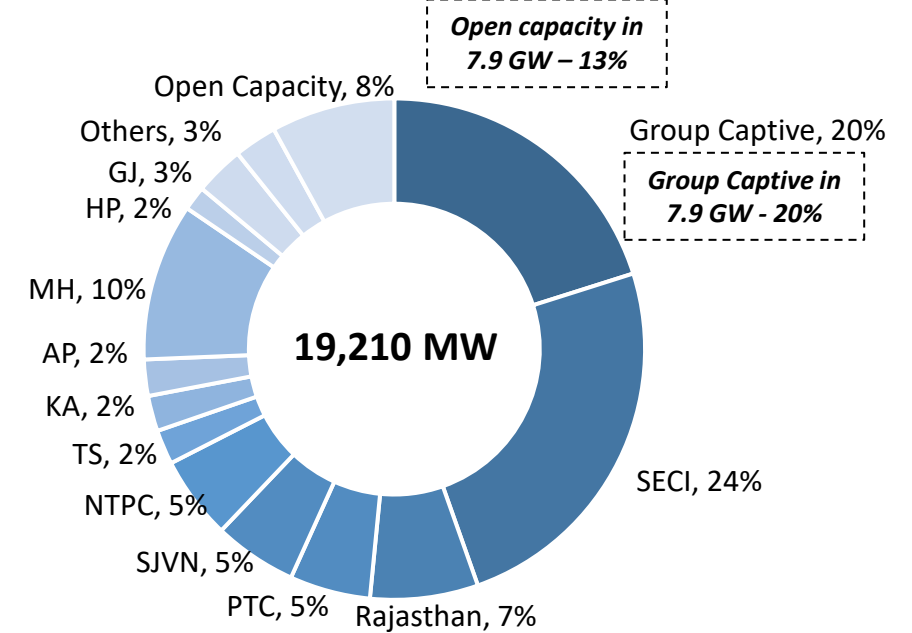


Energy Storage

Hydro PSP 14.4 GWh

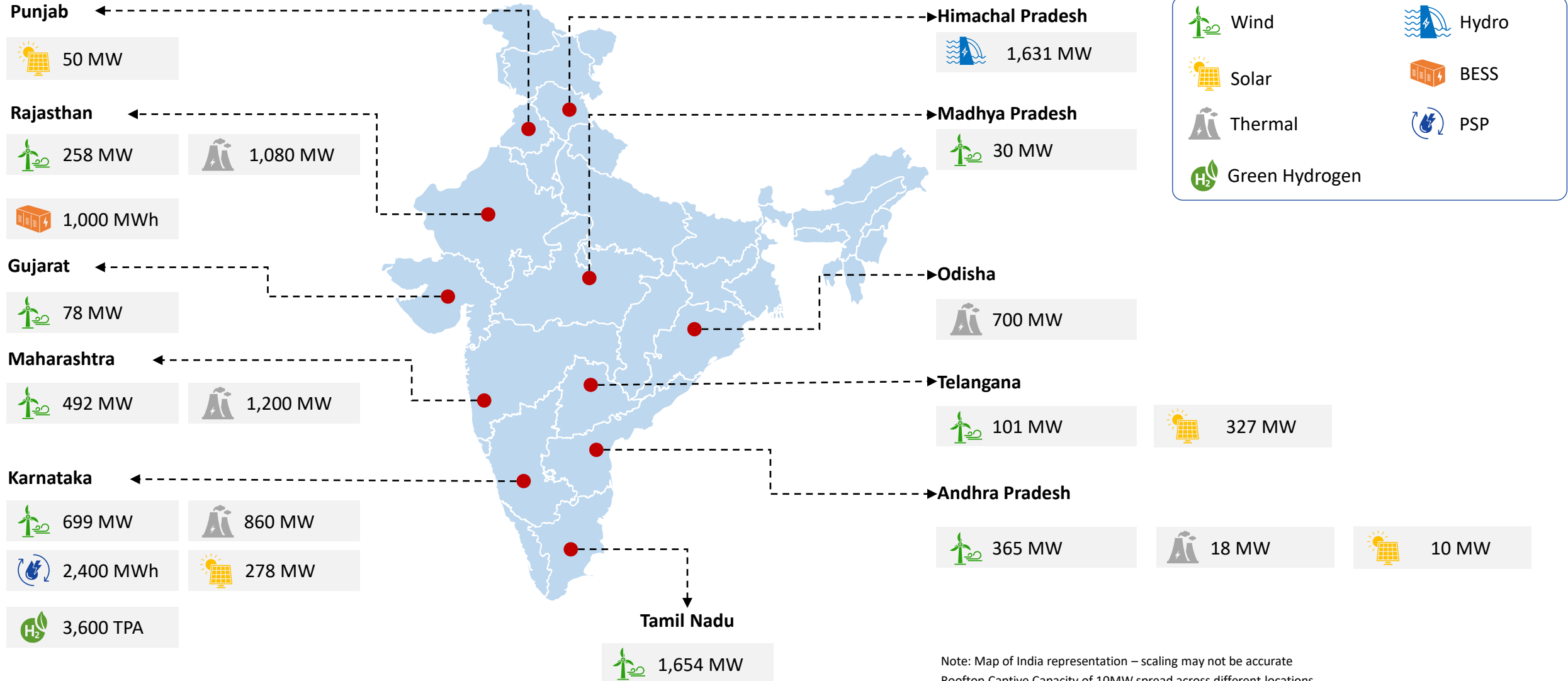


Diversified Offtakers



Developed a Pan India Footprint of Diverse Asset Base

Operational Capacity by FY 25 (9,840 MW)



Note: Map of India representation – scaling may not be accurate
Rooftop Captive Capacity of 10MW spread across different locations

Agenda

Safety & Sustainability

Healthy Operations and Financials

Why JSW Energy ?

JSW NEO – at a Glance

Appendix

Safety & Sustainability



Sustainability: Framework and Policies

17 Focus Areas with 2030 Targets from 2020 as Base Year

<p>Climate Change</p> <ul style="list-style-type: none"> Committed to being carbon neutral by 2050 Reduce our carbon emissions by more than 50% 	<p>Renewable Power</p> <p>Enhance the renewable power to 2/3rd of our Total Installed Capacity</p>	<p>Biodiversity</p> <p>No Net Loss for Biodiversity</p>
<p>Waste Water</p> <p>Zero Liquid Discharge</p>	<p>Waste</p> <p>100% Ash (Waste) utilization</p>	<p>Water Resources</p> <p>Reduce our water consumption per unit of energy produced by 50%</p>

Operational Health & Safety	Resources	Social Sustainability	Local Considerations	Indigenous People	Human Rights
Supply Chain Sustainability	Employee Wellbeing	Air Emissions	Business Ethics	Cultural Heritage	Energy

Aligned to National & International Frameworks



Governance & Oversight by Sustainability Committee

Independent Directors	Mr. Sunil Goyal Ms. Rupa Devi Singh
Executive Director	Mr. Sharad Mahendra

ESG Ratings – best amongst peers

MSCI : A
CDP : Climate A- (Leadership) Water Security B (Management)
Sustainalytics : 23.2 (Medium Risk)
S & P Global (DJSI - ESG) : 77/100
FTSE4Good Index constituent

Carbon Neutrality by 2050



Committed to keep global warming to 1.5°C in line with Paris Agreement - UN Climate Change Conference

Integrated Reporting since FY19



[ESG Data book](#)

Sustainability: Targets and Strategy

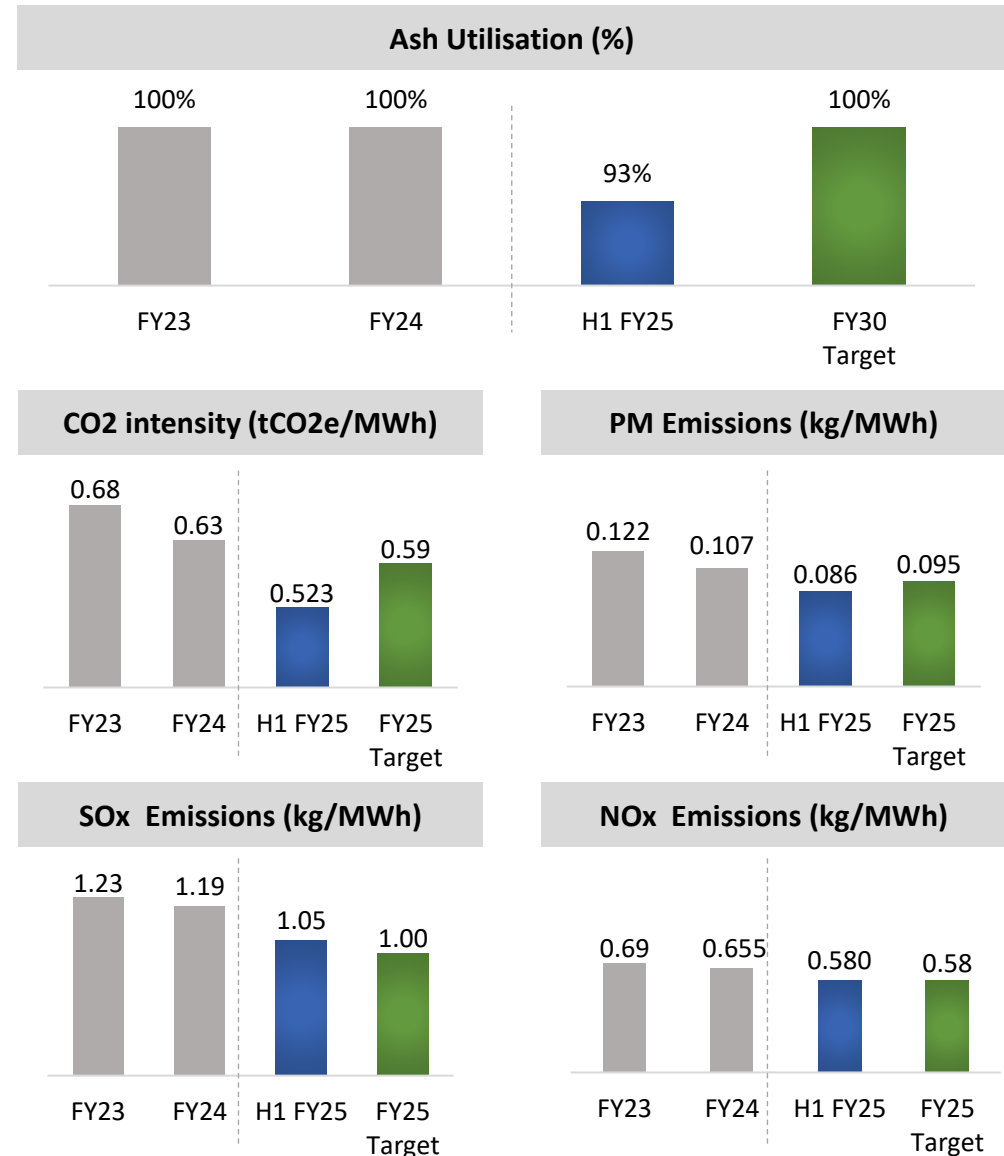
SD Targets		FY20 Actuals	Improvement (FY20 to FY30)	FY30 Targets	Strategic Initiatives and Approach
Climate Change	<ul style="list-style-type: none"> GHG Emissions tCO₂e / MWh 	0.76	71%	0.215	<ul style="list-style-type: none"> TCFD – Identified associated short term , medium term and Long term risks Supply Chain Sustainability – development of Digital Platform for value chain partners under progress. Increased share of RE for decarbonization - Total RE operational capacity increased from 3,613 MW (Q2 FY25) to 4,218 MW (Q2 FY25)
Water Security	<ul style="list-style-type: none"> Specific fresh water intake (m³/MWh) 	1.10	46%	0.591	<ul style="list-style-type: none"> Maintaining zero liquid discharge across operations Optimising utilisation of rain water harvesting system Installation of technology for operating cooling towers with higher Cycles of Concentration with modified chemical regime Reuse of treated effluent of Sewage Treatment Plan for horticulture
Waste	<ul style="list-style-type: none"> Specific Waste (Ash) Generation (t/MWh) Waste Recycled – Ash (%) 	0.070	54%	0.032	<ul style="list-style-type: none"> Integrated Strategy towards efficient waste management – Ash Management , recycling of waste water , handling hazardous waste through authorized recycler. Utilisation of low ash coal in Ratnagiri and Vijayanagar Re-utilisation of pond ash as well as Bottom ash in Boiler 45,000 MT Capacity Ash Silo constructed in Ratnagiti to export the Fly Ash through sea route. About 19,300 MT of Fly Ash exported through sea route in FY24.
Air Emissions	<p>Specific process emissions(Kg/MWh)</p> <ul style="list-style-type: none"> PM SOx NOx 	0.16	67%	0.053	<ul style="list-style-type: none"> Ensuring ESP (Electrostatic Precipitator) Fields availability Optimising Lime dozing system efficiency Process efficiency improvements
		1.78	61%	0.683	
		1.01	63%	0.373	
Biodiversity	<ul style="list-style-type: none"> Biodiversity at our operating sites 	-		Achieve 'no net loss' of biodiversity	<ul style="list-style-type: none"> Implementation of Biodiversity Assessment plan at our operating plants in a phasewise manner to achieve No Net Loss of Biodiversity by 2030. Increased green cover across operations Implementation of Biodiversity Management plan at Barmer Plant.

Sustainability: Q2 FY25 Performance

Key Highlights

- Climate Change**
 - Supply chain sustainability assessment – Registration of vendors in advanced stage; ESG assessment of registered vendors in progress.
 - TCFD (physical risk assessment) at Hydro plants – Site visit completed at JSW Hydro and Kutehr
 - Addition of 204 MW (Q2 FY25) renewable portfolio mix to reduce the GHG emission, a step towards our “ Net Zero” commitment by 2050 or earlier.
- Water Security**
 - Maintained zero liquid discharge across operations
 - Optimizing utilization of rain water harvesting system
 - Reuse of treated effluent of Sewage Treatment Plant for horticulture
 - Dry cleaning adopted instead of wet module cleaning resulted in significant saving of ground water
- Waste**
 - Reutilising pond ash as well as bottom ash in Boiler.
 - Continue 100% Ash utilization initiatives at all plants through tie-ups with cement factories & similar businesses
- Air Emissions**
 - Ensuring ESP (Electrostatic Precipitator) Fields availability
 - Process efficiency improvements being done in all plant locations
 - Lime Dozing system availability and parameters optimization at Barmer to reduced air emissions
 - Online Emission monitoring system installed at Utkal
- Biodiversity**
 - Biodiversity Assessment – Phase 2 is completed for Ratnagiri Plant
 - Increase in green cover at all operations to achieve ‘No Net Loss’ of Biodiversity by 2030.
 - Plantation is continuous activity in all our operating plants

Performance



Strong Board Oversight and Leadership

- Audit Committee
- Compensation & nomination & remuneration Committee
- Risk management Committee
- Stakeholder's relationship Committee
- Corporate social responsibility Committee
- Sustainability Committee
- Permanent invitees to Sustainability Committee



Mr. Sajjan Jindal
Chairman & Managing Director



Mr. Parth Jindal
Non-Executive, Non-Independent Director



Mr. Sharad Mahendra
Joint Managing Director & CEO



Mr. Pritesh Vinay
Director (Finance)



Mr. Ashok Ramachandran
Whole time Director & COO



Ms. Rupa Devi Singh
Independent Director



Mr. Sunil Goyal
Independent Director



Mr. Munesh Khanna
Independent Director



Mr. Rajeev Sharma
Independent Director



Mr. Desh Deepak Verma
Independent Director



Mr. Rajiv Chaudhri
Independent Director



Mr. Ajoy Mehta
Independent Director

Our Core Principles



Accountability



Social Responsibility



Transparency



Environment



Integrity



Regulatory Compliance



Majority Independent Board: 7/12 Directors are Independent
Fully Independent Audit and Compensation and Remuneration Committees

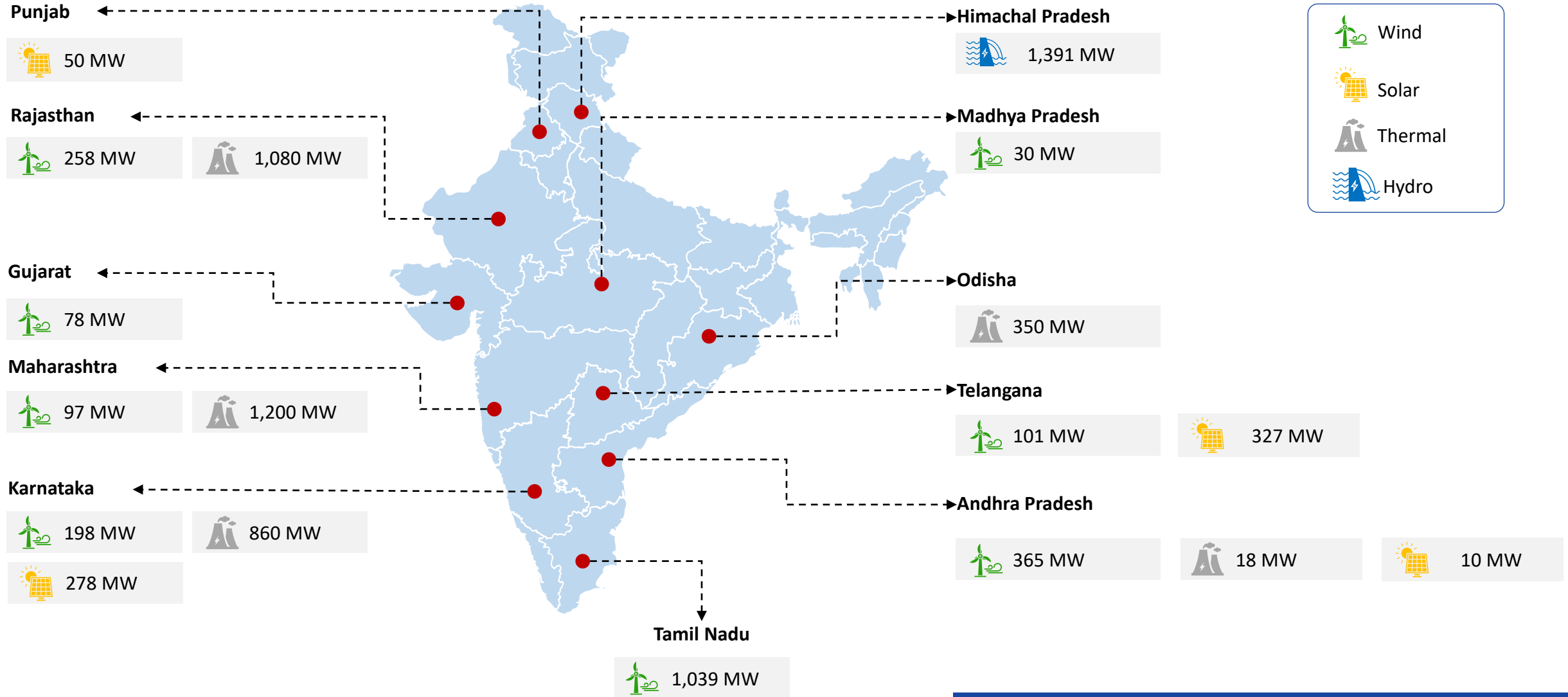
Healthy Operations and Financials



Sholtu Hydro Power Plant - Turbine

Operating Locations: Pan India presence

Current Operational Capacity (7,740 MW)



Note: Map of India representation – scaling may not be accurate

Healthy Operations and Financials

86%

Capacity under LT PPA

~85%

EBITDA contribution from LT¹

9.8BUs

Net Generation

₹ 1,190Cr

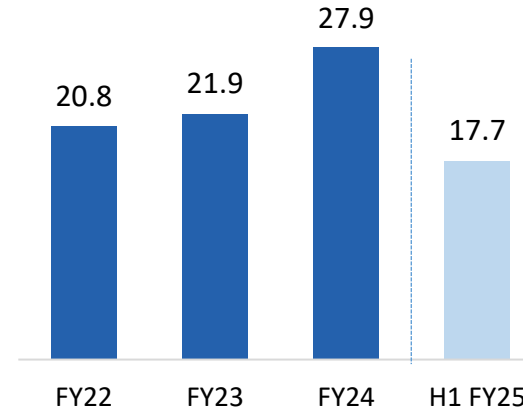
Cash PAT²

Figures are for Q2 FY25

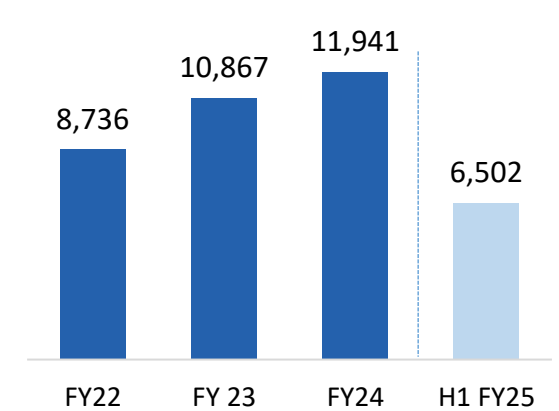
- Steady operations and robust financial: Track record of strong yearly cash profits of 3,462 Crores (TTM).
- High LT PPA tie-up rendering high cash flow visibility
 - Almost all LT PPA under two-part tariff (imported/domestic fuel cost/forex pass through)
 - Remaining Avg. Life of PPA: ~18 years
 - Remaining Avg. Life of Assets: ~24 years
- Diversified off-takers
 - All plants placed favorably in Merit Order Despatch
 - Hydro projects under 'must-run' status
 - Trade receivables at ₹ 2,571Cr equaling to 70 receivable days as on Sept 30, 2024

Business model with steady cashflow generation despite sectoral headwinds

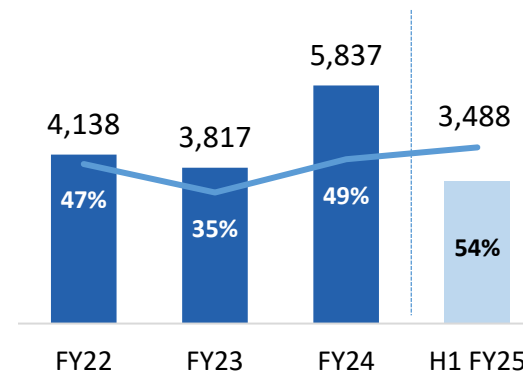
Net Generation (BUs)



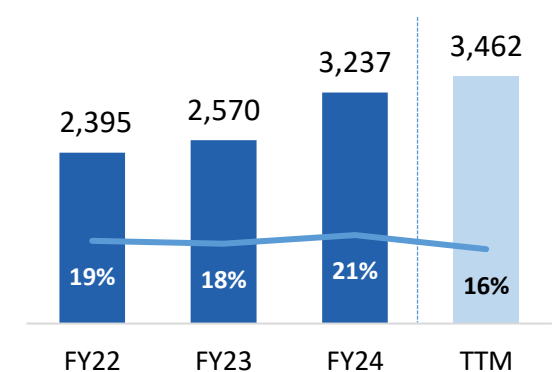
Total Income (₹ Crore)



EBITDA & EBITDA Margin (₹ Crore)



Cash PAT² (₹ Crore) and Return on Adj.Net Worth



Robust balance sheet to support renewable-led growth

4.1x

Net Debt/EBITDA

0.9x

Net Debt/Equity

8.81%

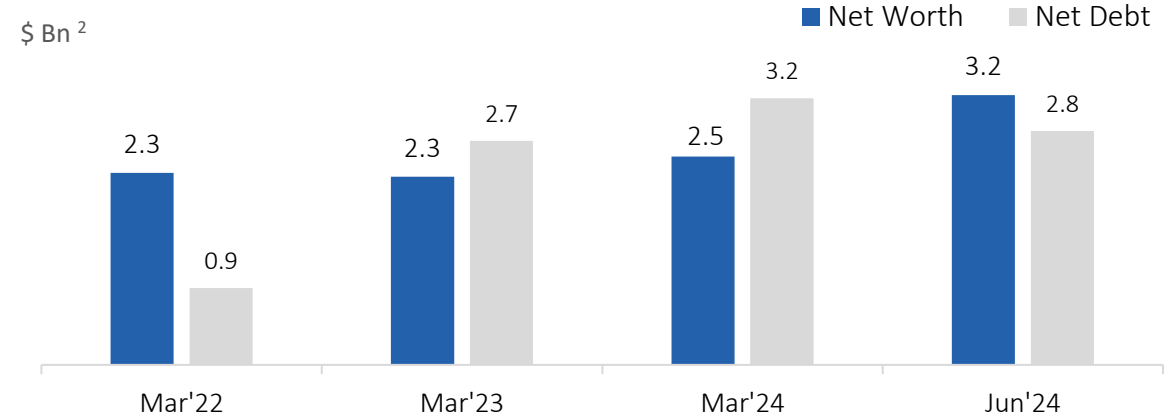
Wt. average cost of debt

70

Receivable Days

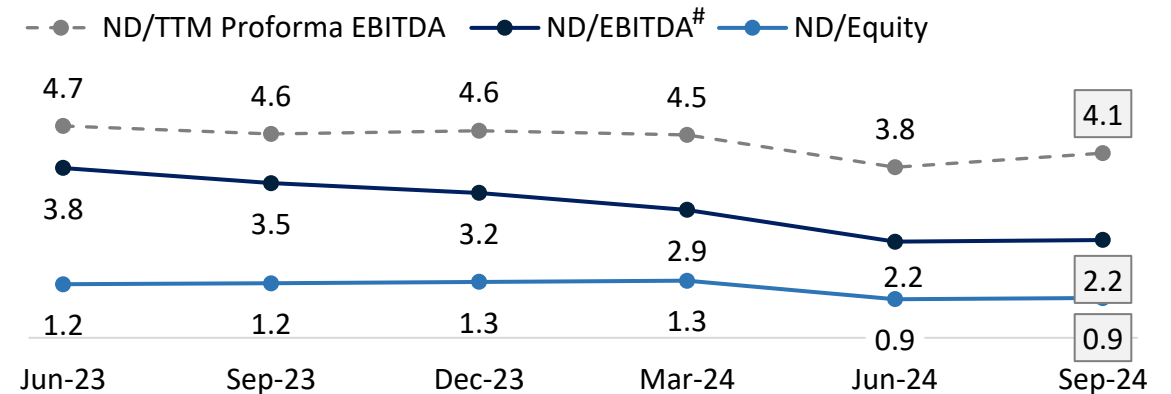
Figures as of Sep 30, 2024

Robust balance sheet & strong cashflow available to pursue growth



- ✓ Strong Liquidity with healthy cash balances: ₹ 5,719 Crore as of Sept'30, 2024
- ✓ Financial flexibility enhanced by equity investments:
 - Holding 7Cr (70mn) JSW Steel shares of Value¹: ₹ 6,417 Cr
- ✓ Healthy Credit Ratings:
 - India Rating & Research: AA (Stable outlook)
 - ICRA Ltd: ICRA AA (Stable)
- ✓ Access to diverse pools of liquidity
- ✓ Operating portfolio generating healthy CF & mid-teen equity IRR
- ✓ Weighted average cost of debt is 8.81% as of Sept 30, 2024

ND/EBITDA for Operational Projects at 2.2x (Sept-24)



1 Value of JSW Steel Share holdings as on Sept 30, 2024
 2 Conversion based on USD = INR spot rate as of respective date
 # ND/Proforma EBITDA excluding debt on under-construction projects

Net Debt Movement

Particulars in ₹ Cr

- Capital Work- in-Progress (CWIP)
- Operational Projects



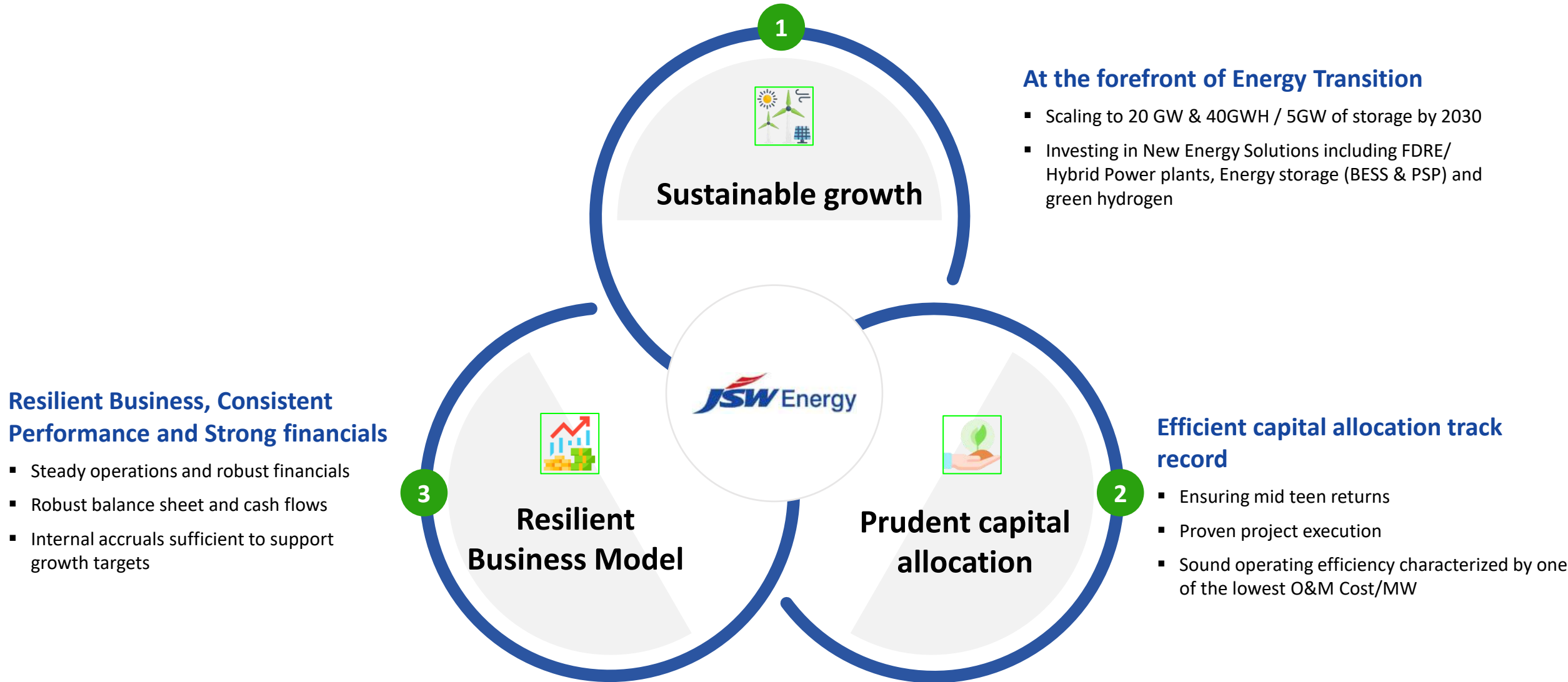
Sustainable Normalised Net Debt / EBITDA is well below the guided range of 3.5x-4.0x

Why JSW Energy ?

- Investment Story
- Key Highlights



Committed to reaching
Net Zero emissions by 2050



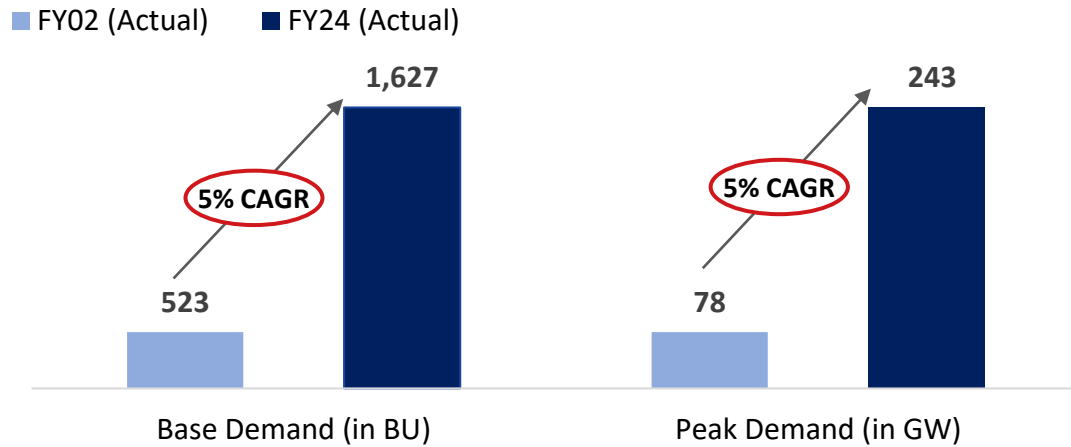


At the forefront of Energy Transition

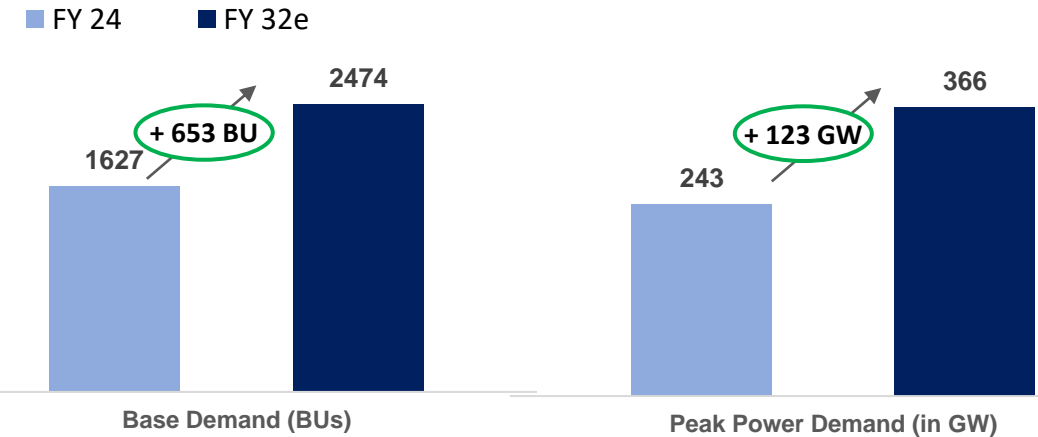
- Scaling to 20 GW & 40GWH / 5GW of storage by 2030
- Investing in New Energy Solutions including FDRE/ Hybrid Power plants, Energy storage (BESS & PSP) and green hydrogen

Significant Market Opportunity: Power Demand Growth to be met by RE

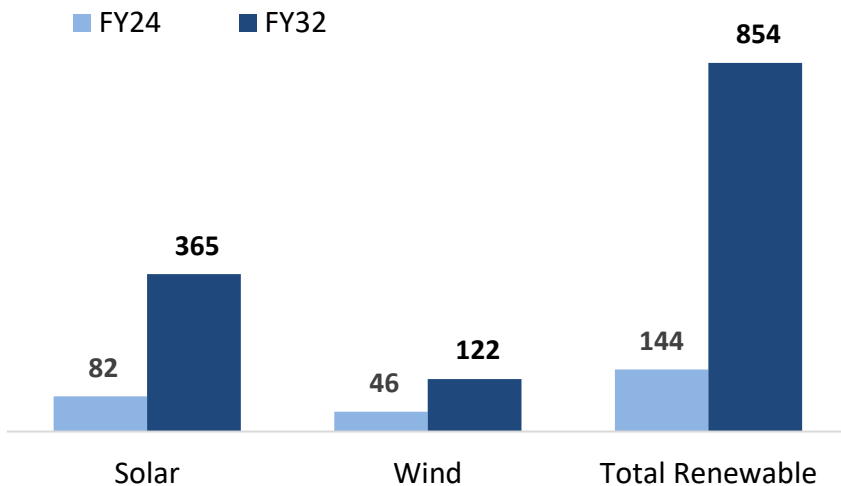
Historical Power Demand Growth




Similar growth expected in power demand over next decade




Demand to be met incrementally with Renewable Energy



Rapid Urbanization and universal electrification to drive power demand

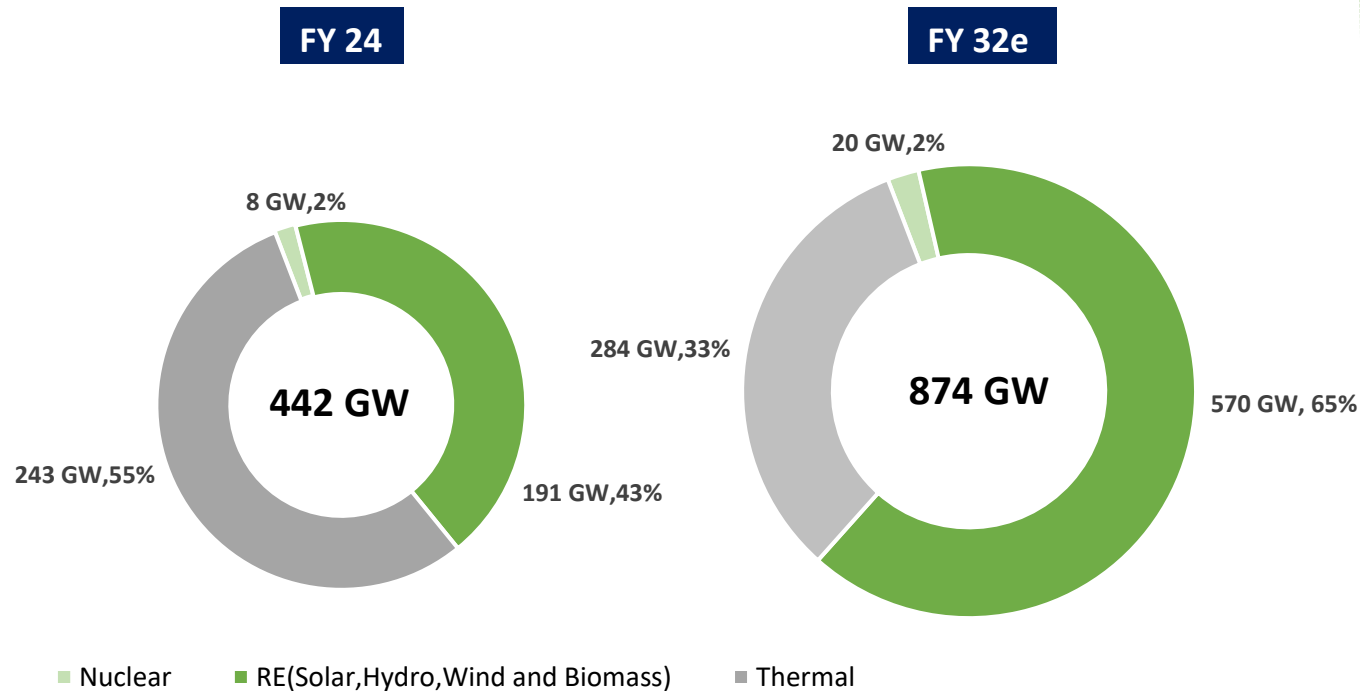
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India is world's third largest power producer, however has a low per capita consumption (~1/3rd of world average), this provides huge opportunity for growth
- 

Sustained economic growth has driven power demand in India, going forward, unlocking of demand from increased rural electrification and rapid urbanization to drive demand for power

Participating in India's Green Transition

India's share of Renewables is projected to increase from 43% in FY 24 to 65% in FY 32



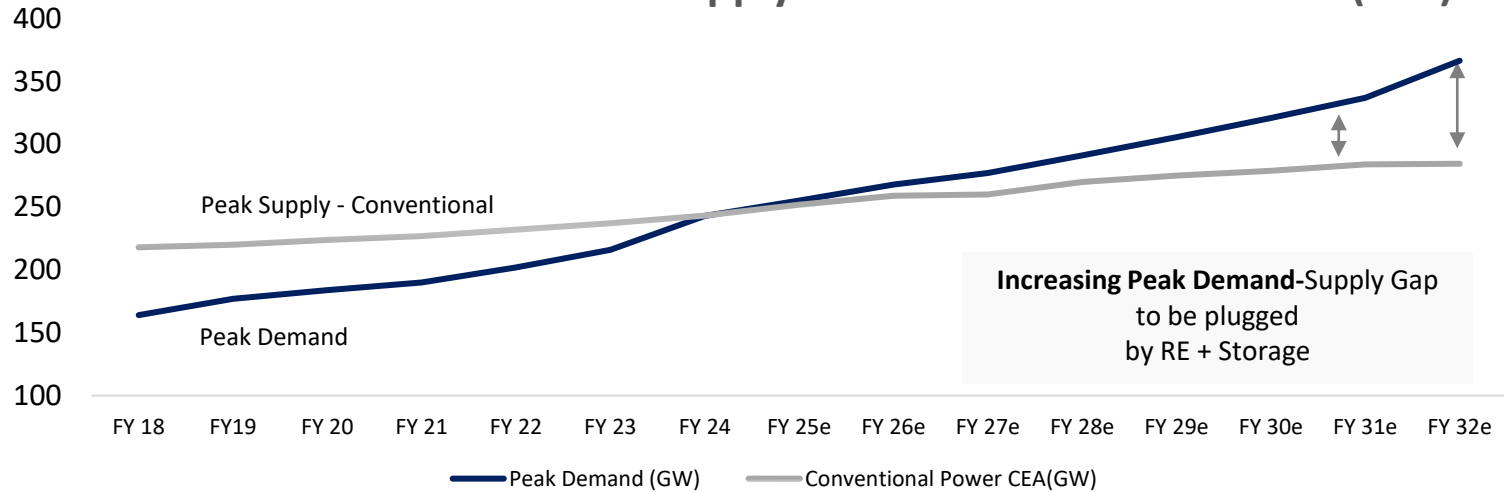
- JSW Energy's strategy is to grow its capacity to 20 GW before FY30 mainly through renewable capacity addition, which is in line with India's renewable energy growth trajectory
- Being part of JSW Group which has its presence across multiple business including steel, cement, infra and paints gives us the opportunity to further grow through group captive

Changing Environment and our Approach

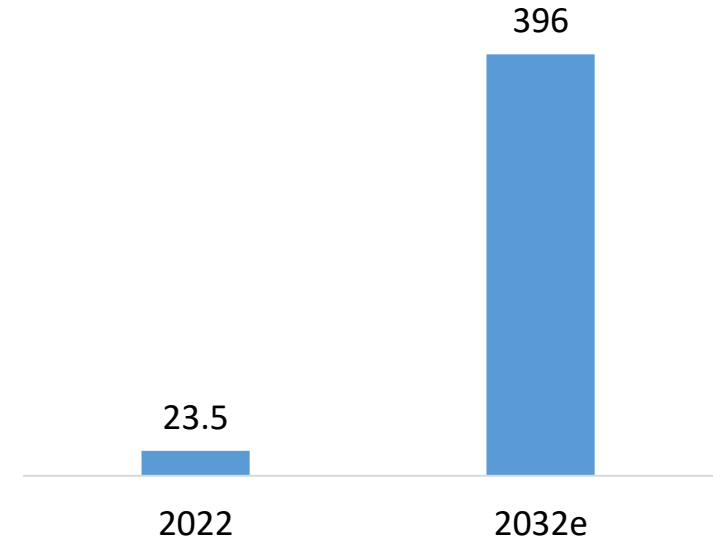
Domain	Environment	Our Approach
Capital	<ul style="list-style-type: none"> • High cost of borrowing due to interest rate hike 	<ul style="list-style-type: none"> • Bidding assumptions take into account interest cycles through life of project
Supply Chain	<ul style="list-style-type: none"> • BCD on imported Solar Panels/Cells • Uncertainty of supply of Solar panels and WTGs 	<ul style="list-style-type: none"> • De-risking of supply chain through backward integration
Policy and Fiscal Support	<ul style="list-style-type: none"> • Draft Hydro PSP and Green Hydrogen policy • Budgetary support for Green Transition 	<ul style="list-style-type: none"> • Early Mover in hydro PSP and BESS
Business Model	<ul style="list-style-type: none"> • Reduced bidding intensity combined with lower tariff discovery 	<ul style="list-style-type: none"> • Bidding discipline with a targeted IRR at P90

Energy Storage critical in India's Energy Transition

Peak Demand vs Supply from Conventional Sources (GW)



Storage Capacity GWh*



Renewable Energy + Storage Solutions required to plug increasing Peak Demand-Supply Gap going forward

- Peak Power Demand is expected to grow at a CAGR of ~6% between FY23-30
- Old & Inefficient thermal capacities to keep on retiring YoY
- Hence, Increasing gap between Peak Demand and Peak Supply from conventional power sources (Thermal+Nuclear+Hydro) will be needed to be plugged by supply from renewable + storage capacities

National Electricity Plan 2023

- Projections of the order of 396 GWh of energy storage requirement by 2031-32

Strategy 2.0 (2023-2030) – at glance



Growth driven by internal accruals

Normalised Net Debt/EBITDA to be in the range in 3.5x-4.0x

Balance Sheet Size to grow at 22% CAGR

Strategy 2.0 – 20 GW Generation + 40 GWh of Storage before FY30

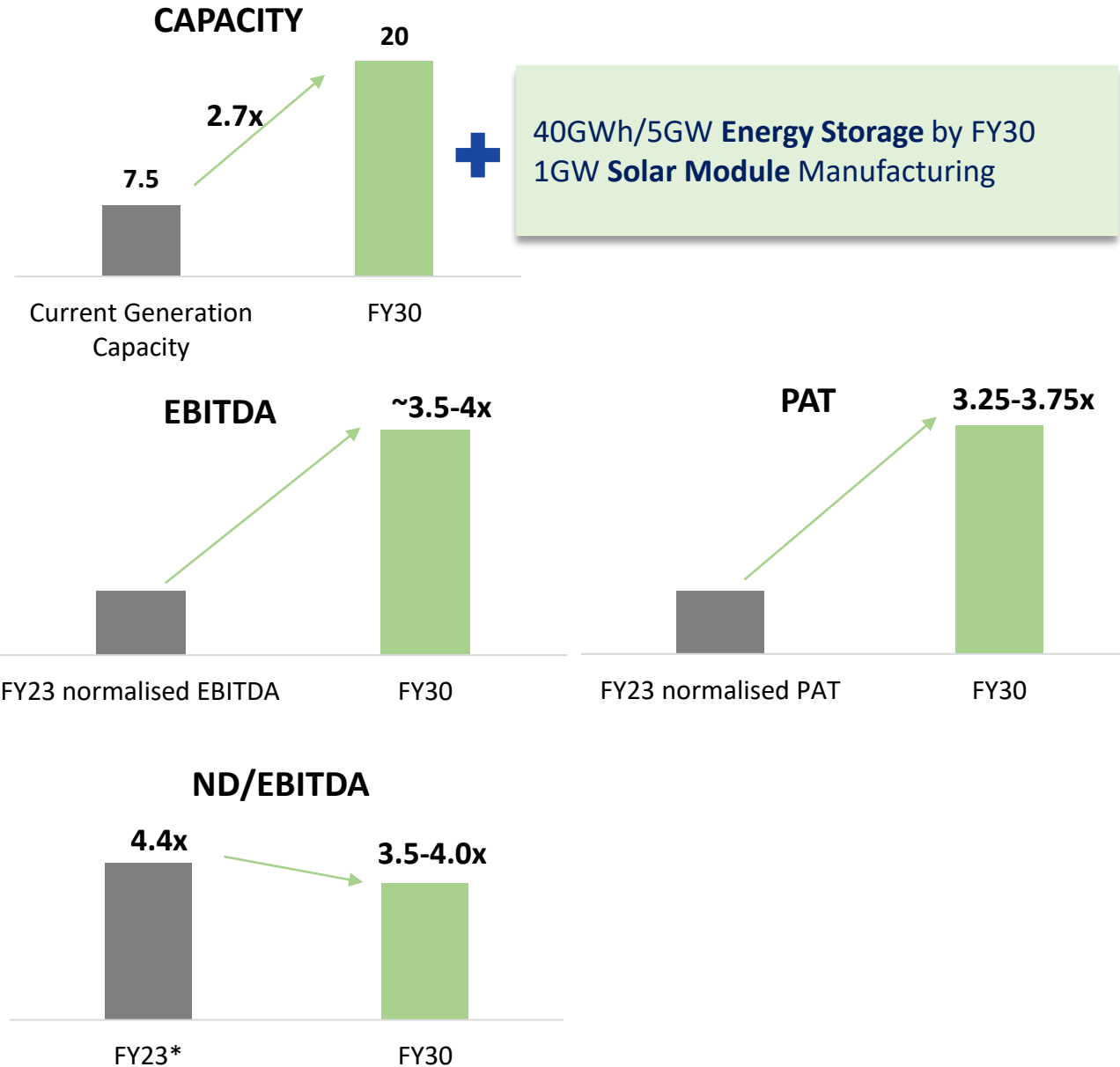
Pillars for Self sustainable and Integrated road map

- Sustainable value creation focused on Cash Returns
- Internal Accruals and BS Headroom (no external capital)
- Organisational Capability and competency

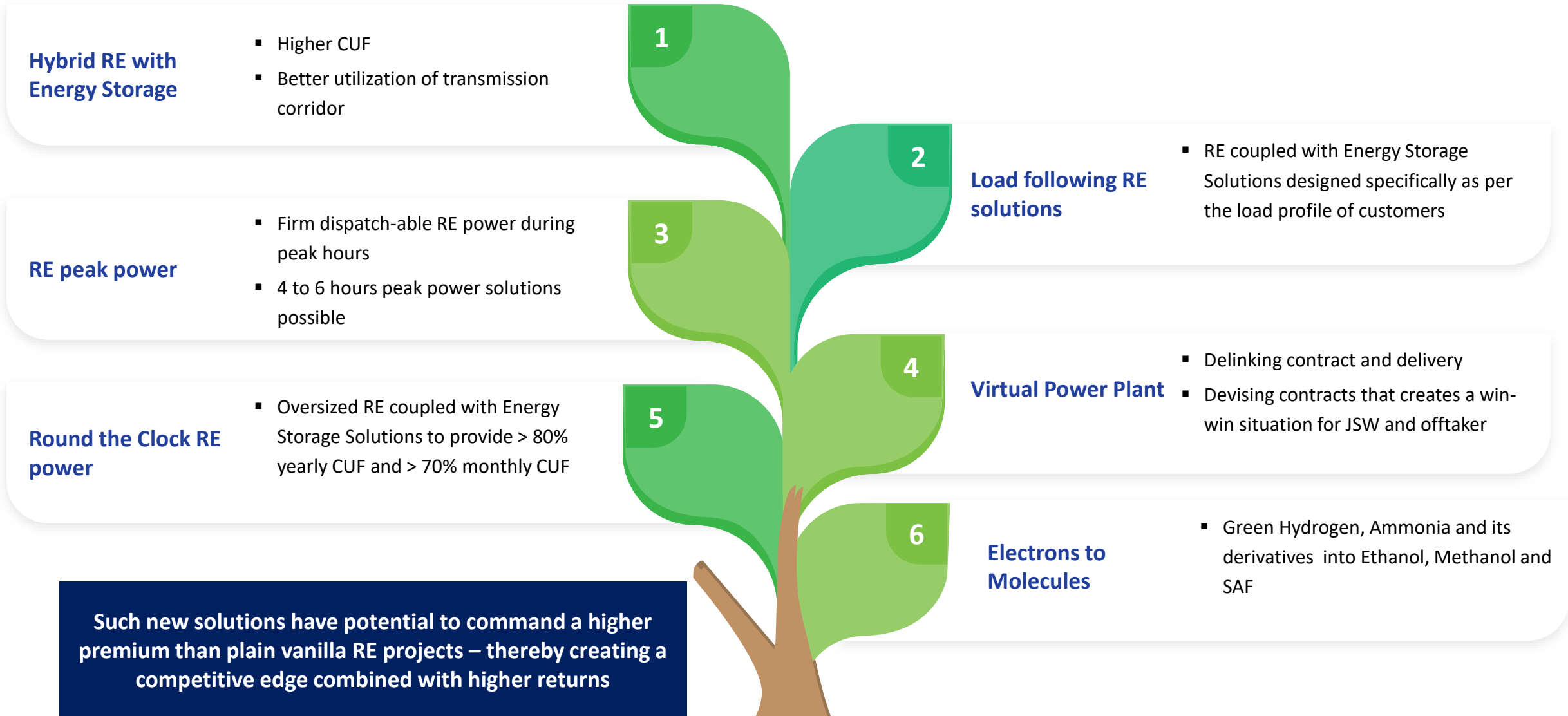
Growth Multipliers

Portfolio generating healthy cash flows & 16% cash return¹

- ❖ **Steady operations and robust financials**
 - Portfolio TTM Cash PAT of ₹3,462 Crore p.a.
 - Incremental cash accruals from commissioning of Under construction projects and integration of M&A deals
- ❖ **86% of portfolio tied-up under Long Term PPA**
 - 86% of portfolio tied-up under Long Term PPA; Remaining Avg. Life of Assets/PPA: ~24years / ~18 years
- ❖ **Financial flexibility** enhanced by equity investments: JSW Steel shares: 7 Cr shares held (Value as on Sep 30, 2024: ₹ 6,417Cr)
- ❖ Healthy receivables management and low working capital cycle



Energy Storage – Enabler for New RE based products and services



Battery Storage (BESS) and Hydro Pump Storage (HPSP)

India's Storage Capacity Mix for FY 2031-32

National Electricity Plan 2023



Aiming 40 GWh and 5 GW Energy Storage by 2030

JSW Energy

Battery Energy Storage System (BESS)

- Build Own Operate Transfer (BOOT) with tenure of 12 years
- Battery Storage Purchase Agreement for 60% of the capacity with SECI and balance is open for sale
- Identified site is at Fatehgarh, Rajasthan
- Participate in ancillary market with the open capacity
- Expected commissioning by Jun-25, site preparatory works started

Hydro Pump Storage (PSP)

- **Signed PPA for 12.0GWh (1.5 GW x 8 hours) PSP from MSEDL**
 - Target commissioning : 48 months from signing of PPA
 - PPA Duration: 40 years
- **Received LoI for 2.4GWh (300 MW x 8 hours) PSP from Power Company of Karnataka Ltd (PCKL)**
 - Target commissioning : 36 months from signing of PPA
 - PPA Duration: 40 years

Electrons to Molecules: Green Hydrogen Potential

Advantage India

Significant Hydrogen demand

Current demand ~6 MMT expected to grow to ~24 MMT by 2050

Huge RE potential

Existing RE capacity of ~191 GW (incl. Hydro)
Target – 50% of capacity share of RE by 2030

Low Tariffs

RE tariffs in India (INR ~ 2.5-3.5)

India's Import Bill

India is 3rd largest consumer of oil & gas, imports ~85% of oil and ~50% of Gas

Clean energy Commitment

GH adoption contributes to emission reduction & meet energy demand

Infrastructure build

Large part of India's infrastructure needs to be built out, allows better integration

JSW Energy



- Contracted India's largest Commercial Scale Plant for production of Green H₂ (Capacity- 3,800 TPA). This is towards production of Green Steel
- Received LoA for 6.5 KTPA Green Hydrogen production facility from SECI under SIGHT Scheme
- Signed MoU with JSW Steel for 85-90 KTPA of Green Hydrogen & 720 KTPA of Green Oxygen by 2030.

Grey Hydrogen: Currently, more than 95% of hydrogen is produced from fossil fuels via carbon intensive processes.

Main production route

- Steam Methane Reforming (SMR)
- Coal Gasification

Characteristics

↑ Intense CO₂
↓ Low Cost

Blue Hydrogen: Grey hydrogen whose CO₂ emitted during production is sequestered via carbon capture and storage (CCS)

Main production route

- SMR + CCS
- Coal Gasification + CCS

Characteristics

↓ Low CO₂
↑ High Cost

Green Hydrogen: Low or zero-emission hydrogen produced using clean energy sources

Main production route

- Electrolysis using renewables

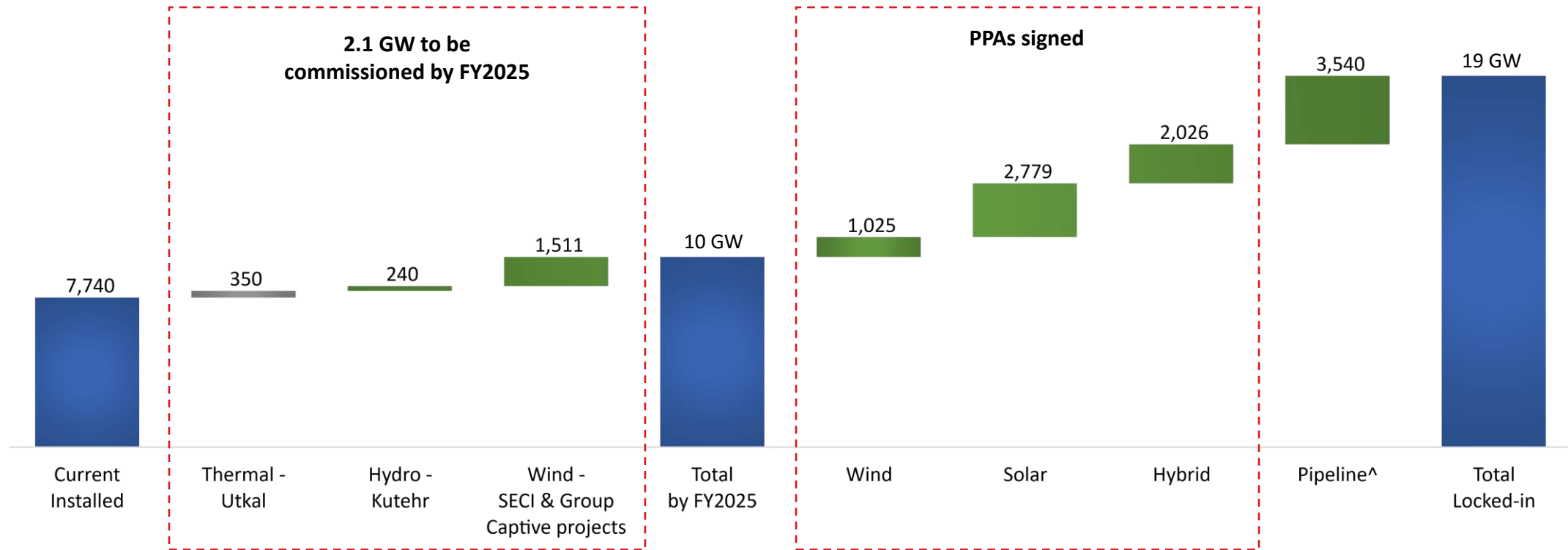
Characteristics

↓ Zero CO₂
↑ High Cost

Generation Capacity - Locked-in 19 GW

Generation (MW)

Installed Capacity to Double



Strategy 2.0 – Generation Capacity 20 GW & Energy Storage of 40 GWh before 2030

Exclusively Renewable Project Pipeline

PPA Signed

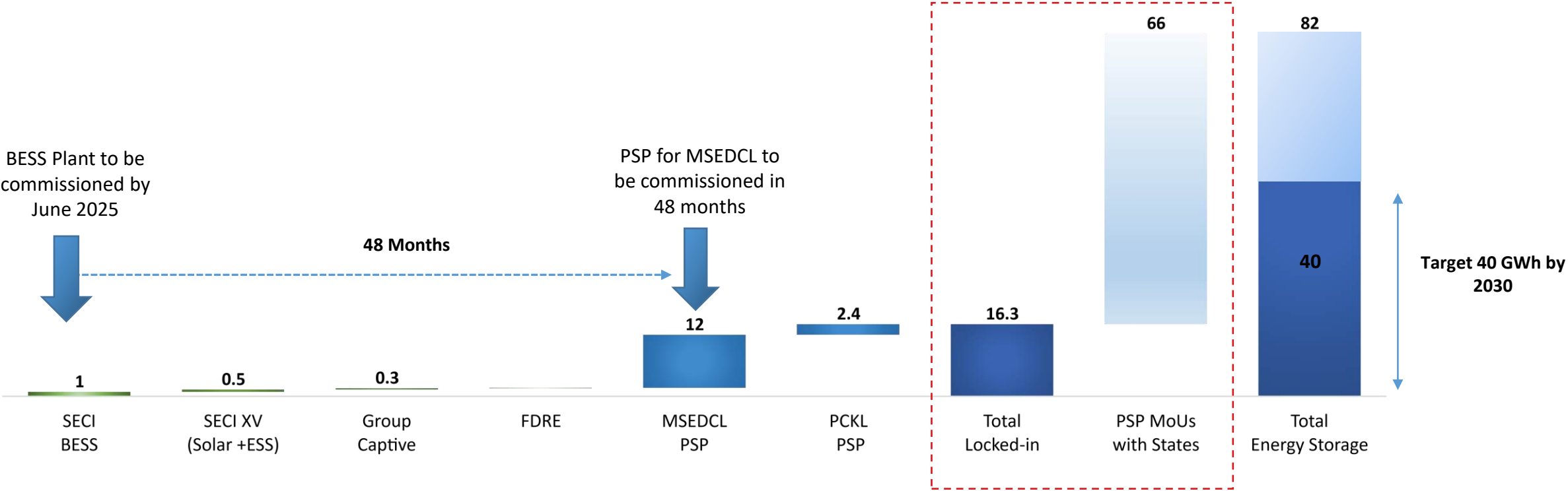
Project	Contracted (MW)	Installed (MW)
SJVN	700	700
SECI XIII	700	700
NTPC	700	700
GUVNL	300	300
PAVAGADA	300	300
Group Captive	79	79
Total Solar	2,779	2,779
SECI XVI	1,025	1,025
Total Wind	1,025	1,025
GUVNL (Phase II)	192	234
MSEDCL (Hybrid III & IV)	1,200	1,600
Group Captive	125	125
C&I	67	67
Total Hybrid	1,584	2,026
Total	5,388	5,830

Letter of Award/Intent Received (PPA to be Signed)

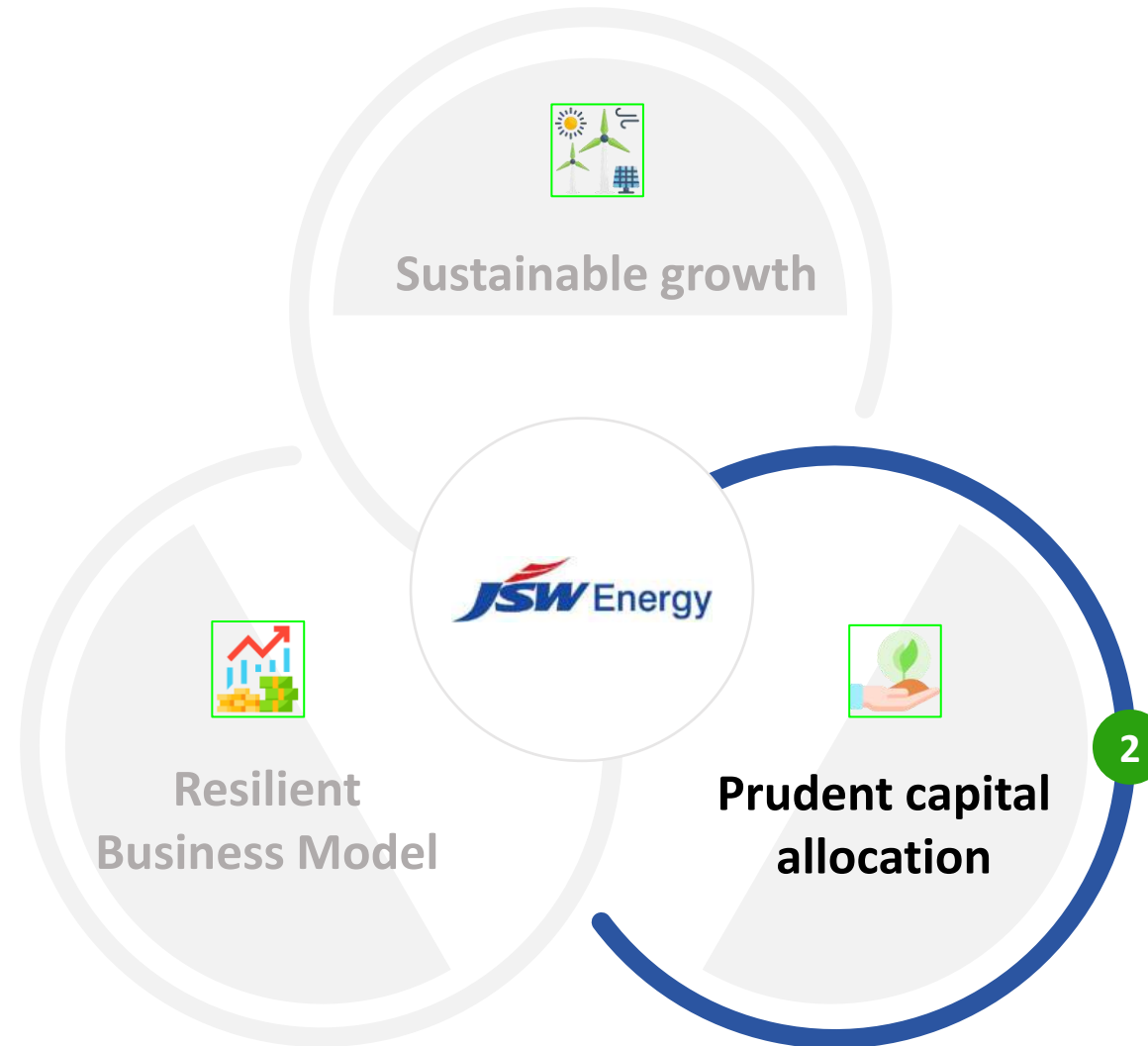
Project	Contracted (MW)	Installed (MW)
SECI XV (Solar +ESS)	500	500
Group Captive	60	60
Total Solar	560	560
Adani Energy – Wind	250	250
Total Wind	250	250
SECI (Hybrid VIII)	300	330
SJVN (Hybrid –II)	300	330
NTPC (Hybrid VI)	300	330
Group Captive	1,410	1,410
Total Hybrid	2,310	2,400
SECI – FDRE IV	230	330
Total	3,350	3,540

2/3rd of the projects won in CY24 have been tied-up under long-term PPA

Energy Storage - Locked in 16.2 GWh



Strategy 2.0 – Generation Capacity 20 GW & Energy Storage of 40 GWh before 2030



Efficient capital allocation track record

- Ensuring mid teen returns
- Proven project execution
- Sound operating efficiency characterized by one of the lowest O&M Cost/MW

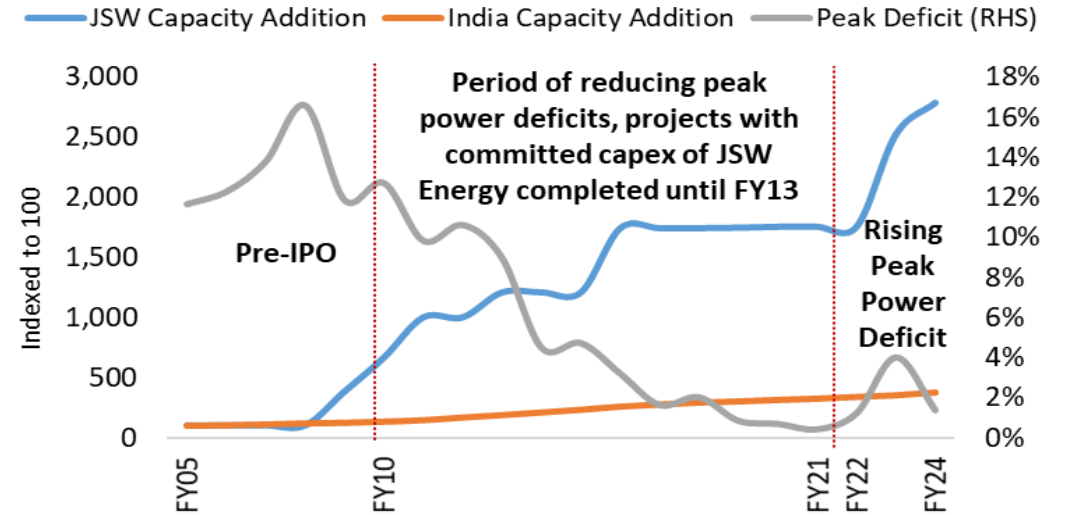
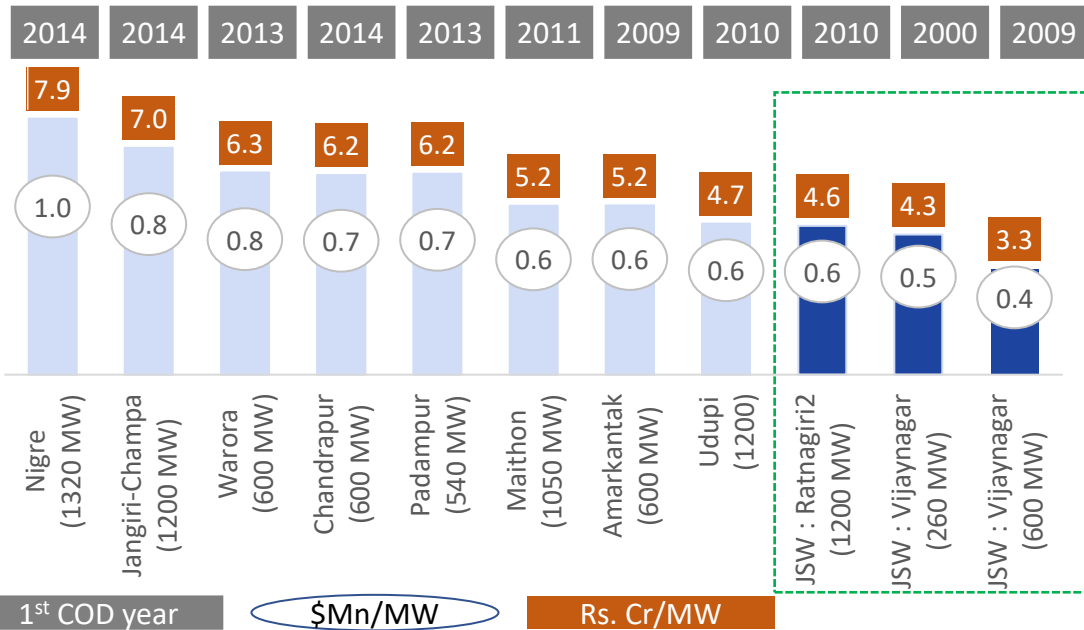
Proven project execution and operational excellence...

Prudent and consistent capital allocation strategy for growth over a 25 year history

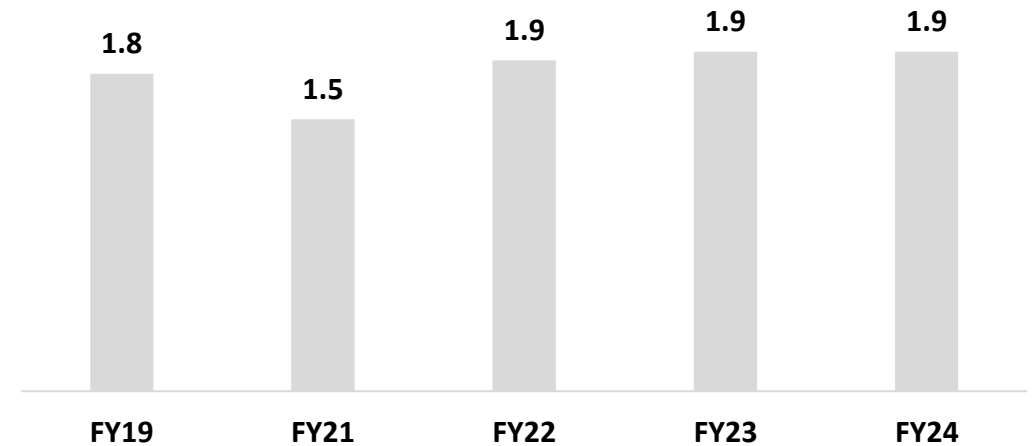
Selective bidding to ensure mid teen returns

Successful integration of inorganic capacities

One of the lowest project execution cost in the industry

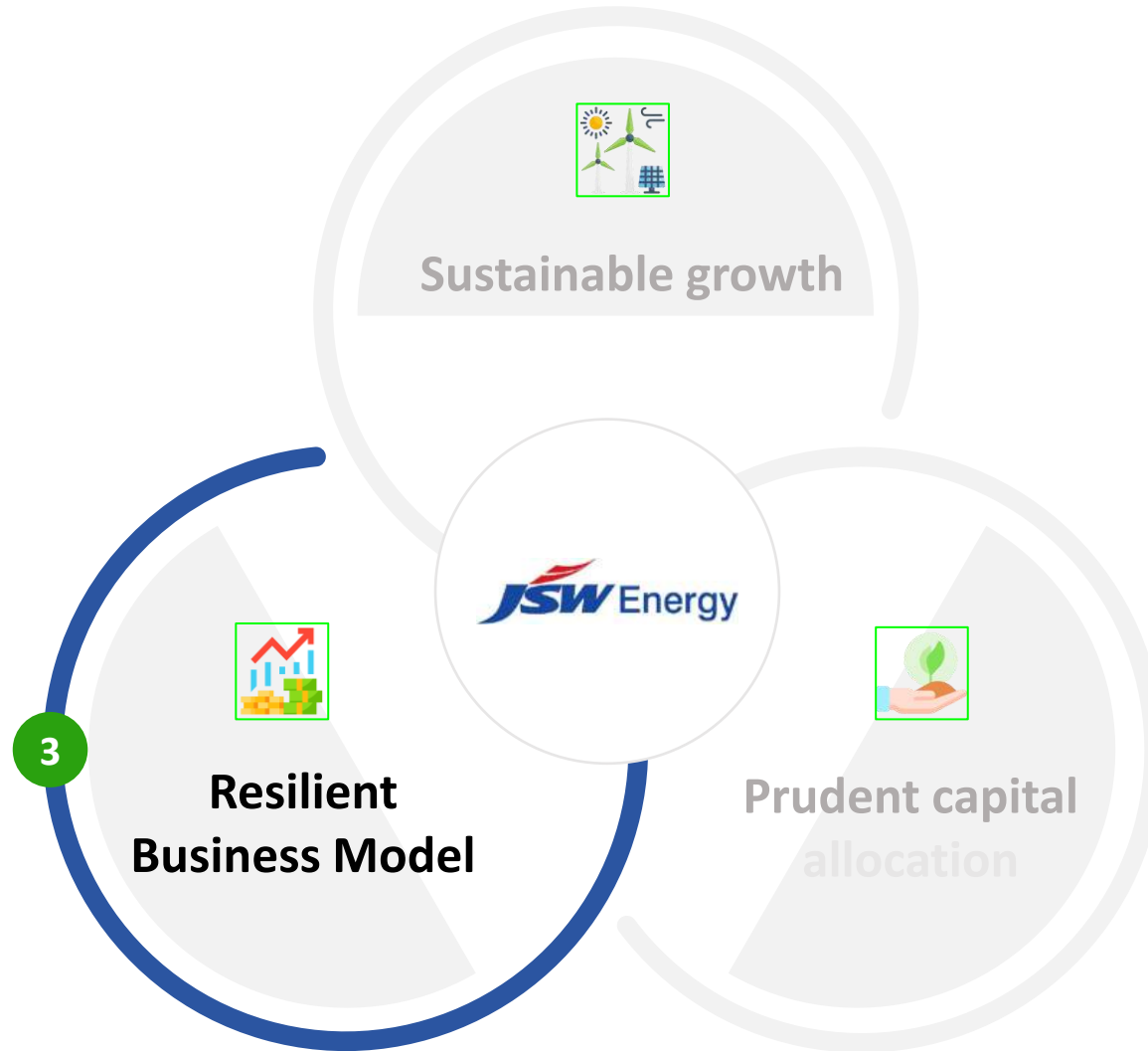


Sound operating efficiency characterized by one of the lowest O&M Cost/MW (₹ mn)



Resilient Business, Consistent Performance and Strong financials

- Steady operations and robust financials
- Robust balance sheet and cash flows.
- Internal accruals sufficient to support growth targets



Robust Balance Sheet & Cashflows

Balance sheet headroom to pursue growth opportunities

- **Strong Financials**

Particulars	As on Sept 30, 2024
Networth	₹ 27,970 Cr
Net Debt	₹ 24,875 Cr
Net Debt/TTM Proforma EBITDA	4.1x
Net Debt/TTM Proforma EBITDA (excl. under construction projects)	2.2x
Net Debt/Equity	0.9x
Wtd. Average Cost of Debt	8.81%
Cash PAT TTM	₹ 3,462Cr

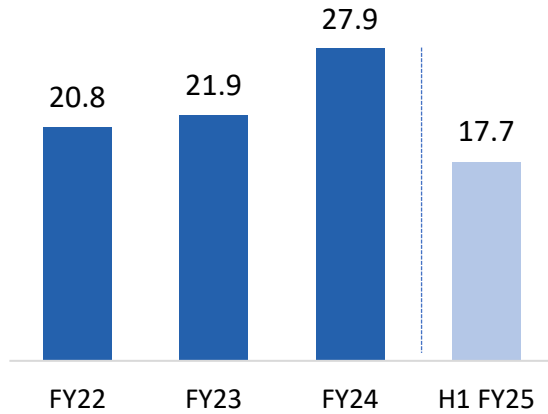
- **Healthy Credit Ratings and access to diverse pools of liquidity**

- India Rating & Research: IND AA (Outlook Stable)
- ICRA Ltd: ICRA AA/ Stable

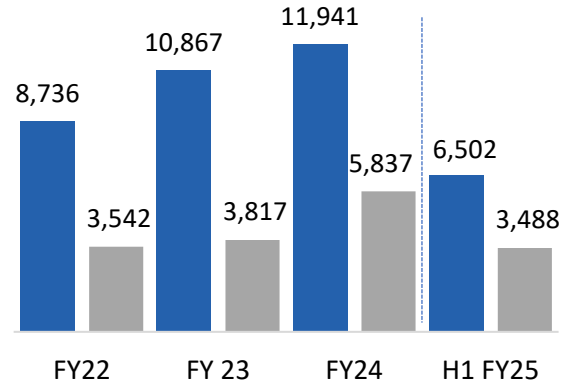
- **Strong Liquidity with healthy cash balances: ₹5,719 Cr***

Steady Operations and Robust Financials

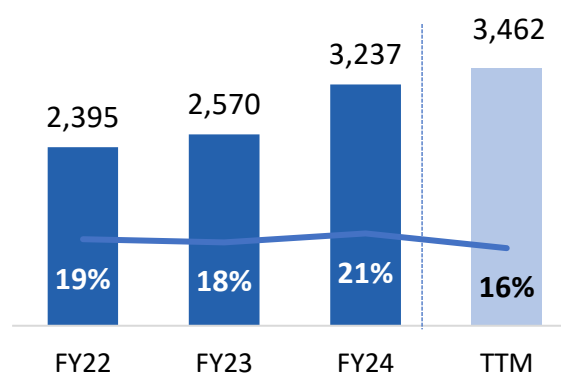
Net Generation (BUs)



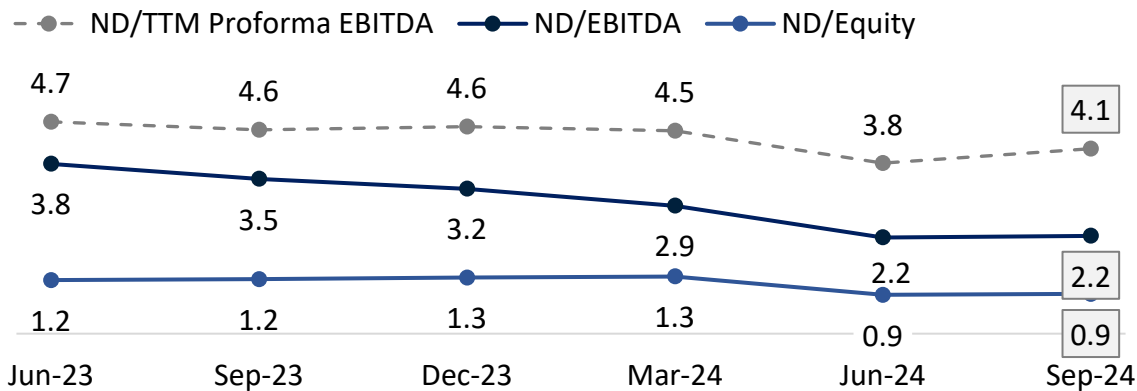
Total Income¹ and EBITDA (₹ Cr)



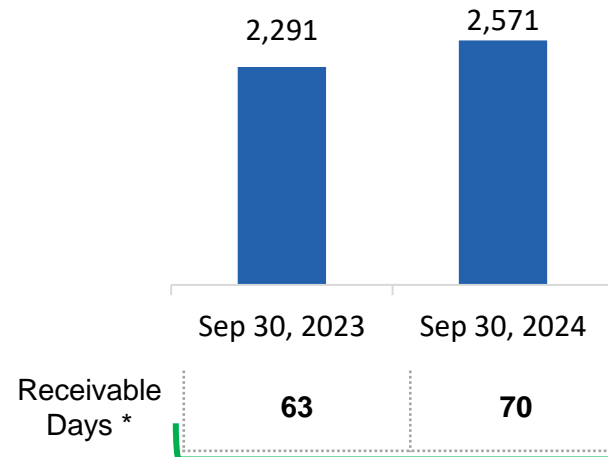
Cash PAT (₹ Cr) and Cash Returns



ND/EBITDA for Operational Projects at 2.2x



Healthy receivables days



Steady operations and robust financial

- 86% of portfolio tied-up under Long Term PPA; Remaining Avg. Life of Assets/PPA: ~24 years / ~18 years
- Track record of strong yearly cash profits and mid-teen equity returns

Financial flexibility








- Strong leverage ratio, Net Debt to operating EBITDA of 2.2x
- JSW Steel shares: 7 Cr shares held (Value as on Sep 30, 2024: ₹ 6,417Cr)
- Raised ₹ 5,000 Cr Growth Capital through QIP

Receivables

- All plants placed favourably in States' Merit Order Dispatch
- Payment security mechanism in force for power tied under long term PPA with discoms

1. Not comparable YoY from FY21 due to Change to Job Work Model Partially
 # ND/Proforma EBITDA excluding debt on under-construction projects * Includes Unbilled Revenue and excluding Acquired RE Portfolio receivables

JSW Energy : Key Highlights

-  **Proven Execution Excellence**
 - ✓ Proven project execution skills: Projects set-up in lowest cost & time
 - ✓ Differentiated business strategy for growth to 20 GW, driven by Renewable
 - ✓ Foraying in New Energy Platforms: Green Hydrogen, Energy Storage, Energy Products & Services
-  **Focus on Sustainability**
 - ✓ Strong Focus on ESG – MSCI ESG Rating 'A' and Leadership band with 'A-' score in the 2023 CDP Climate Change rating
 - ✓ Amongst the Highest rated power generation company in India by various independent ESG rating agencies - DJSI 77/100
-  **Efficient O&M**
 - ✓ Sound operating efficiency characterized by one of the lowest O&M costs in the sector
 - ✓ Barmer, Ratnagiri and Vijayanagar Plants awarded 'SWORD OF HONOUR' by British Safety Council
-  **Steady EBITDA and Cash accruals**
 - ✓ 86% of total portfolio tied up with LT PPA providing steady EBITDA and Cashflow generation
 - ✓ Two-part tariff structure mitigating fuel and forex risk
-  **Healthy Receivables**
 - ✓ Receivables days at low levels in DSO terms.
 - ✓ Favorable placement in Merit Order Despatch & diversified off-takers mitigate Receivable risk
-  **Strong Balance Sheet**
 - ✓ Robust Balance Sheet: 4.1x Net Debt/EBITDA; 0.9x Net Debt/Equity
 - ✓ Healthy debt metrics to be maintained while pursuing value accretive growth
 - ✓ A healthy cash balance of ₹ 5,719 Cr and financial flexibility with JSW Steel equity shareholding
 - ✓ Raised ₹ 5,000 Cr Growth Capital through QIP from marquee institutional investors to accelerate growth
-  **Low Cost of Funding**
 - ✓ Weighted average cost of debt at 8.81%
 - ✓ Executed attractive refinancing and debt sizing package for Acquired RE Portfolio RE assets, cost saving of > ₹240 cr
 - ✓ Raised a Rs 707 million green bond to refinance debt for hydro entity in May'21

JSW Energy – at a glance



Thermal Assets



Ind Barath 700 MW



Barmer 1,080 MW



Ratnagiri 1,200 MW



Vijayanagar 860 MW

JSW Energy – Broad Corporate Structure

JSW Energy Limited
19,210 MW

Ratnagiri – 1,200 MW
Vijayanagar – 860 MW
Nandyal – 18 MW
Solar – 10MW
Total – 2,088 MW

Hydro Entities
Solar/Wind Entities
Products & Services

JSW Neo Energy
15,342 MW

JSW EBL – 1,080 MW
Utkal – 700 MW

Energy Generation Portfolio *

JSW Hydro Energy Limited (1,391 MW)
(Karcham & Baspa)

JSW Energy (Kutehr) Limited (240 MW)

JSW Renew Energy Limited (810 MW SECI-IX)

JSW Renew Energy Two Limited (454 MW SECI-X)

JSW Renewable Energy (Vijayanagar) Limited (866 MW Captive)

JSW Renewable Energy (Dolvi) Limited (96 MW Captive)

Acquired RE portfolio (1,753 MW - Acquired)

JSW Renew Energy Three Limited SECI XII 300 MW

JSW Renew Energy Twenty Two Limited (230 MW SECI-FDRE-IV)

JSW Renew Energy Eight Limited; and JSW Renew Energy Nine Limited (1,025 MW SECI-XVI)

JSW Renew Energy Ten Limited (300 MW GUVNL)

JSW Renew Energy Eleven Limited (700 MW SECI-XIII)

JSW Renew Energy Thirteen Limited (700 MW NTPC)

JSW Renew Energy (Raj) Limited (700 MW SJVN)

MSEDCL (Hybrid III & IV) (1,200 MW)

JSW Renewable Energy (Coated) Limited (45 MW - Acquired)

Products & Services

BESS – SECI Pilot
(500MW/1000MWh)

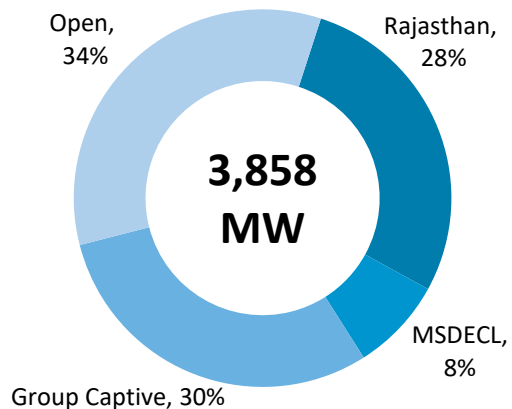
PSP
• PPA for 12 GWh
• LoI for 2.4 GWh
• MOUs signed for 80 GWh

Advanced high efficiency solar module (Awarded capacity under PLI)

Green Hydrogen
(3,800 TPA) & its Derivatives

Thermal Assets | Q2 FY25 Highlights

Offtaker Profile



Installed Capacity

PPA tied

Fuel Type

Net Generation (MUs)

LT

Total

PLF/(Deemed PLF)

LT

Total

Operational Assets



Ratnagiri



Barmer



Vijayanagar



Utkal

	Ratnagiri	Barmer	Vijayanagar	Utkal
Installed Capacity	1,200 MW	1,080 MW	860 MW	700 MW Unit 1 (350 MW) operational
PPA tied	1,105 MW	1,080 MW	338 MW	Merchant
Fuel Type	Imported Coal	Lignite	Imported Coal	Domestic Coal
Net Generation (MUs)	1,698 MUs (15% YoY)	1,562 MUs (-2% YoY)	569 MUs (12% YoY)	-
Total	1,829 MUs (4% YoY)	1,562 MUs (-2% YoY)	972 MUs (8% YoY)	467 MUs
PLF/(Deemed PLF)	77%/(88%)	73%/(81%)	88%/(94%)	-
Total	75%/(88%)	73%/(81%)	55%/(58%)	66%/(66%)

~72% of Current Installed Thermal Capacity of 3,508 MW is tied-up under Long-Term PPA

Renewable Assets – 15.4 GW



JSW NEO Energy (housing all Renewable assets) – At a Glance

Generation

15.4 GW

Renewable

Installed – 4,232 MW
Under Construction – 7,581 MW
Pipeline – 3,540 MW



MoUs

4.9 GW

Group Captive MoUs



Energy Storage

16.2 GWh

Energy Storage

BESS – SECI 500MW/1000MWh
Hydro Pump Storage (HPSP) –
MSEDCL 1,500 MW / 12,000 MWh
PCKL 300 MW/ 2400 MWh
SECI Solar + ESS (500MW+ 500MWh)
Group Captive 132 MWh



MoUs

2.6 GWh

Group Captive MoUs

80 GWh

Across 7 states



Energy Products

Backward Integration

Allotted 1 GW of solar wafer, cell and module (W-C-M) capacity under PLI scheme.

Electrons to Molecules

Received NoA for 6,500 TPA under SIGHT Program
Constructing 3,800 TPA Green Hydrogen plant



MoUs

Green H₂ - 85-90 KTPA

Green O₂ - 720 KTPA

Group Captive MoUs

Energy Storage – Unique Value Proposition as an Early Mover

Battery Energy Storage System (BESS)

LoA received for 500MW/1000 MWh SECI project
 BESPA signed for 250MW/500 MWh with SECI in Mar-24

- Build Own Operate Transfer (BOOT) with tenure of 12 years
- Battery Storage Purchase Agreement for 60% of the capacity with SECI and balance is open for sale
- Identified site is at Fatehgarh, Rajasthan
- Participate in ancillary market with the open capacity
- Project of 1 GWh (SECI) expected to be commissioned by June 2025

Particulars	SECI (BESS)
Tender capacity	500 MW / 1000 MWh
No. of hours backup	2 hours
Purchase agreement tenure	12 years
RTE	Min 85%
No of cycles per day	2

Hydro Pump Storage (PSP)

- Signed PPA for 12.0GWh (1.5 GW x 8 hours) PSP from MSEDL
 - Target commissioning : 48 months from signing of PPA
 - PPA Duration: 40 years
- Received Lol for 2.4GWh (300 MW x 8 hours) PSP from Power Company of Karnataka Ltd (PCKL)
 - Target commissioning : 36 months from signing of PPA
 - PPA Duration: 40 years
- JSW’s proven experience with managing the largest hydro portfolio in the private sector

Large Resources secured for ~80GWhr PSP/ 12.3 GW

State	Capacity (GW)
Karnataka	0.4
Maharashtra	3.0
Uttar Pradesh	1.7
Rajasthan	1.2
Andhra Pradesh	1.5
Telangana	1.5
Uttarakhand	3.0
Resources Secured	12.3

Green Hydrogen Opportunity – JSW Energy’s Positioning

G

RTC RE Power at competitive prices

- Power is ~65-70% of variable cost for Green H₂ production
- Green H₂ a natural progression path for power companies banking on its competitive power cost
- JSWEL has RE resources with good CUF and profile along with large energy storage resources

R

Monetization of byproducts

- Valorization of Oxygen produced generating by-product credits
- O₂ produced in the Green H₂ to also be a part of the offtake agreement

E

Scalability

- JSWEL’s backward integration to solar module manufacturing along with secured energy storage resources, provides optionality of scaling up its Green H₂ capacity going ahead
- Low LCoE for Green H₂ provides optionality for manufacturing further downstream derivatives

E

Co-location with Offtaker

- Co-location of Hydrogen Complex with JSW Steel’s ecosystem
- Sharing of common infrastructure like water, roads, rail, etc.

N

Project Experience

- Ability to execute and build plants at costs well below industry standards
- Industry leading efficiency & high Equity IRRs

H₂

Mutually Beneficial

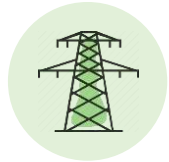
- Green H₂ project win-win for JSWEL and JSW Steel
- Decarbonisation for hard to abate sector (Steel)
- Using Green H₂ increases the productivity of Direct Reduced Iron (DRI) process and will help offset Carbon Tax on Exports of Steel.

Contracted Commercial Scale Green Hydrogen Project

Produce Green Hydrogen for Production of Green Steel



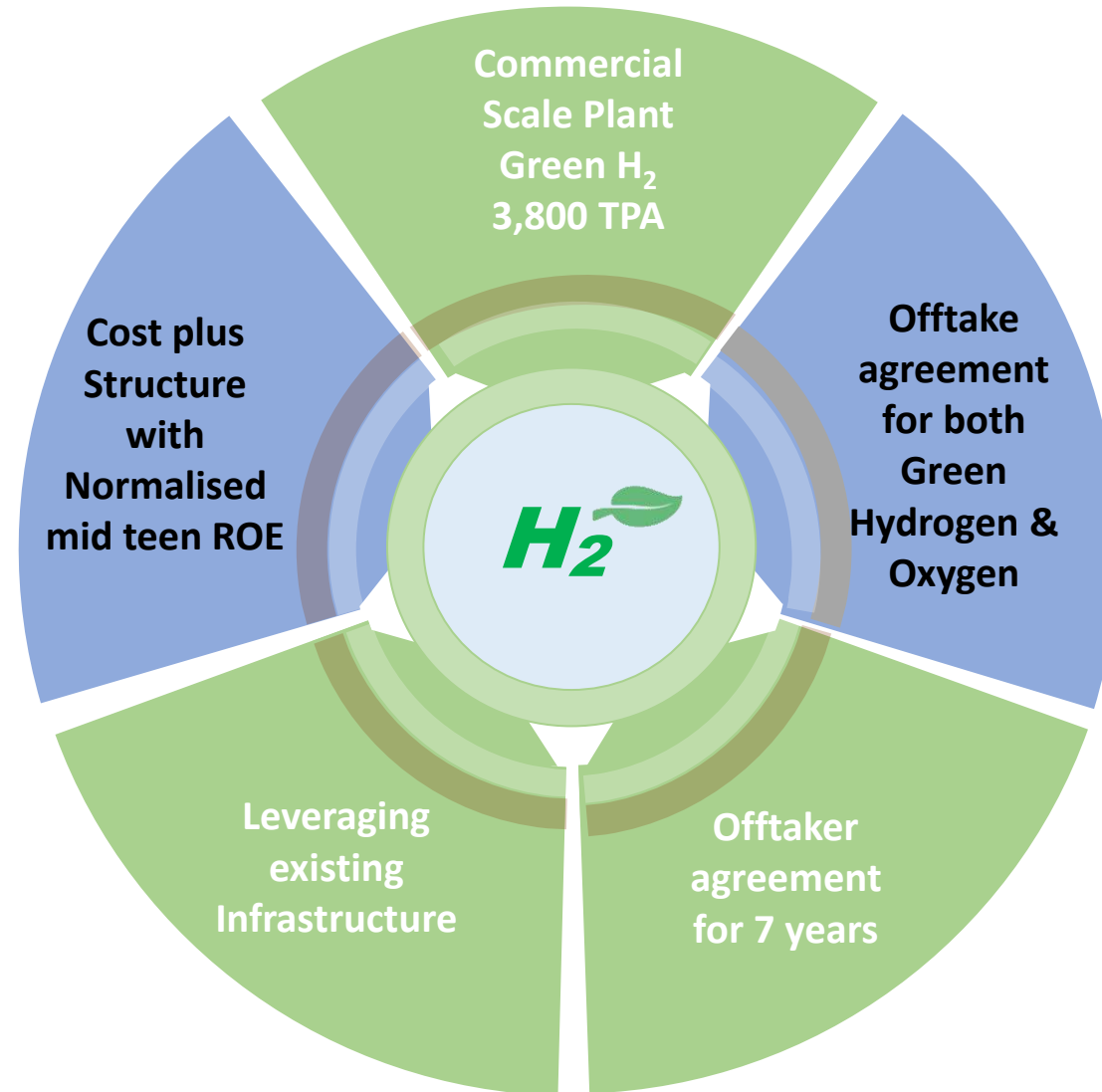
Green Power
25 MW RTC power
Secured land for plant



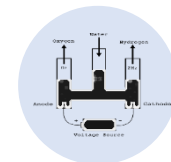
Power Transmission
Existing micro grid - No power banking needed



Full amortization of capex in 7 years with normative mid-teen RoE



Surety of Offtake Green Hydrogen Green Oxygen



Commissioning by Mar-25

NEED FOR BACKWARD INTEGRATION

Solar power is critical to transition towards green power

Tariff policy (BCD) restrictive, leading to high landed cost of cells and modules

Grid connected projects must use modules listed in ALMM

Supply reliability issue, limited domestic module capacity vs the requirement

1 GW under PLI



Wafer-Cell- Module

BACKWARD INTEGRATION AT JSW ENERGY

Allocated 1 GW of capacity under PLI for W-C-M

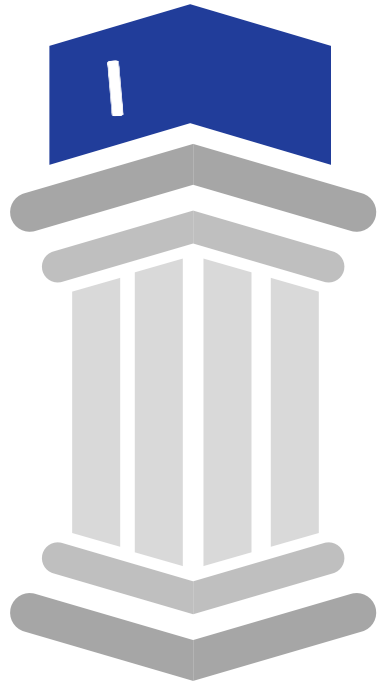
Supply Chain Derisking - strategic intent to utilize solar modules for captive usage

Eligible for ~₹ 320 Cr benefits under PLI scheme. Additional Incentives from State Government are under negotiation

Securing Resources – Location identified in Rajasthan, necessary approvals and ordering are in process

Capital expenditure of ~₹ 1,600 Cr

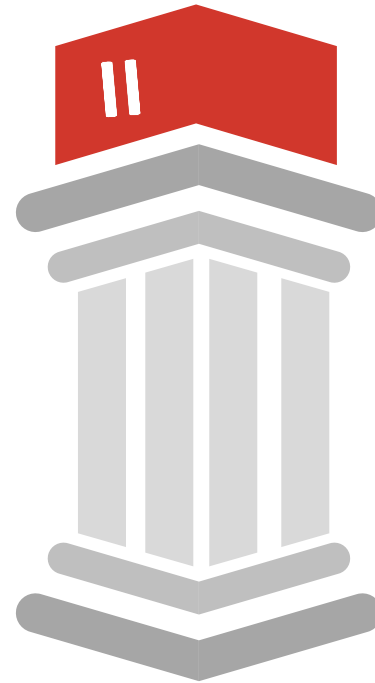
Value Accretive Business Model



Prudent selection of growth opportunities

- Bidding based on P90 generation assumption
- Conservative Interest rate assumptions
- Targeted selection- Targeting a niche segment of market offering healthy returns – Mid teen IRRs

Implementation De-risking



Life cycle approach

- Land acquisition, De- scoped project construction, power evacuation and O&M
- Power evacuation
- Proactive approach to get the PPA/PSA executed and tariff adoption

Execution Efficiency

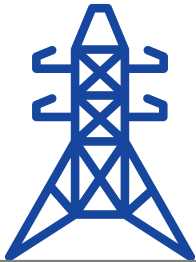


Group's project execution excellence

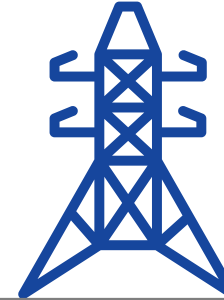
- Fast execution while ensuring all safety guidelines

Growth Framework leading to industry-leading returns

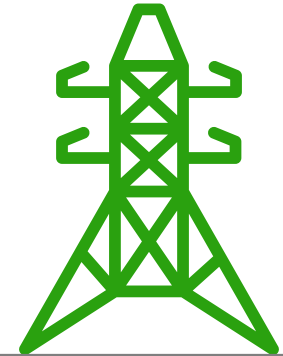
Single digit to lower teen IRR%



Mid-teen IRR %



High-teen Returns Realized



Equity IRRs

Current market returns due to highly competitive tariffs¹

Pre-Bid Preparation

- Bidding with conservative assumptions
- Targeting a niche market segment offering healthy returns
- Pre-bid resources identification to reduce uncertainty on land & connectivity

Project Execution

- No Turn key EPC contracts: instead creating value with split package approach
- Modular commissioning; Early onset of revenues
- Debt loading coinciding with revenue generation

JSW Energy Target Returns

Targeting mid-teen post-tax equity IRRs

Potential Upside Levers Post COD

- Cost reductions due to Self O&M
- Technology Improvement
- Reducing Interest cost via refinancing

Realized Returns

Enhancement In Returns Realized

1- Company market analysis; COD: Commercial operations date; IRR: Internal Rate of Return

Protecting Returns



Value Accretive Business Model

- Bidding based on P90 generation assumption
- Conservative Interest rate assumptions
- Targeted selection- Targeting a niche segment of market offering healthy returns – Mid teen IRRs



Implementation De-risking

- Land acquisition, De- scoped project construction, power evacuation and in-house O&M
- Proactive approach to get the PPA/PSA executed and tariff adoption



Execution Efficiency

- Group's project execution: Fast execution while ensuring all safety guidelines

Enhancing IRRs



De-scoped Project Execution

- No Turn key EPC contracts: instead creating value with split package approach
- Modular commissioning; Early onset of revenues



Attractive Financing Solutions

- Debt loading coinciding with revenue generation
- Reducing Interest cost via refinancing



Operational excellence

- Cost reductions due to Self O&M
- Technology Improvement

Further Growth Opportunities



Green Energy Needs of JSW Group and C&I customers

- JSW Group has aggressive growth plans in Steel, Cement and Paints businesses providing opportunities for group captive projects



Power to X (PtX): Green Chemicals

- Green Hydrogen and Ammonia derivatives
- Green Methanol and derivatives



Energy Storage: Hydro PSP and BESS



Value Accretive M&A opportunities

Investor Relations Contact:

ir.jswenergy@jsw.in

JSW
JSW ENERGY LTD
RATNAGIRI



We are
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Recognized by Great Place To Work® India

Appendix



Consolidated Financial Results

H1 FY25	H1 FY24	Particulars in ₹ Crore	Q2 FY25	Q2 FY24
6,502	6,401	Total Revenue	3,459	3,387
3,488	3,316	EBITDA	1,907	2,008
54%	52%	<i>EBITDA Margin(%)</i>	55%	59%
767	807	Depreciation	392	409
1029	999	Finance Cost	518	514
1,691	1,510	Profit Before Tax	997	1,086
1,375	1,140	Profit After Tax	853	850
2,148	1,923	Cash Profit After Tax ¹	1,190	1,180
7.88	6.93	Diluted EPS ² (₹)	4.89	5.17

Operational Performance – Thermal

			Net Generation (MUs)						PLF/CUF (%)			
Location (Current Capacity)	Capacity (%)		Q2 FY25	Q2 FY24	Change YoY	H1 FY25	H1 FY24	Change YoY	Q2 FY25	Q2 FY24	H1 FY25	H1 FY24
Ratnagiri (1,200 MW)	LT	91%	1,698	1,478	15%	3,327	3,140	6%	77 (*88)	67 (*88)	75 (*87)	72 (*94)
	Total	100%	1,829	1,752	4%	3,946	3,691	7%	75 (*88)	72 (*91)	82 (*93)	76 (*96)
Barmer (1,080 MW)	LT	100%	1,562	1,593	-2%	2,951	3,011	-2%	73 (*81)	75 (*78)	70 (*74)	71 (*74)
Vijayanagar (860 MW)	LT	37%	569	510	12%	1,169	1,039	12%	88 (*94)	80 (*86)	91 (*95)	83 (*89)
	Total	100%	972	900	8%	1,718	1,973	-13%	55 (*58)	51 (*53)	49 (*51)	57 (*59)
Utkal (350 MW)	Total	100%	467	NA	NA	833	NA	NA	66 (*66)	NA	59 (*59)	NA
Nandyal (18 MW)	LT	100%	15	25	-37%	38	34	9%	44 (*100)	69 (*100)	54 (*100)	49 (*100)
Total Thermal (3,508 MW)	LT	72%	3,845	3,605	7%	7,484	7,225	4%	76 (*86)	72 (*83)	75 (*83)	73 (*85)
	Total	100%	4,847	4,269	14%	9,485	8,709	9%	69 (*76)	67 (*76)	68 (*74)	69 (*78)

LT : Long Term; ST: Short Term, NM : Not meaningful, * denotes Deemed PLF
 Figures rounded off to nearest units digit

Operational Performance – Renewables

			Net Generation (MUs)						PLF/CUF (%)			
Location (Current Capacity)		Capacity (%)	Q2 FY25	Q2 FY24	Change YoY	H1 FY25	H1 FY24	Change YoY	Q2 FY25	Q2 FY24	H1 FY25	H1 FY24
Hydro (1,345 MW)*	LT	97%	2,683	2,694	0%	4,422	3,828	16%	94	95	78	68
	Total	100%	2,916	2,766	5%	4,756	3,910	22%	99	94	81	67
Solar (675 MW)	LT	100%	275	288	-5%	630	654	-4%	19	20	21	22
Wind (2,152 MW)	LT	100%	1,803	1,315	37%	2,849	2,062	38%	41	40	35	32
Total Renewables (4,172 MW)	LT	99%	4,760	4,297	11%	7,901	6,545	21%	NA	NA	NA	NA
	Total	100%	4,993	4,369	14%	8,236	6,627	24%	NA	NA	NA	NA

LT : Long Term; ST: Short Term, NM : Not meaningful, Figures rounded off to nearest units digit

Financial Results – Major Entities

Entity-wise Revenue from Operations				
Particulars in ₹ Crore	Q2 FY25	Q2 FY24	H1 FY25	H1 FY24
Standalone	967	1,133	2,017	2,617
JSW Energy (Barmer)	746	727	1,385	1,367
JSW Energy Utkal	266	0	530	4
JSW Hydro Energy	466	691	786	988
Acquired RE Portfolio	559	607	991	1,025
JSW Renewable Energy (Vijayanagar)	77	40	140	90
JSW Renew Energy (SECI IX)	63	0	93	0
JSW Renew Energy Two (SECI X)	95	44	148	56
JPTL	17	17	33	34
Consolidated*	3,238	3,259	6,117	6,187

Entity-wise EBITDA (Including Other Income)				
Particulars in ₹ Crore	Q2 FY25	Q2 FY24	H1 FY25	H1 FY24
Standalone	428	452	919	877
JSW Energy (Barmer)	258	225	445	430
JSW Energy Utkal	37	1	145	2
JSW Hydro Energy	448	689	755	971
Acquired RE Portfolio	507	557	892	931
JSW Renewable Energy (Vijayanagar)	72	36	131	83
JSW Renew Energy (SECI IX)	58	0	89	1
JSW Renew Energy Two (SECI X)	94	42	145	54
JPTL	16	19	33	36
Consolidated*	1,907	2,008	3,488	3,316

Cash Returns on Adjusted Net Worth

₹ Cr (Unless mentioned otherwise)

Quarter ended	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24
Reported PAT	180	272	290	850	231	351	522	853
Add: Depreciation	295	291	398	409	400	427	375	392
Add/(less): Deferred Taxes	14	24	55	89	(4)	(92)	61	(4)
(Less): Dividend Received	-	-	-	(24)	-	-	-	(51)
Add/(less): One-offs*	-	-	-	(144)	-	-	-	-
Cash PAT	489	587	743	1,180	628	686	958	1,190
Cash PAT (TTM)	2,625	2,570	2,500	2,999	3,138	3,237	3,452	3,462
Adjusted Net Worth**	13,446	14,177	14,061	14,859	15,336	15,501	20,972	21,553
Cash Returns on Net Worth (%)	20%	18%	18%	20%	20%	21%	16%	16%

Strong Cash Generation of > ₹3,400 Crore