



Accelerating for a Better Tomorrow

Corporate Presentation
August 2022

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JSW Group – Overview



**US\$ 22 Bn¹ Group
Amongst India's
leading
conglomerates**



JSW Energy

- Power producer with 9.1 GW generation portfolio, 20 GW Target by 2030 (85% share of renewable up from 65% currently)
- Market Cap: ~US\$ 6.7 Bn



Infrastructure

- Amongst **Top 5** Indian port companies
- Operates environment-friendly seaports & terminals
- Targeting 200mtpa cargo handling capacity in next few years



Paints

- India's new age Paints company offering a path-breaking Any Colour at One Price
- State-of-the-art Facilities in Maharashtra and Karnataka
- Ranks Number 1 in Industrial Coil Coatings



Sports

- Supporting Indian sports ecosystem
- Teams Owned: Bengaluru FC, Delhi Capitals, Haryana Steelers



Steel

- India's leading integrated steel producer
- Installed crude steel capacity of 28.5mtpa, growing to 38.5mtpa
- Market Cap: ~US\$ 20.0 Bn



Cement

- India's leading Green cement company
- Current capacity of 16mtpa, with a medium term target of 25mtpa
- Product range includes PSC, GGBS, Concrete & Construction Chemicals



Ventures

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



Foundation

- Social development arm of JSW Group
- Footprint across 11 states
- Positively impacts more than a million lives across India

JSW Energy : Our Vision

**Bringing positive transformation to
every life we touch**

Agenda



JSW Energy at a Glance

Why JSW Energy?

Sustainability

Risk Mitigation

Annexures

JSW Energy – At a Glance

The company is well placed to achieve its capacity growth target of 10 GW much ahead of the stated timeline of FY25 and being future-ready with increased share of renewables.

9.1 GW

Diversified Asset Portfolio
(65% Renewable)

=

4.8 GW

Installed Capacity
Thermal – 3,158 MW
Renewable – 1,626 MW

+

1.8 GW*

Acquisition of 1,753 MW
Renewable Portfolio of
Mytrah Energy

+

2.5 GW

Entirely Renewable
Under-Construction – 2,233 MW
LoA Received (SECI XII) – 300MW

* Details of the deal in the annexure

Acquisition of 100% of Mytrah Energy RE Assets



- ✓ JSW Neo Energy* has executed a binding agreement with Mytrah Energy India Private Limited (MEIPL) for acquisition of its 18 SPVs housing RE assets.

- ✓ Total acquired portfolio consists of 422 MW Solar and 1,331 MW of wind across 9 states



- ✓ Transaction values Mytrah Energy portfolio at an EV of approximately ₹ 10,530 Cr after adjusting for net current assets implying a EV/EBITDA multiple of 6.4x on normalized EBITDA of ₹ 1,650Cr



- ✓ The transaction is expected to be completed by 15th November, 2022 subject to fulfilment of Conditions Precedent set out in SPA

Commissioned 225 MW Solar Power Plant in Apr'22



- ✓ Commenced operations at 225 MW solar power plant at Vijayanagar in Apr'22. The plant is installed on approximately 1,000 acres' land.



- ✓ Construction completed in a record time of less than 12 months despite several headwinds like Covid-19 related disruptions, elevated commodity prices, and global supply chain outages.

- ✓ Project executed in a safe manner complying to all Environment, Health, and Safety norms of the Group and without any Loss Time Injury.



- ✓ 25-year PPA under group captive scheme, provides long term and predictable cash flows.

JSW Energy - Asset Overview – 9.1GW

Pre-Acquisition (7.3GW)

Post-Acquisition (9.1 GW)

Operational:



Thermal – 3,158 MW



Thermal – 3,158 MW

Total increase in RE capacity: 1.75 GW

Operational RE Capacity: 3.38 GW



Hydro – 1,391 MW



Hydro – 1,391 MW



Solar - 235 MW



Solar - 657 MW



Wind – 1,331 MW

Under-Construction:



Wind – 1,993 MW



Wind – 1,993 MW



Hydro - 240 MW



Hydro - 240 MW

In Pipeline:



Wind - 300 MW ¹

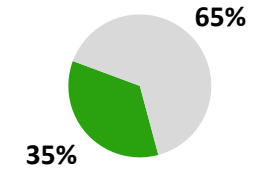
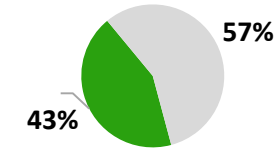


Wind - 300 MW ¹

Pre-Acquisition

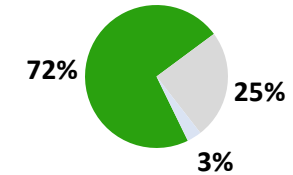
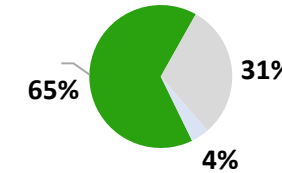
Post-Acquisition

By Green and Grey Portfolio



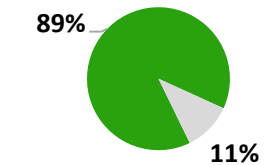
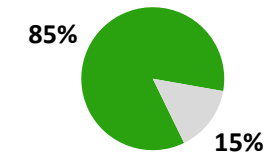
■ Thermal
■ Renewable

By Stage of Development



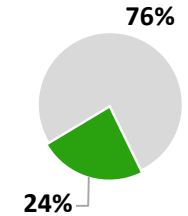
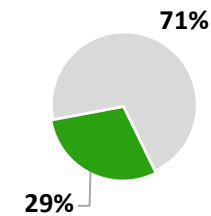
■ Operational
■ Under-construction
■ In-Pipeline

By PPA Tie-up ²



■ Under PPA
■ Open Capacity

By Group Captive



■ Group Captive
■ Non Group Captive

JSW Energy Portfolio

Barmer: 1,080MW

- **Configuration:** 8 X 135MW
- **Units operating:** since 2009³
- **Technology:** Sub-critical pithead Lignite based TPP
- **Fuel Source:** Captive Lignite mines of BLMCL¹
- **Power Offtake:** Long Term PPA : 100%
- **Project Cost:** INR 7,165 Crore/ \$919mn²

Ratnagiri: 1,200MW

- **Configuration:** 4 X 300MW
- **Units operating:** since 2010³
- **Technology:** Sub-critical TPP
- **Fuel Source:** Imported Thermal Coal
- **Power Offtake:** Long Term PPA: 96%
- **Project Cost:** INR 5,516 Crore/ \$707mn²

Nandyal: 18 MW

- 1x18MW Thermal Power Plant
- 100% LT PPA under Group Captive scheme

Vijayanagar: 860 MW

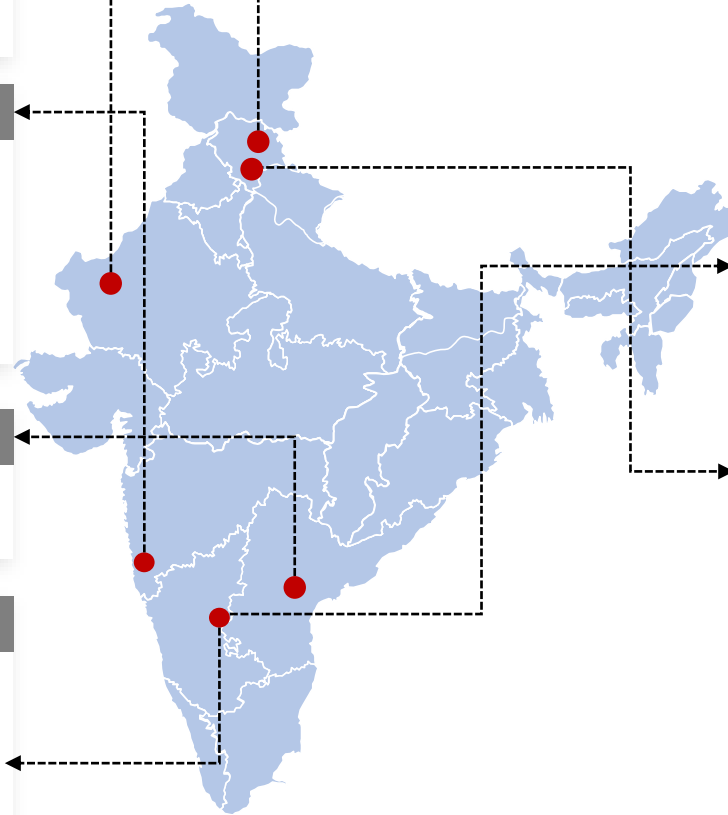
- **Configuration:** 2 X 130MW and 2 X 300MW
- **Units operating:** since 2000³
- **Technology:** Sub-critical TPP
- **Fuel Source:** Imported Thermal Coal & Gas
- **Power Offtake:** Long Term PPA : 35%
- **Project Cost:** INR 3,096 Crore/ \$397mn²

Remaining Avg. Life of PPA: ~20 years
Remaining Avg. Life of Assets: ~30 year

4.8 GW Installed
34% Renewable
66% Thermal

2.25 GW Under-construction
100% Renewable

0.3 GW In Pipeline
100% Renewable



Map for illustrative purposes, showing project locations

Green – 4,159 MW (57%)
Grey -3,158 MW (43%)

Baspa II: 300MW & Karcham Wangtoo: 1,091MW⁴

- **Configuration:** 3x100MW (Baspa II) ; 4x272.75MW (Karcham)
- **Units operating:** Baspa II since 2003³ and Karcham Wangtoo since 2011³
- **Technology & Fuel Source:** Hydro
- **Power Offtake:** Long Term(1300MW), Short Term(45MW)
- **Asset Value to JSW Energy:** INR 9,275 Crore/\$1,189mn²

Solar: 10 MW

- Ground based and rooftop solar power projects across various locations with captive power tie-up within JSW Group

Vijayanagar Solar: 225 MW

- **Configuration:** 225 MW AC
- **Power Offtake:** PPA with JSW Steel

Under Construction/ In Pipeline

Kutehr: 240 MW (Under Construction)

- **Configuration:** 3x80MW
- **Fuel Source:** Hydro Power Plant
- **Power Offtake:** PPA Signed

Wind : 1,993 MW (Under Construction)

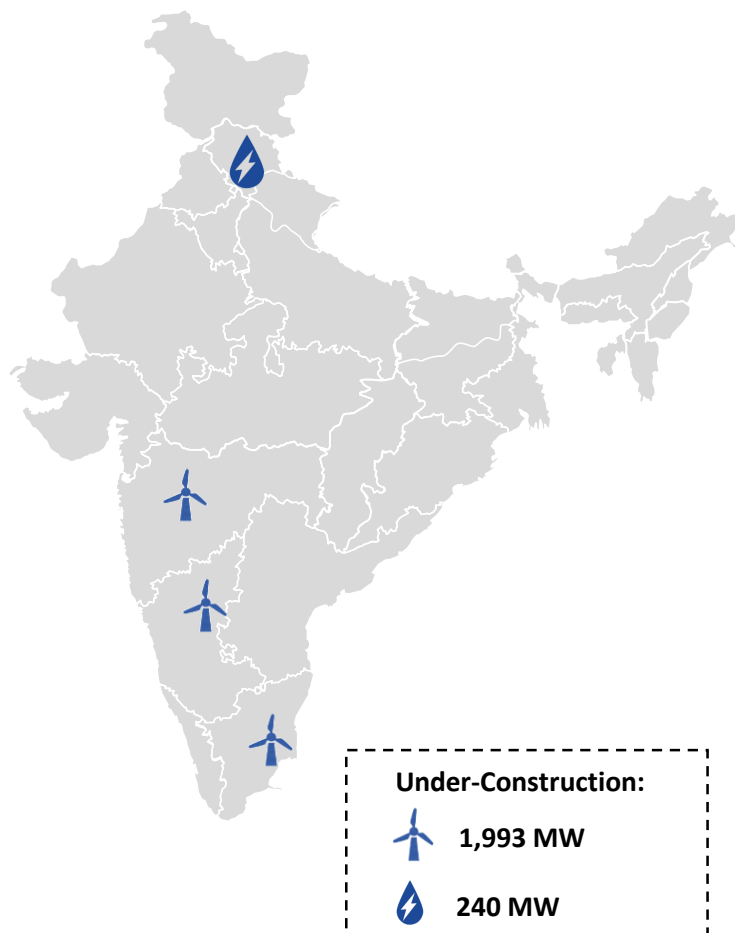
- 810 MW, Wind: SECI IX – PPA Signed
- 450 MW, Wind: SECI X – PPA Signed
- 733 MW Wind JSW Steel – PPA Signed

Wind : 300 MW (In Pipeline)

- 300 MW, Wind: SECI XII– LOA Signed

Projects Under Construction : Renewable led growth

2.25 GW Renewable Projects



Map for illustrative purposes, showing project locations

Portfolio						
Plant	Capacity (MW)	Segment	Location	PPA/Offtake	Scheduled Commissioning	Target Commissioning
SECI - IX	810	Wind	Tamil Nadu	25-Year; SECI	Dec-23	progressively from Q2 FY23
SECI - X	450	Wind	Tamil Nadu	25-Year; SECI	Jul-23	
Group Captive – JSW Steel	733	Wind	Karnataka	25-Year; JSW Steel	NA	progressively from Q1 FY24
Kutehr	240	Hydro	Himachal Pradesh	35-Year; Haryana Discom	Aug-26	Sep-24

Metrics for RE projects (Incl. 225 MW of solar project commissioned at Vijayanagar)

Blended tariff ₹ 3.08/unit (excl. hydro)

PPA PPAs Signed

Capex

- Total : ~ ₹ 16,660 Crore
- Spent: ~₹ 3,100 Crore
- Committed: ~₹ 9,600 Crore

Upcoming Projects:

SECI XII Wind project: Letter of Award received in Jul-22 for 300 MW of Wind Power Capacity

Progress Update on Renewable Projects (1/2)

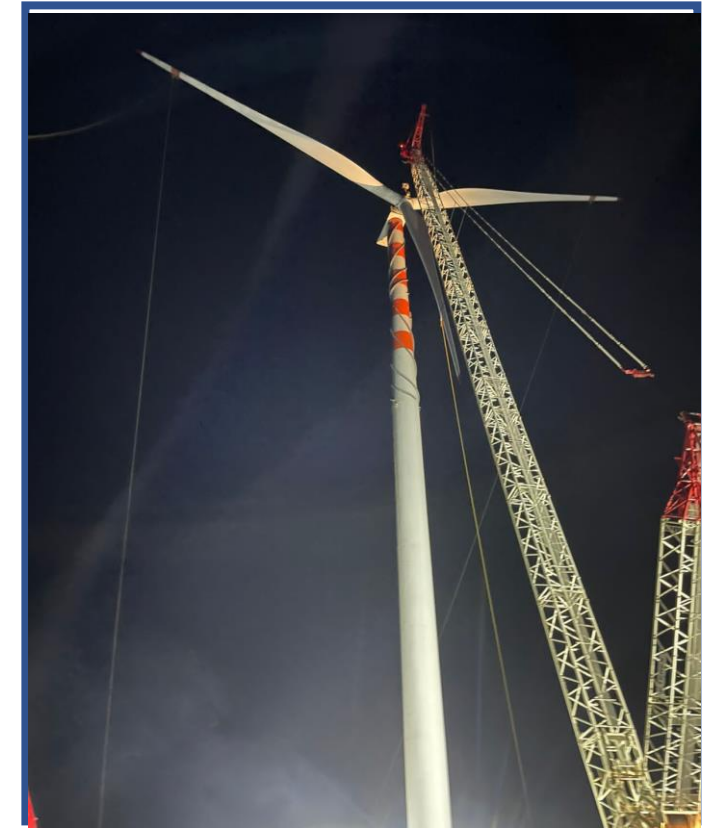
1,260 MW SECI-IX & X Wind, Tamil Nadu



WTG Erection work in progress



Nacelle Erection work in progress



WTG Erection work in progress

Progress Update on Renewable Projects (2/2)

240 MW Kutehr HEP, Himachal Pradesh



- Diverted river stream in the barrage successfully
- Completed ~75% (16.0 km) tunneling work (up from ~70% in Q4 FY22) well ahead of timelines

Healthy Operations and Financials (4.8 GW Operational)

85%

Capacity under LT PPA¹

~95%

EBITDA contribution from LT

21BUs

Net Generation

₹ 2,395 Cr

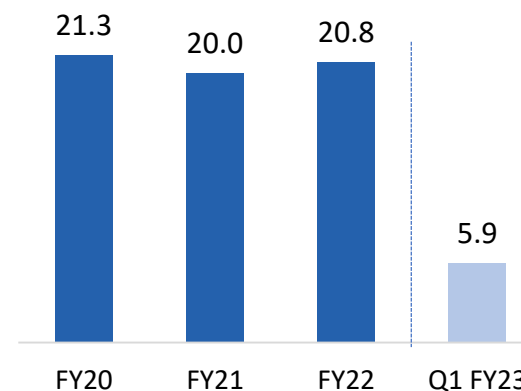
Cash PAT²

Figures are for FY22

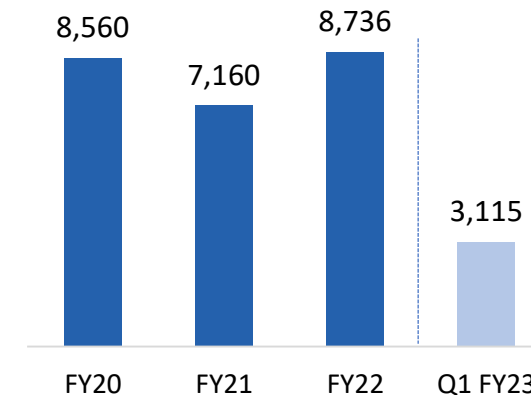
- Steady operations and robust financial: Cash PAT of ₹ 2,300 Crore p.a.
- High LT PPA tie-up rendering high cash flow visibility
 - Almost all LT PPA under two-part tariff (imported/domestic fuel cost/forex pass through)
 - Remaining Avg. Life of PPA: ~20 years
 - Remaining Avg. Life of Assets: ~30 years
- Diversified off-takers
 - All plants placed favorably in Merit Order Despatch
 - Hydro projects under 'must-run' status
 - Consolidated Trade receivables at ₹ 1,648 Cr equaling to 45 receivable days as on Jun 30, 2022

Business model resilient with steady cashflow generation despite several sectoral headwinds

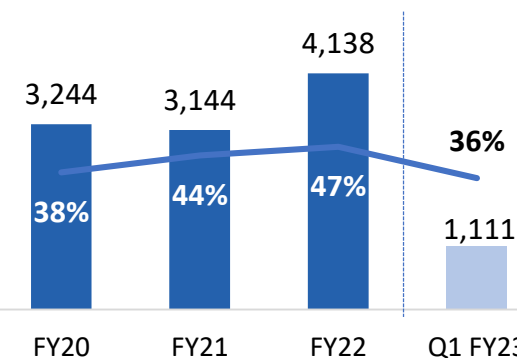
Net Generation (BUs)



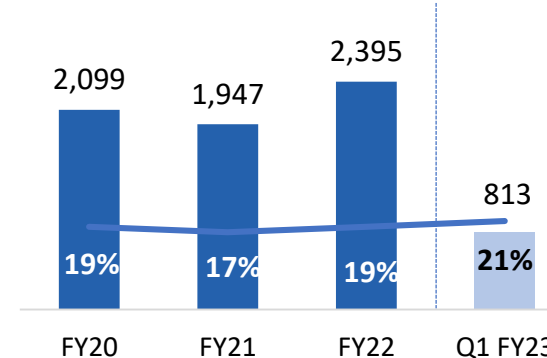
Total Income³ (₹ Crore)



EBITDA & EBITDA Margin (₹ Crore)



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



Robust balance sheet to support renewable-led growth

1.75x

Net Debt/EBITDA

0.46x

Net Debt/Equity

7.87 %

Wt. average cost of debt

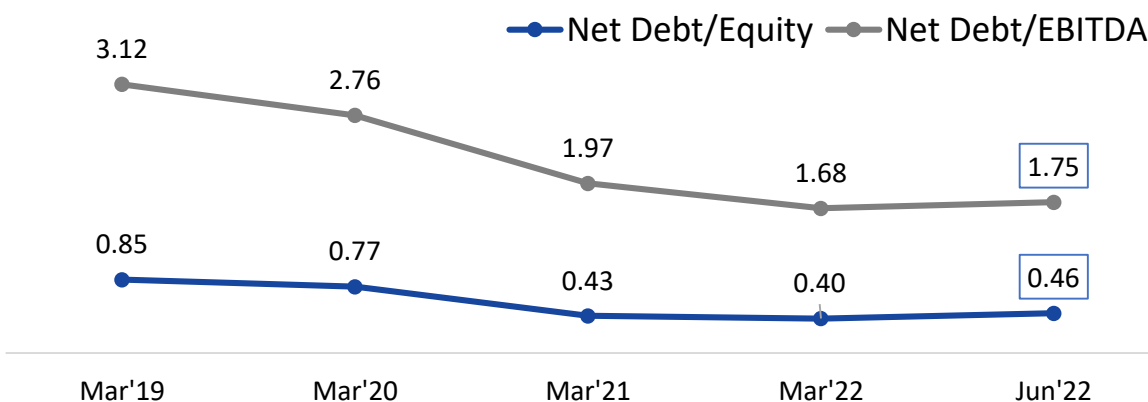
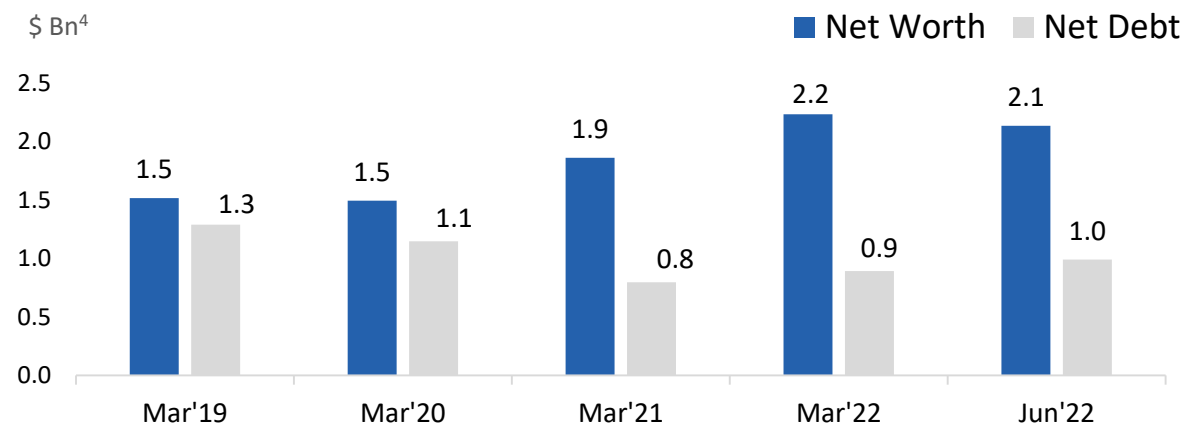
45

Receivable Days

Figures as of Jun 30, 2022

- ✓ Strong Liquidity with healthy cash balances: Rs 1,825 Crore (**\$ 235 Mn³**)
- ✓ Financial flexibility enhanced by equity investments:
 - Holding 7Cr (70mn) JSW Steel shares (Value¹: **~\$510 Mn³**)
- ✓ Healthy Credit Ratings:
 - India Rating & Research: AA (Stable outlook)
- ✓ Access to diverse pools of liquidity
- ✓ Existing portfolio of 4.8 GW generating healthy CF & mid-teen equity IRR²
- ✓ Weighted average cost of debt is 7.87% as of Jun 30, 2022

Large balance sheet headroom & strong cashflow available to pursue growth



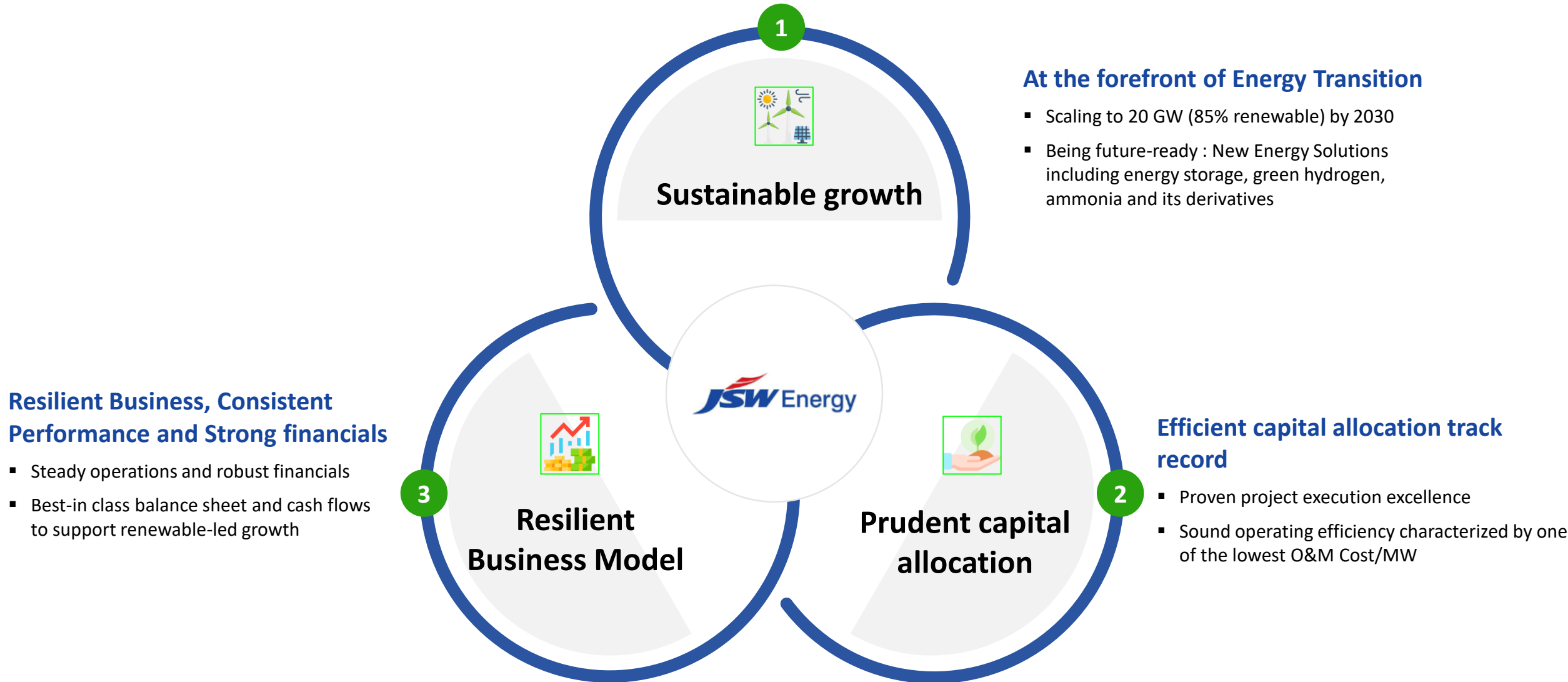
¹ Value of JSW Steel Share holdings as on June 30, 2022. Net Worth is impacted by change in value of listed equity investments through Other Comprehensive Income, ². Calculated as FCFE Yield on Adj. NW is ~14%; Adj NW : Net worth adjusted for non-strategic equity investments held ³. 1 USD =78 INR

Why JSW Energy ?..

An aerial photograph of a large dam and reservoir. The reservoir is a large body of greenish water, and the dam is a long, low structure across the middle. To the left of the dam, there are several buildings with red roofs and some industrial structures. A blue diagonal line runs from the top left towards the bottom right, crossing the reservoir and the dam area.

Committed to reaching
Net Zero emissions by 2050

Compelling Investment Story



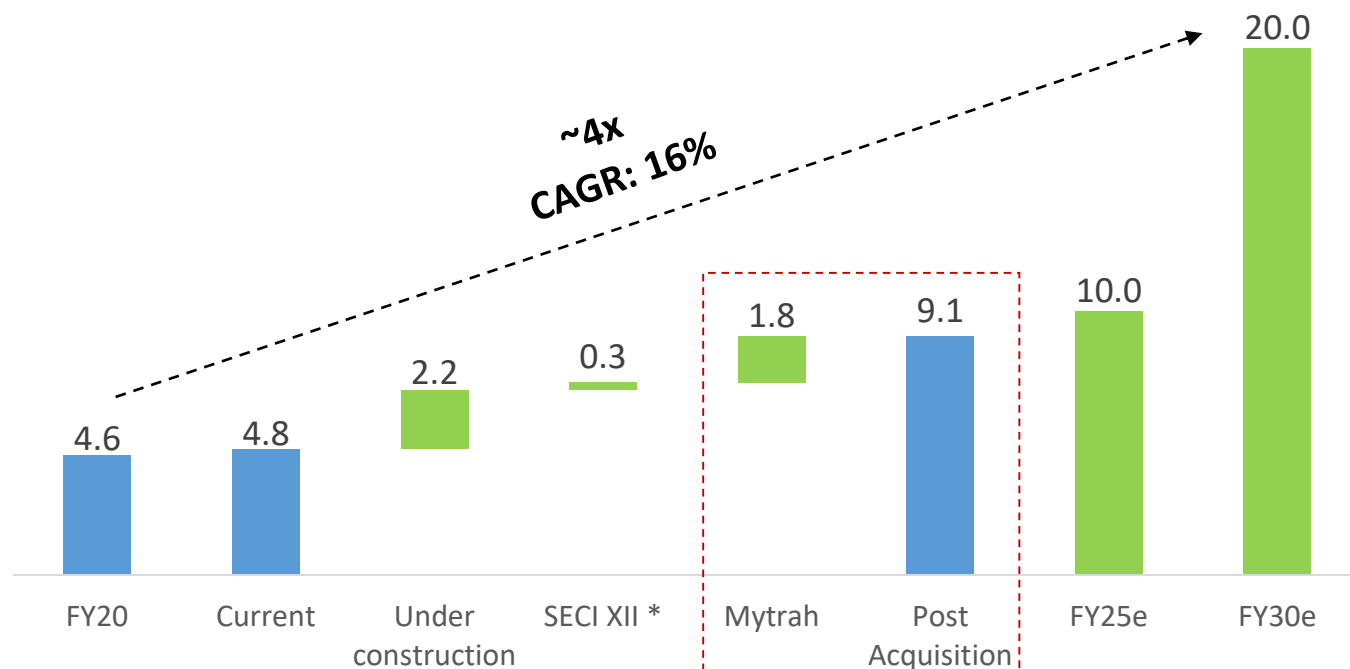


At the forefront of Energy Transition

- Scaling to 20 GW (85% renewable) by 2030
- Being future-ready : New Energy Solutions including energy storage, green hydrogen, ammonia and its derivatives

Twin Engines of Growth for significant value creation

Scaling to 20 GW by 2030 via Renewables



Being future-ready : New Energy Solutions



Energy Storage: Hydro Pumped Storage (PSP) and Battery Storage

- Hydro PSP: Targeting 10 GW. Resources tied-up for 5 GW with various states



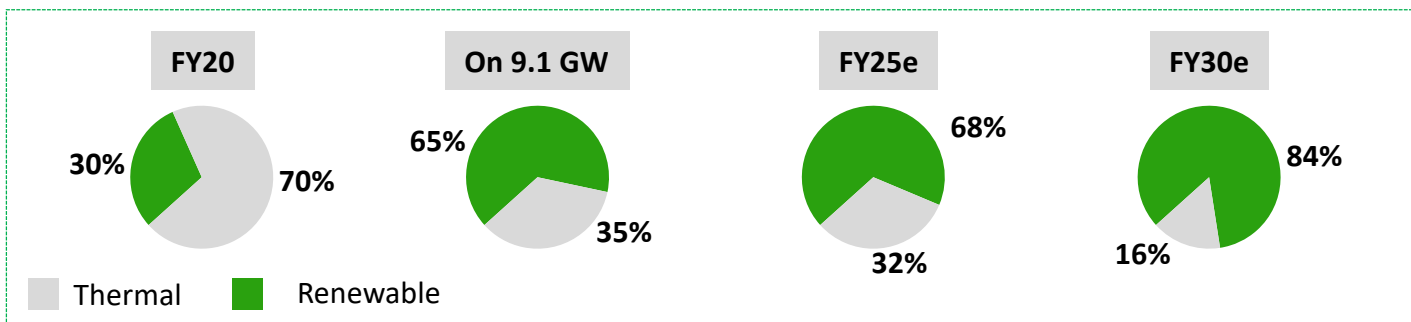
Green Hydrogen/Ammonia

- Foray into production of Green Hydrogen and Ammonia
- Catalyst for decarbonization of industries/manufacturing



Energy Solutions

- Renewable energy coupled with Storage solutions and digital capabilities can lead to multiple energy solutions & products for the grid and commercial & industrial users



- ✓ **No equity dilution** envisaged for growth
- ✓ **Diverse Sources** of Capacity addition: Solar and Wind bids, RTC power bids, Storage bids, C&I customers, RE Power for Green Hydrogen

Being Future Ready : Hydro Pumped Storage Projects (PSP)

India's Market Potential



Only 3.3 GWh operational out of 96 GWh potential

- Hydro Power Obligations to bolster development of PSPs
- Waiver of ISTS charges also allowed for Hydro PSP



Supporting 2030 target of 50% non-fossil fuel based capacity

Hydro PSP to provide adequate peaking reserves, reliable grid operation and integration of variable renewable energy sources

Key Highlights:

- Long Project Life
- Low construction cost and better PLF vis-à-vis conventional hydro projects
- Supports Grid Stability
- High tariffs with attractive returns

JSW's Plans

✓ In Advanced Stages for 5 GW PSP

- Signed **MoUs** with Govt. of Maharashtra for 1.5 GW, Govt. of Telangana for 1.5 GW, Govt. of Chhattisgarh for 1 GW for Hydro Pumped Storage Projects and a **Letter of Intent** with Govt. of Rajasthan for 1 GW Hydro Pumped Storage projects
- Water allocation approved
- Applied for Environmental clearance
- Techno economical feasibility studies are being done

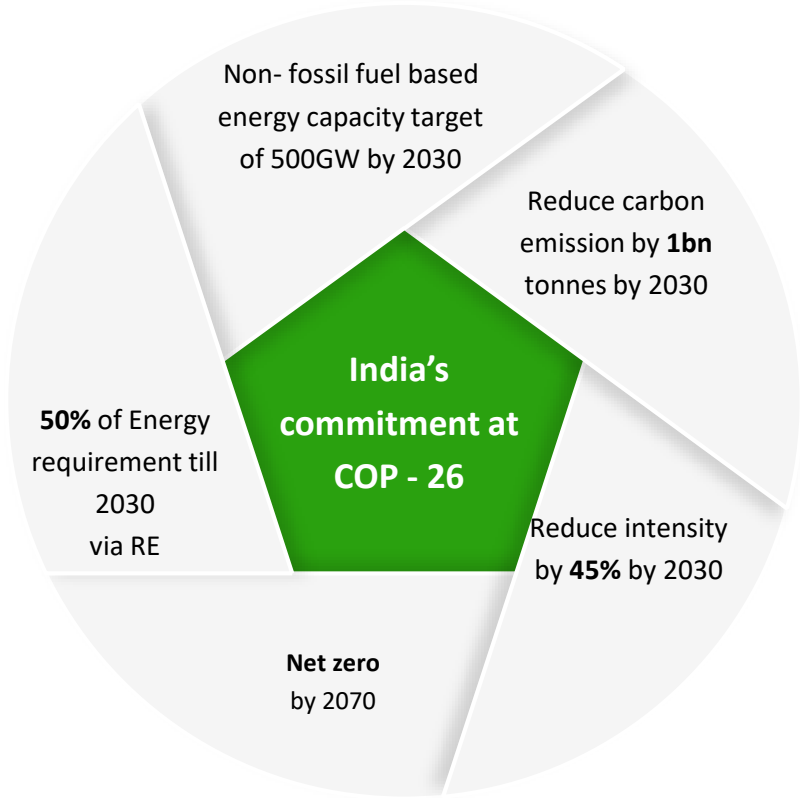
✓ Benefit of JSW's proven experience with managing the largest hydro portfolio in the private sector

✓ PSPs integrated with RE power can provide firm despatchable RE power

Expected Timeline:

- Project Clearances : 3 Years (in progress since FY21)
- Project Construction: 3 Years (expected from early FY24)

Being Future Ready : 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 ~130 GW (India among global leaders): Target – 50% of total capacity by 2030

Low Tariffs

RE tariffs in India (INR ~ 2-2.5)

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

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

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

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

Main production route

Characteristics



Steam Methane Reforming (SMR)



Intense CO₂



Low Cost



SMR + CCS



Coal Gasification + CCS

Characteristics



Low CO₂



High Cost

Main production route

Characteristics



Electrolysis using renewables



Zero CO₂



High Cost

India's Market Potential

H₂

Significant H₂ demand

- India - 2nd largest hydrogen demand base in the world
- H₂ demand expected to grow to ~24 MMT by 2050; can spur USD 65-70 Bn investments in incremental RE capacity



National Hydrogen Mission

- Announced in the Union Budget 2021 for making a hydrogen roadmap for the country
- Government announced Green hydrogen obligation for Fertilizers and Refinery sector



India's Clean Energy commitments

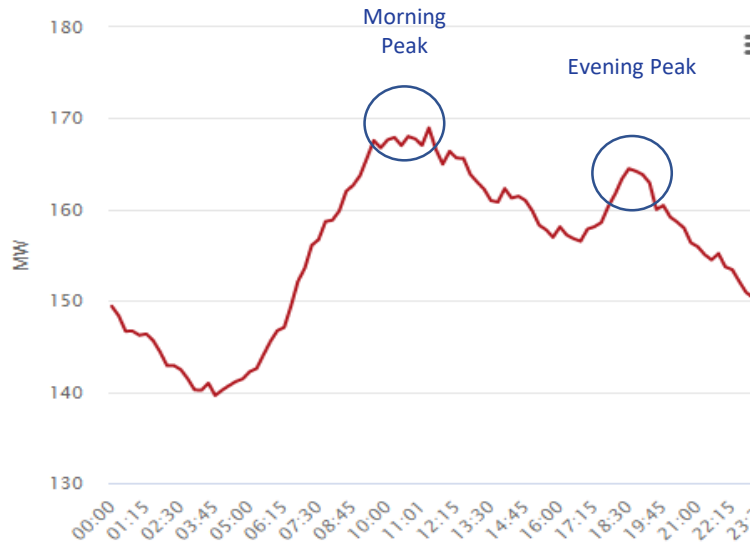
- Green H₂ adoption can contribute to emission reduction in allied sectors
- India has low RE tariff's: Electricity is ~80% of Cost of Green H₂

JSW's Plans

- ✓ To tap significant clean energy market opportunity in India and become a front-runner in a future hydrogen economy
- ✓ Green H₂ Pilot Project at Vijayanagar - Scoping for the same is near completion
- ✓ Utilisation potential across:
 - green steel making
 - green ammonia
 - chemical derivatives
 - hydrogen mobility
 - other industrial applications

Being Future Ready : Energy Products & Services - Value Unlocking

All India Peak Demand Pattern (2021)¹



- All India power demand shows a peaking upward trend during morning & evening hours
- **Demand of 16-20 GW during these peaks** vs a base demand of ~150 GW
- **Generation resources needed to effectively meet** base load and **varying incremental** load during multiple daily duration period(s)

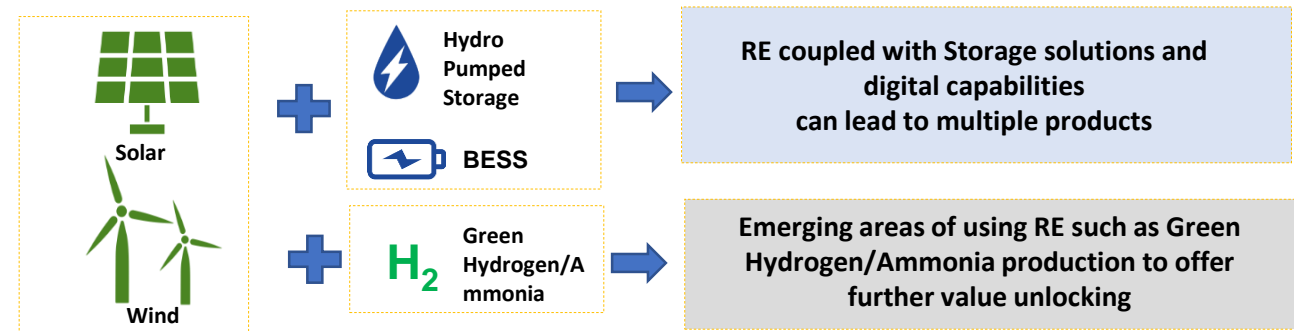
Varying power demand requirements and rise of utility scale renewable projects is leading to innovative approaches that encourage pairing solar/wind with storage technologies to offer “round the clock” (RTC) and on-demand power supply

1. Discoms:

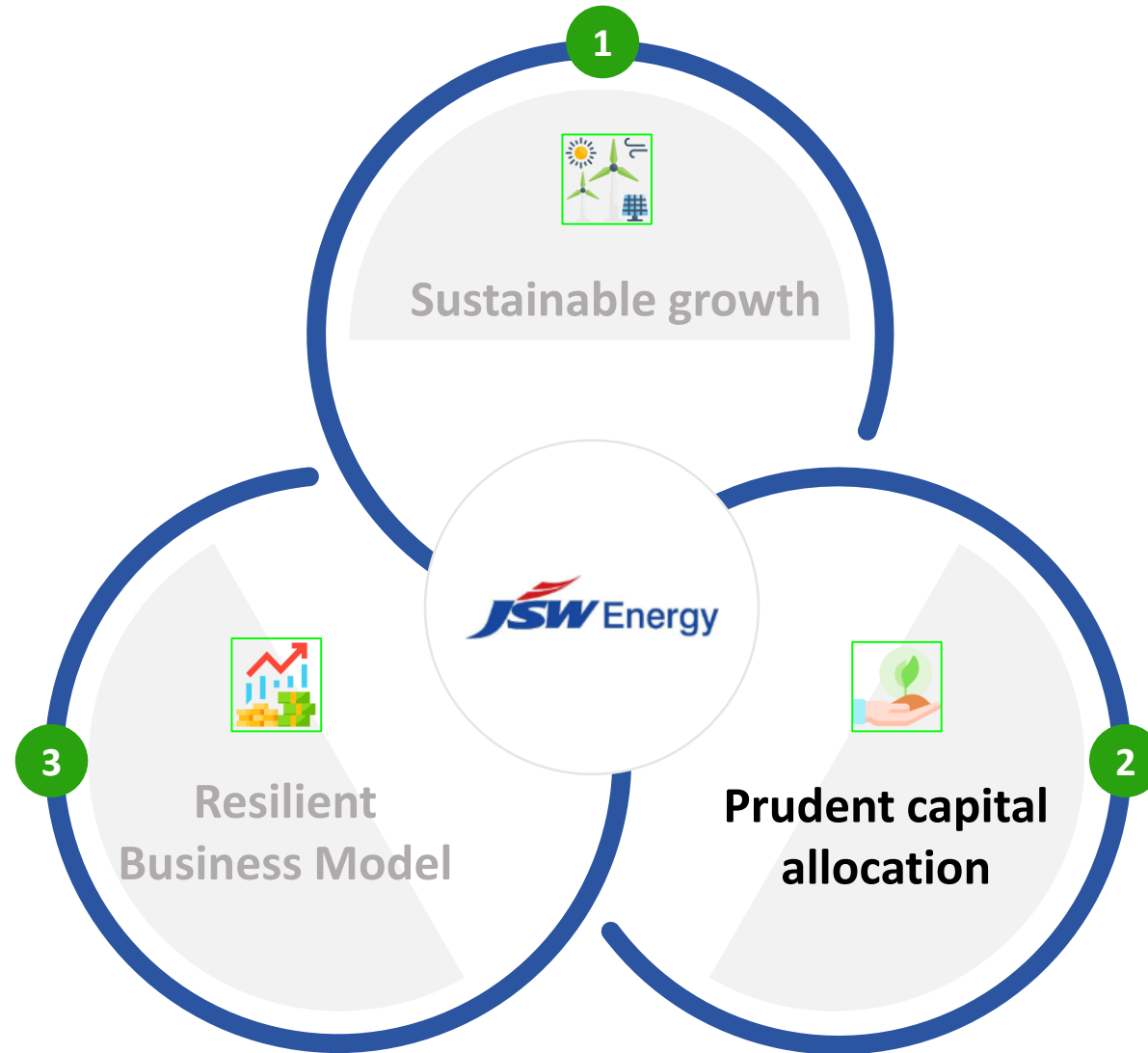
- To incrementally secure energy from renewable energy + energy storage sources to meet peak and off-peak power demand for RTC requirements
- Evolution of Renewable tenders from plain vanilla solar/wind to Hybrid & RTC tenders

2. Commercial & Industrial (C&I) Users:

- Innovative PPAs & tariffs with C&I customers (such as Metro, Large Offices) to meet varying power demand requirements



Compelling Investment Story



Efficient capital allocation track record

- Proven project execution excellence
- Sound operating efficiency characterized by one of the lowest O&M Cost/MW

Proven project execution and operational excellence...



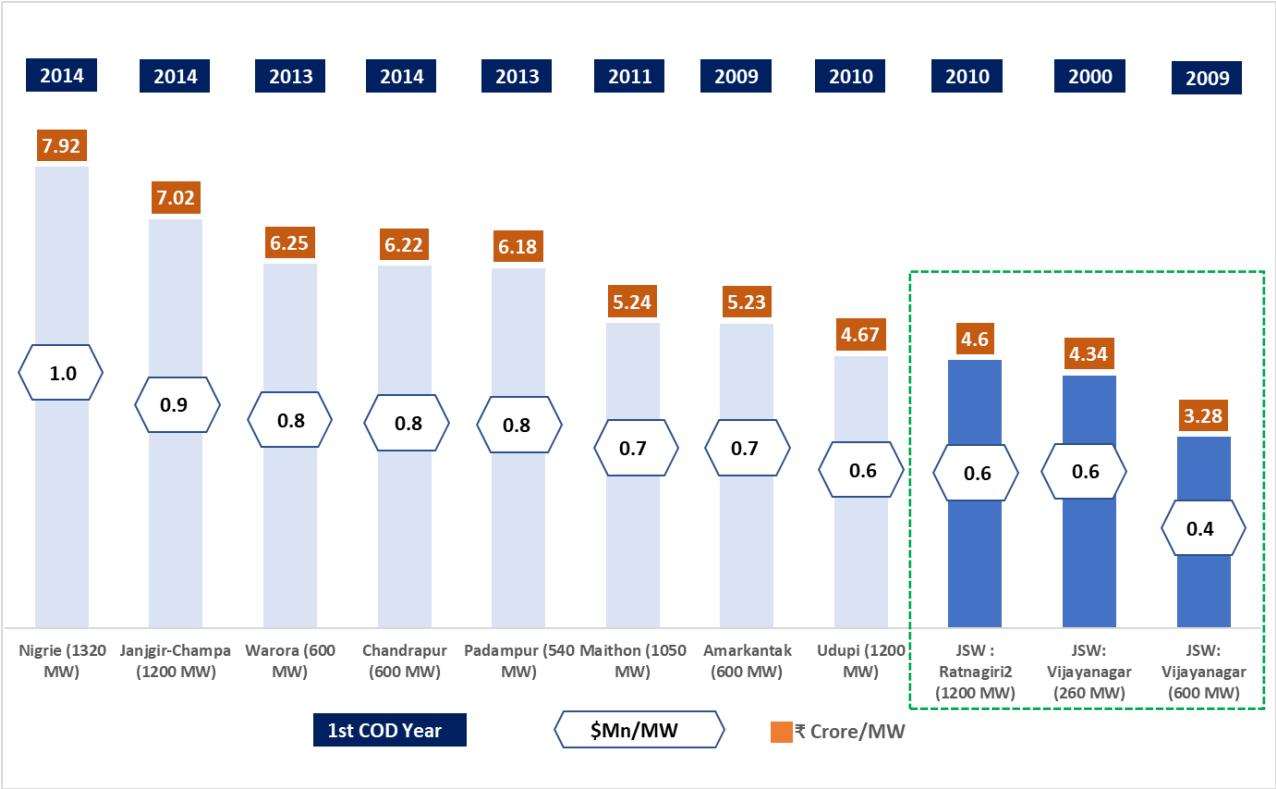
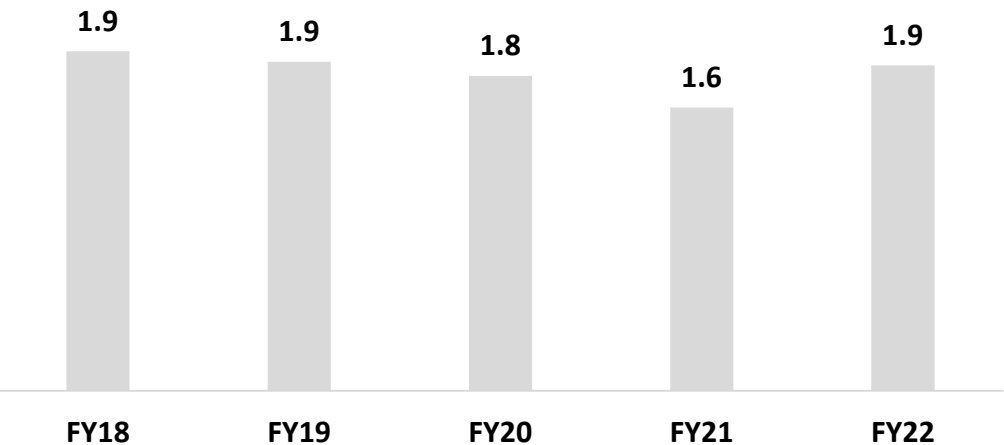
Prudent and consistent capital allocation strategy for growth over a 25 year history

Business model resilient despite several sectoral headwinds over the last decade

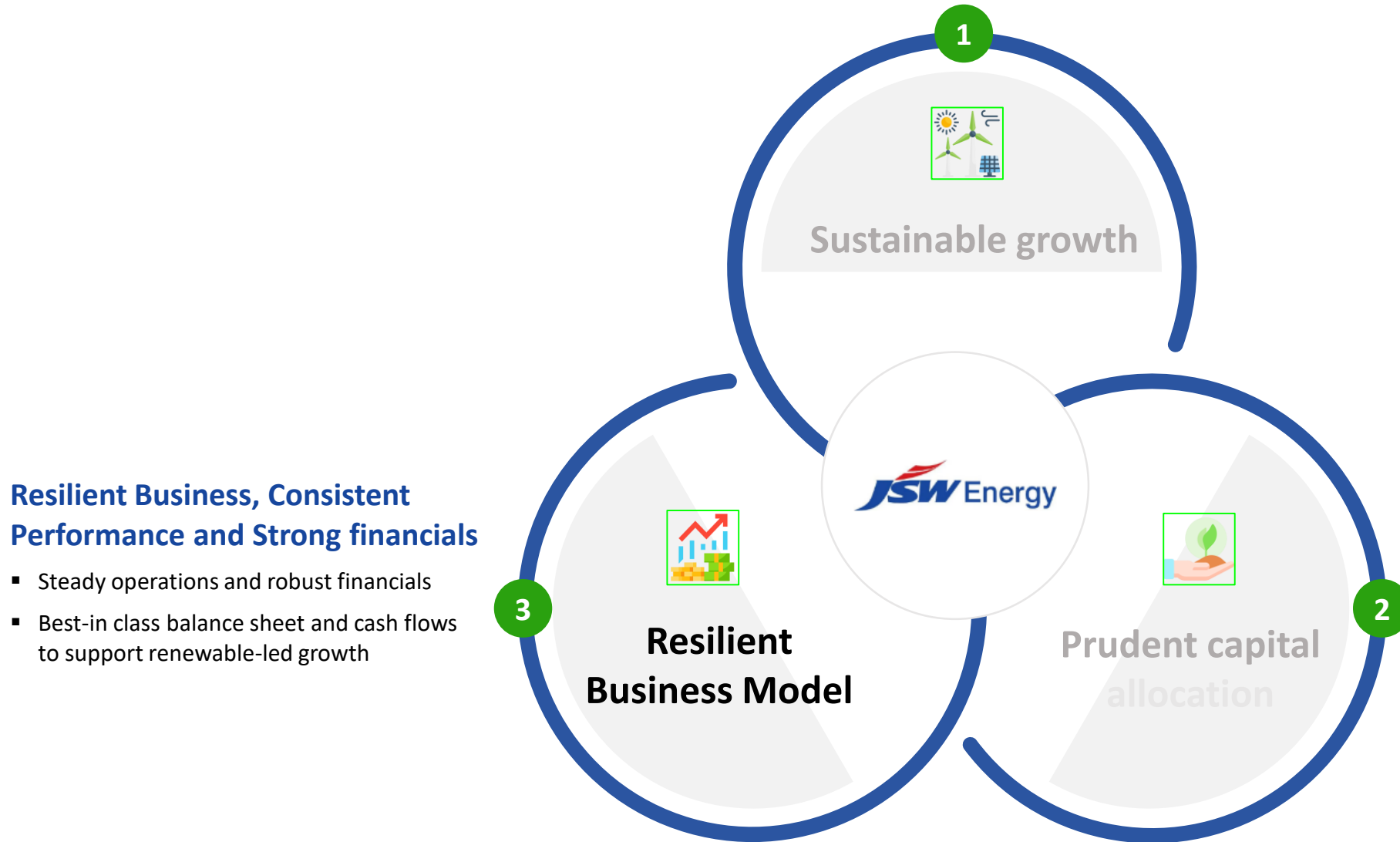
Sound operating efficiency characterized by one of the lowest O&M Cost/MW

One of the lowest project execution cost in the industry

O&M Expenses (Rs Mn/MW)



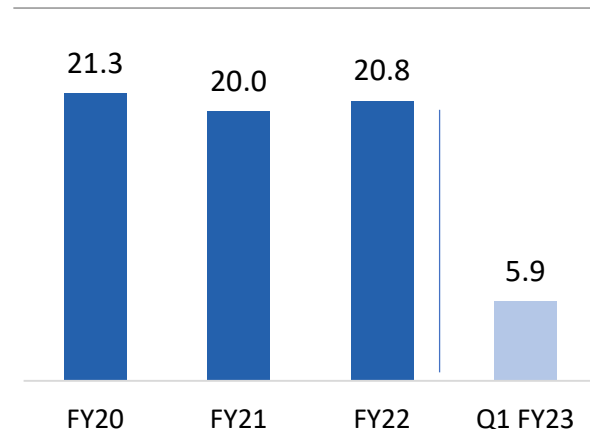
Compelling Investment Story



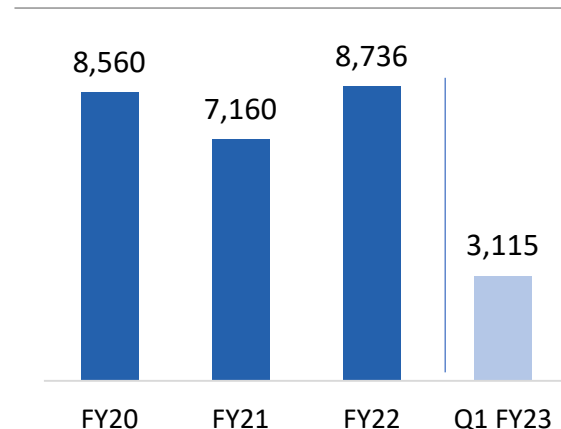
Steady Operations and Robust Financials

Consistent asset performance

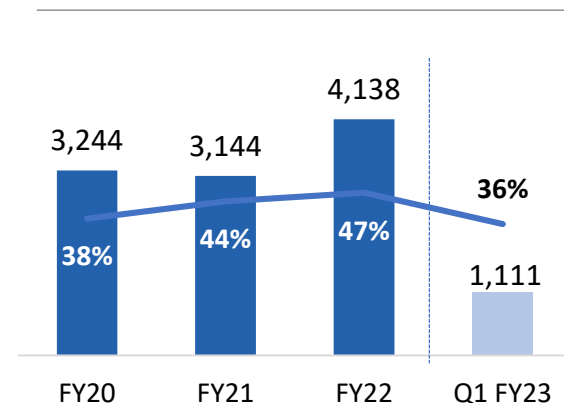
Net Generation (BUs)



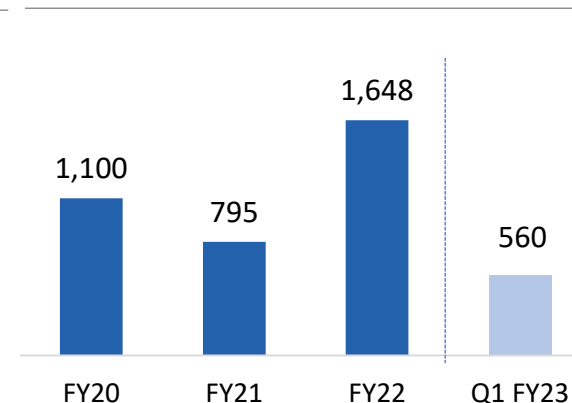
Total Income¹ (₹ Crore)



EBITDA & EBITDA Margin (₹ Crore)

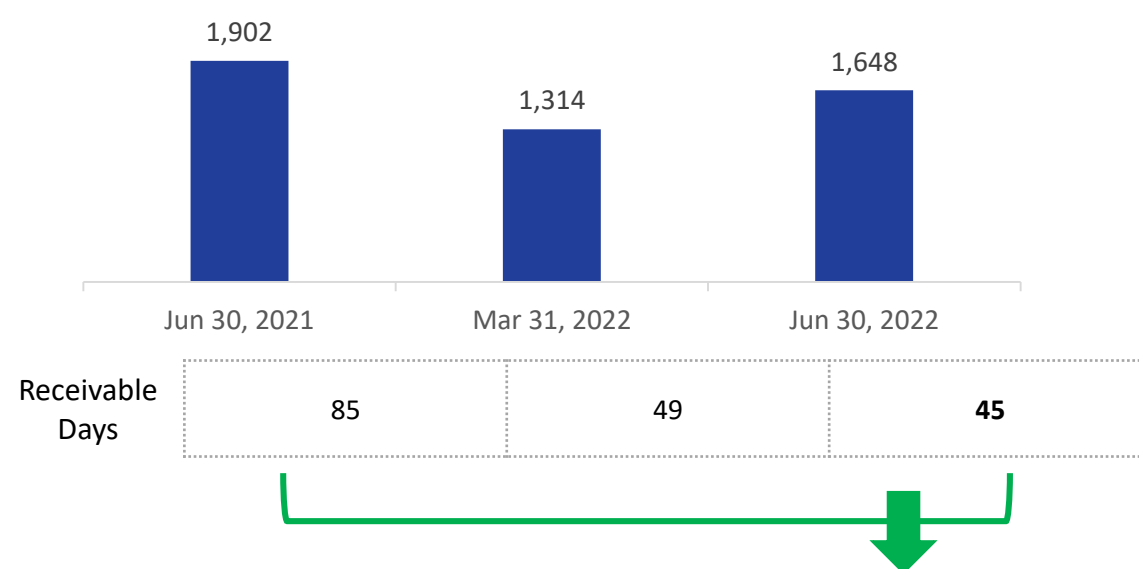


Reported PAT (₹ Crore)



Low Trade Receivables

Consolidated Trade Receivables² (₹ Crore)



- ✓ All plants placed favourably in States' Merit Order Dispatch
 - Further, Hydro plants under 'Must-run status' with no scheduling risk
- ✓ No history of any bad debts from routine long term trade receivables
- ✓ Payment security mechanism in force for power tied under long term PPA with discoms
- ✓ Recovery of late payment surcharge in case of delayed payments from discoms

Best-in class balance sheet & cash flows to support renewable-led growth

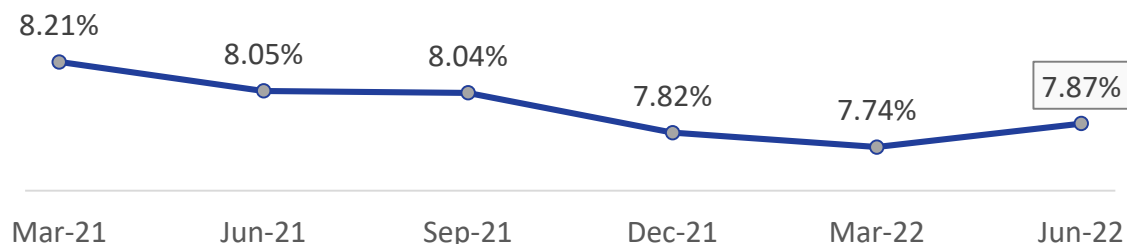
Large balance sheet headroom to pursue growth opportunities

Strong credit metrics :

Figures in ₹ Crore	As on Jun 30, 2022
Networth	16,638
Net Debt	7,720
Net Debt/EBITDA	1.75
Net Debt/Equity	0.46
Wtd. Average Cost of Debt	7.87%

- **Healthy Credit Ratings and access to diverse pools of liquidity**
 - ✓ India Rating & Research: AA (Stable outlook)

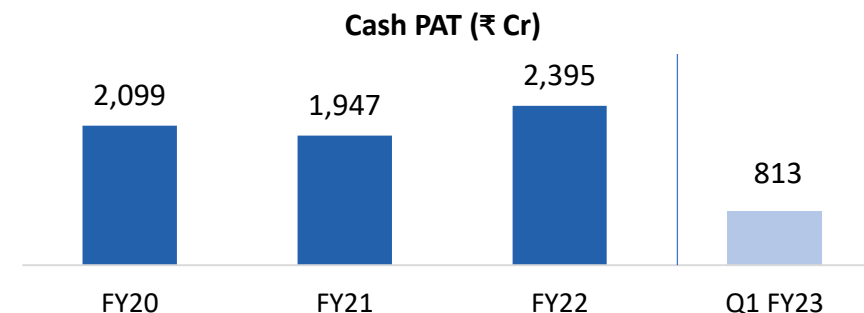
Wt. Average Cost of Debt



Healthy internal accruals to support growth

Operational Portfolio (4.8 GW):

- **Steady operations and robust financial:** Track record of strong yearly cash profits of ~₹2,300 Crores¹



- **Generating healthy CF & mid-teen equity returns**
- 85% of portfolio tied-up under Long Term PPA
 - ✓ Remaining Avg. Life of PPA: ~20 years
 - ✓ Remaining Avg. Life of Assets: ~30 years
- **Strong Liquidity with healthy cash balances²:** ₹1,825 Crore
- **Financial flexibility** enhanced by equity investments:
 - ✓ JSW Steel shares: 7 crore shares held (Value as on Jun 30, 2022: ₹ ~3,954 Crore)

Sustainability at JSW Energy



Sustainability: Framework and Policies

17 Focus Areas with 2030 Targets from 2020 as Base Year

Climate Change:
Committed to being carbon neutral by 2050
Reduce our carbon emissions by more than 50%

Renewable Power:
Enhance the renewable power to 2/3rd of our Total Installed Capacity

Biodiversity:
No Net Loss for Biodiversity

Waste Water:
Zero Liquid Discharge

Waste:
100% Ash (Waste) utilization

Water Resources:
Reduce our water consumption per unit of energy produced by 50%

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

2 Independent Directors	Mr. Sunil Goyal
	Ms. Rupa Devi Singh
1 Executive Director	Mr. Prashant Jain

ESG Ratings – best amongst peers

MSCI : BB

CDP : A- (Leadership Level)

Sustainalytics: 28.9 (Medium Risk)

FTSE4Good Index constituent

Carbon Neutrality by 2050

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Committed to set science based targets to keep global warming to 1.5°C under SBTi

Integrated Reporting since FY19











FY19

FY20

FY21

FY22

Sustainability: Targets and Strategy

SD Targets		FY20 Actuals	FY30 Targets	Improvement	Strategic Initiatives and Approach
 Climate Change	<ul style="list-style-type: none"> GHG Emissions tCO₂e/ MWh 	0.76	 0.304	60%	<ul style="list-style-type: none"> Increased share of renewable energy for deep decarbonization Process efficiency improvements Replacement of condenser tubes with graphene coatings
 Water Security	<ul style="list-style-type: none"> Specific fresh water intake (m³/MWh) 	1.10	 0.591	46%	<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 (%) 	0.070 100	 0.032 100	54% -	<ul style="list-style-type: none"> Integrated Strategy towards efficient waste management Optimizing utilisation of low ash coal
 Air Emissions	Specific process emissions(Kg/MWh) <ul style="list-style-type: none"> PM SOx NOx 	0.16 1.78 1.01	 0.053 0.683 0.373	67% 61% 63%	<ul style="list-style-type: none"> Ensuring ESP (Electrostatic Precipitator) Fields availability Optimising Lime dozing system efficiency Process efficiency improvements
 Biodiversity	<ul style="list-style-type: none"> Biodiversity at our operating sites 	-	 Achieve 'no net loss' of biodiversity		<ul style="list-style-type: none"> Continue to enhance Biodiversity at all our locations and operations to achieve 'no net loss' Increase green cover across operations

Sustainability: Q1 FY23 Performance

Key Highlights



Climate Change

- Increased share of renewable energy for deep decarbonisation
- Generation commenced at Solar project at Vijayanagar
- Installation in progress for Wind Projects at Tuticorin
- Continuous focus on process improvements to reduce GHG



Water Security

- Maintain zero liquid discharge across operations
- Optimising utilisation of rain water harvesting system
- Reuse of treated effluent of Sewage Treatment Plan for horticulture



Waste

- Set-up of a 45kt Silo for ash export from Ratnagiri plant. Trials & testing underway
- 100% Ash utilization at all plants through tie-ups with cement & other industrial businesses



Air Emissions

- Ensuring ESP (Electrostatic Precipitator) Fields availability
- Process efficiency improvements

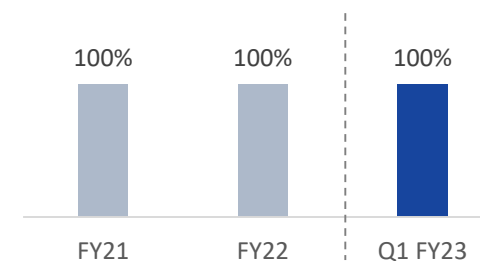


Biodiversity

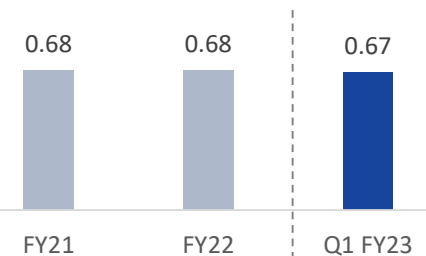
- Mango plantations in 25 acre area around Ratnagiri plant
- Eco-System study underway at Barmer by Confederation of Indian Industry (CII) to aid Bio-diversity management

Performance

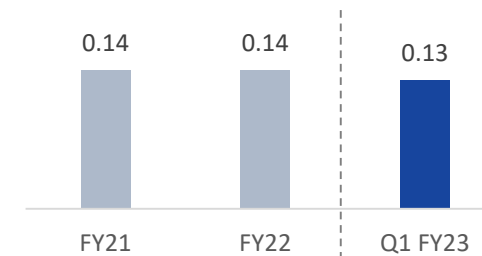
Ash Utilisation (%)



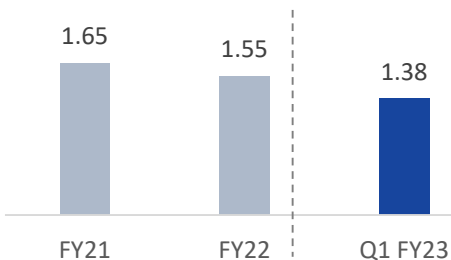
CO2 intensity (tCO2e/MWh)



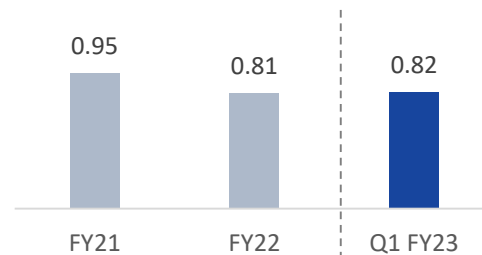
PM Emissions (kg/MWh)



SOx Emissions (kg/MWh)



NOx Emissions (kg/MWh)

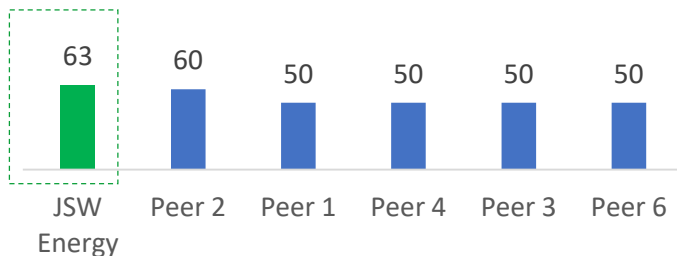


Advantage JSW: Superior ESG Profile

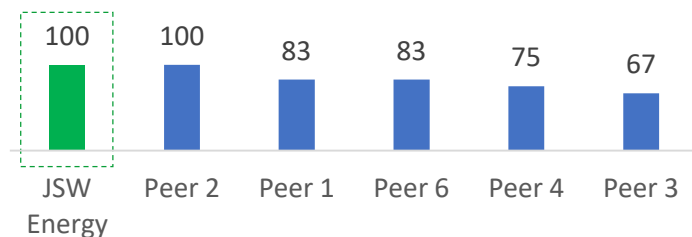


Board & Governance

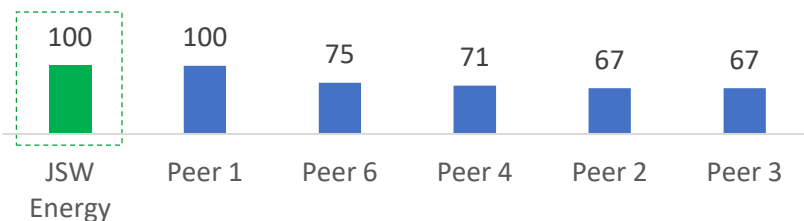
% Board Independent



% Audit Committee Independent

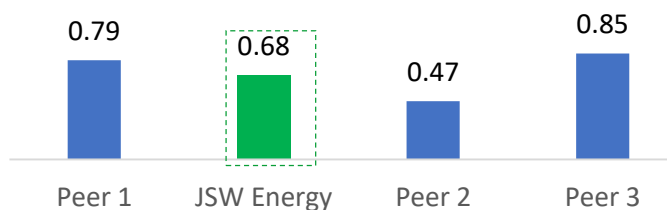


% Nomination & Remuneration Committee Independent

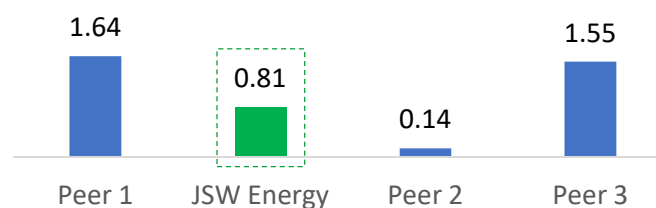


Air Emissions

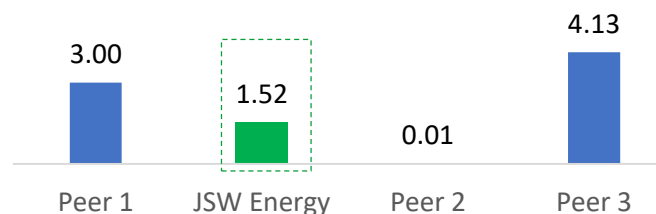
CO2 Intensity (t CO2e/MWh)



Specific NOx Emissions(Kg/MWh)

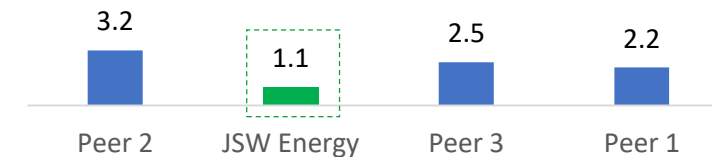


Specific SOx Emissions(Kg/MWh)



Water & Waste Management

Specific Fresh Water Consumption (m3/MWh)



Ash Utilisation (%)



ESG Ratings*



JSW Energy

Peer 6	A-
Peer 1	B
Peer 3	C
Peer 5	C
Peer 2	D
Peer 4	F



JSW Energy

Peer 6	BB
Peer 1	A
Peer 3	BBB
Peer 5	CCC
Peer 2	CCC

Sustainability: Initiatives and Disclosures



Ratnagiri

- Plantation drive carried near the vicinity of the facility wherein 200 mango saplings were planted.
- Around 157 plants of different variety planted near the township.



Hydro- Sholtu

- Collaborative effort of employees at JSW Hydro and Staff of Forest department –Plantation of different variety of pine saplings at a dumping site.
- These plantations should help in binding and retaining soil & slopes.



Ratnagiri

- Water utilized from Rain water harvesting stands at 30,134 m3.
- After augmentation of the system, the per day lifting of rain water increased from 2000 m3 to 3000 m3



Vijayanagar

- Green Cover development in Vijayanagar plant
- 16,247 MT Ash Re-used
- 99.451 m3 of water re-cycled and re-used in the process

Comprehensive ESG Data profile with ~300 factors across 15 sustainability frameworks

[JSW Energy](#)

[JSW Hydro Energy](#)

Sustainability: Empowering Our Communities



Sports Promotion & Development

- Organized a state-level boxing championship in collaboration with Kinnaur Boxing Association in Himachal Pradesh. 100 boxers from all over Himachal Pradesh participated.
- Basketball court is being constructed at Barmer to enable the youth to learn/improve their game. PCC work & fencing work is completed.



Community Development & Support

- Barmer: Solar powered lights have been installed in 12 villages. 38 tons of fodder provided to approximately 1600 unattended cattle in four villages.
- Himachal Pradesh: Meetings were conducted with heads of direct influence zone to effectively implement the CSR activities.



Skill Development & Livelihoods

- Training is provided under the 'Charkha' initiative wherein one-year training on handloom weaving is provided to women in Village Urni and Kuppa (Himachal Pradesh).
- This enables them to start their own enterprise from home.



Assuring Water Availability

- Piped water supply scheme is made available to the households in water scarce region of Barmer to reduce the drudgery of the female population in arranging the water from far and difficult sources.
- This scheme currently covers 450 households in the region.



[Health & Nutrition](#)



[Water & Environment](#)



[Waste Management](#)



[Agri-livelihoods](#)



[Education](#)



[Women's BPO & Livelihoods](#)



[Skill Enhancement](#)



[Art, Culture & Heritage](#)



[Sports](#)

Continuing our Health & Safety Excellence Journey

All Figures are for Q1 FY23



Zero severe injuries/fatalities



77% of contractors covered by JSW CARES audit.

5 Star rating achieved by 7 contractors & 4 Star rating achieved by 2 contractors in a stringent Internal Safety Assessment



21,000+ cumulative safety observations

Influencing 'positive safety behavior' of our workforce by reporting smallest of the safety considerations thereby avoiding any major / minor incident.



Continuous strengthening of safety processes: 15 high risks processes/systems completed; addressing next 5 high risks processes at all plants



Prestigious Safety Awards & Recognition

- Grow Care Gold Award: Karcham Wangtoo & BASPA II plants recognized for Occupational Health & Safety
- Barmer Plant accredited with the 'Prashansa Patra' from National Safety Council for Occupational Health & Safety

Awards & Recognitions



Strong Board Oversight and Leadership



Mr. Sajjan Jindal
Chairman & Managing Director



Mr. Prashant Jain
Joint Managing Director & CEO



Mr. Pritesh Vinay
Director (Finance)



Mr. Rajeev Sharma
Independent Director



Mr. Munesh Khanna
Independent Director



Ms. Rupa Devi Singh
Independent Director



Mr. Sunil Goyal
Independent Director



Mr. Desh Deepak Verma
Independent Director



Audit Committee



Compensation & nomination & remuneration Committee



Risk management Committee



Stakeholder's relationship Committee



Corporate social responsibility Committee



Sustainability Committee



Permanent invitees to Sustainability Committee

- ✓ Majority Independent Board: 5/8 Directors are Independent
- ✓ Fully Independent Audit and Remuneration Committees

Our Core Principles



Accountability



Social Responsibility



Transparency



Environment



Integrity



Regulatory Compliance

Risk Mitigation



Adequately addressing key risks and concerns (1/2)

Key Risks/Concerns	Favourable Policy Support and Market Interventions	Mitigation Strategy by JSW Energy
Demand risk (Clearing of PPA Backlogs)	<ul style="list-style-type: none"> Well established central agencies (SECI, NTPC) for managing PPAs Discoms/offtakers entering into new renewable long-term PPAs at commercially attractive tariff given pick-up in economic activity resulting in strong spot electricity prices Renewable Power Obligation for RE and Hydro Projects, energy storage obligations also introduced thereby promoting energy storage projects 	<ul style="list-style-type: none"> Existing portfolio: 85 % PPA signed which forms about 95% of EBITDA U/C portfolio: All renewable projects PPA signed Mix of Discoms and C&I customer base Targeting new areas of demand through Green Hydrogen and Energy storage
Receivable risk	<ul style="list-style-type: none"> Payment security through mandatory provision of LCs before power off-take Late payment surcharge fees are charged for delays US\$41bn reforms based, results linked scheme for Discoms Defined framework for recovery of costs due to 'Change in Law' 	<ul style="list-style-type: none"> All plants placed favorably in States' Merit Order Dispatch Portfolio diversified across multiple off-takers No history of any bad debts from routine LT trade receivables Recovery of late payment surcharge in case of delayed payments from discoms
Domestic industry for capacity addition	<ul style="list-style-type: none"> ~\$600mm production linked incentive scheme for high efficiency PV modules ~\$2,400mm scheme for ACC batteries 	<ul style="list-style-type: none"> Technology agnostic approach To benefit from domestic capacity addition

Adequately addressing key risks and concerns (2/2)

Key Risks/Concerns	Favourable Policy Support and Market Interventions	Mitigation Strategy by JSW Energy
Offtake Risk (revenue/volume)	<ul style="list-style-type: none"> Must-run status for renewable; Rule notified to provide regulatory support towards 'Must-run' status - Electricity (Promotion of generation from renewable sources of energy by addressing Must Run and other matters) Rules, 2021 	<ul style="list-style-type: none"> Hydro plants under 'Must-run status' with no scheduling risk ~98% of LTPPA under two-part tariff; Plant Availability maintained above normative across locations to recover fixed charge; fluctuations in fuel cost and forex are completely pass through
Soundness of Auction framework	<ul style="list-style-type: none"> Efficient and Transparent competitive bidding process Innovative models emerging: Hybrid solar, Renewable-plus-storage , Round-the-clock (RTC) renewable power 	<ul style="list-style-type: none"> Highest ever single bid capacity secured under any of the Indian renewable auction – 810 MW blended wind capacity awarded under SECI IX Participating in RTC bids
Grid Infrastructure capability	<ul style="list-style-type: none"> Development of dedicated Green Energy Corridors for evacuating RE capacity 	<ul style="list-style-type: none"> Pump Storage and battery storage solutions offer opportunity to address grid balancing issues

JSW Energy : Key Highlights



Proven Execution Excellence

- ✓ Superior project execution skills: Projects set-up in lowest cost & time
- ✓ Differentiated business strategy for growth to 20 GW, entirely by Renewable
- ✓ Foraying in New Energy Platforms: Green Hydrogen, Energy Storage, Energy Products & Services



Focus on Sustainability

- ✓ Strong Focus on ESG – Leadership band with ‘A-’ score in the 2021 CDP Climate Change assessment
- ✓ Amongst the Highest rated power generation company in India by various independent ESG rating agencies
- ✓ To be Carbon Neutral by 2050; Committed to set science based emission reduction targets (SBTi)



Efficient O&M

- ✓ Sound operating efficiency characterized by one of the lowest O&M costs in the sector
- ✓ Global best practices & recognition in Safety: JSWEBL awarded ‘SWORD OF HONOUR’ by British Safety Council



Steady EBITDA and Cash accruals

- ✓ 85% 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 lowest levels in DSO terms.
- ✓ Favorable placement in Merit Order Despatch & diversified off-takers mitigate Receivable risk



Strong Balance Sheet

- ✓ Amongst the Strongest Balance Sheet in the sector: 1.75x Net Debt/EBITDA; 0.46x Net Debt/Equity
- ✓ Healthy debt metrics to be maintained while pursuing value accretive growth
- ✓ A healthy cash balance of ₹1,825 Cr and financial flexibility with JSW Steel equity shareholding



Low Cost of Funding

- ✓ Proactive Debt Management: Weighted average cost of debt at 7.87%
- ✓ Raised a US\$ 707 million green bond to refinance debt for hydro entity in May'21



Investor Relations Contact:

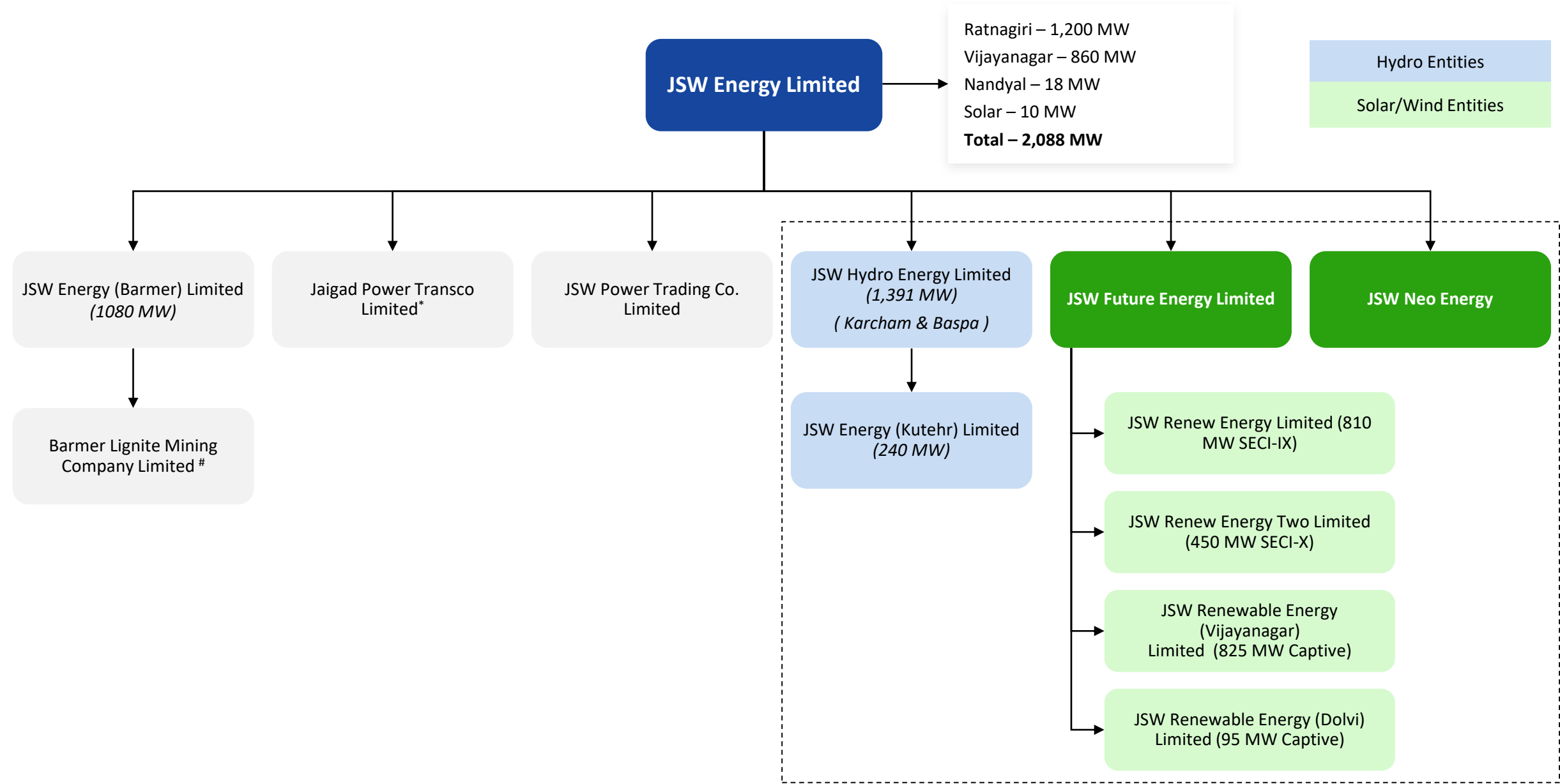
ir.jswenergy@jsw.in

ESG Data Profile: [Link](#)

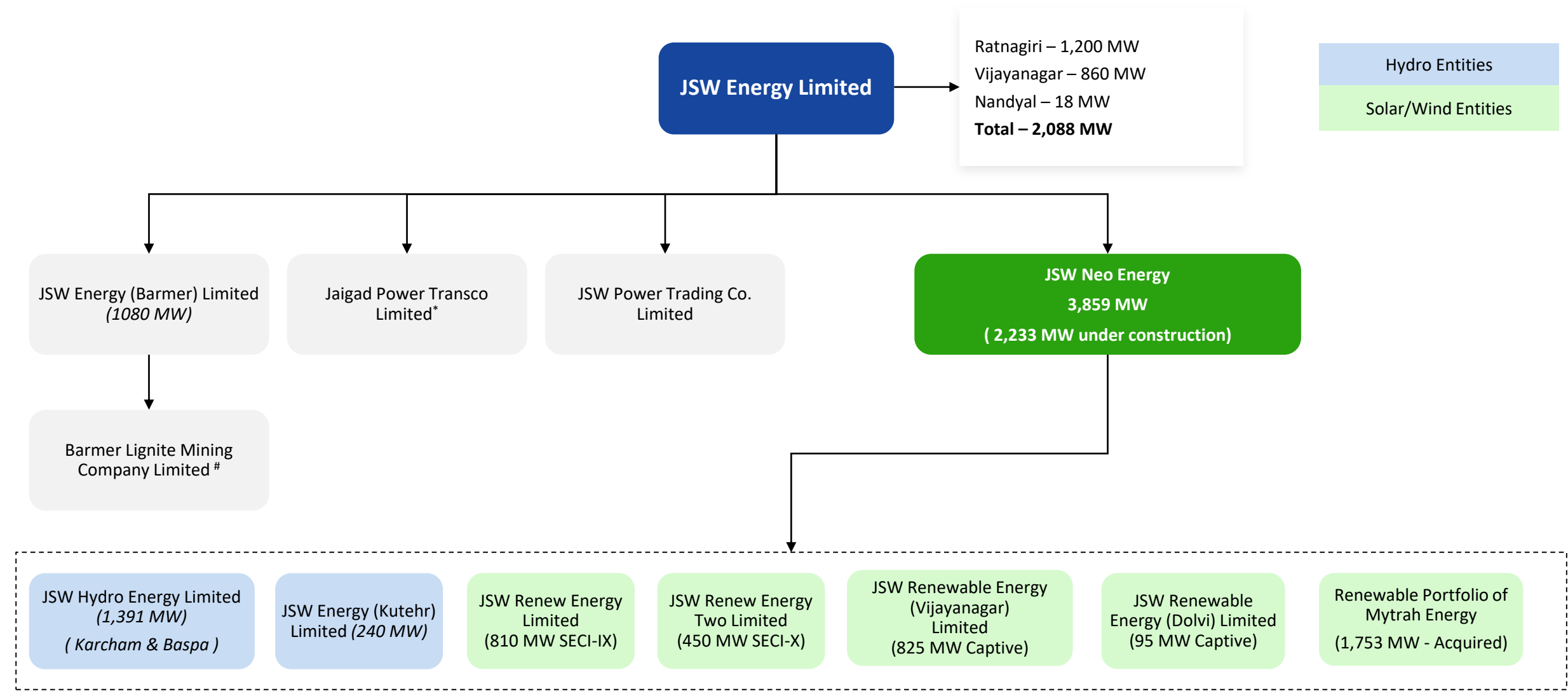
Annexures



Broad Corporate Structure : Existing



Broad Corporate Structure : Post re-organisation



All subsidiaries shown are WOS except the following - * JPTL is a 74:26 JV between JSWEL and Maharashtra State Electricity Transmission Company Limited (MSETCL) # BLMCL is a 51:49 JV between Rajasthan State Mines and Minerals Limited (RSMML) and JSWE(B)L

Re-organisation of Green and Grey Business

To facilitate growth and unlock value for the shareholders, the renewable energy business will be housed under 'JSW Neo Energy Limited', a wholly owned subsidiary of the Company, while the thermal business will continue to be housed in the Company

The following steps are being undertaken to effectuate the re-organisation (in no particular order / sequential manner):	Status
1. Transfer of 100% of the equity shares held by JSW Future Energy Limited in (i) JSW Renew Energy (Kar) Limited and (ii) JSW Renewable Energy (Dolvi) Limited, to JSW Neo Energy Limited	Completed
2. Merger of JSW Future Energy Limited with JSW Neo Energy Limited under a Scheme of Amalgamation to be approved by NCLT, wherein all the assets and liabilities of JSW Future Energy Limited will be transferred to JSW Neo Energy Limited	In-Progress
3. Transfer of 100% of the equity shares held by JSW Hydro Energy Limited in JSW Energy (Kutehr) Limited to JSW Neo Energy Limited	Completed
4. Transfer of 100% of the equity shares held by the Company in JSW Hydro Energy Limited to JSW Neo Energy Limited	Completed

JSW Neo Energy – Green Energy Vehicle of JSW Energy

JSW Energy Limited

JSW Neo Energy *

3,859 MW

(2,233 MW under construction)

Hydro Entities

Solar/Wind Entities

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
(450 MW SECI-X)

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

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

Renewable Portfolio of
Mytrah Energy
(1,753 MW - Acquired)

5.9 GW

Diversified Asset Portfolio
(100% Renewable)

=

1.6 GW

Installed Capacity
Renewable – 1,626 MW

+

1.8 GW

Acquisition of Renewable
Portfolio of Mytrah Energy

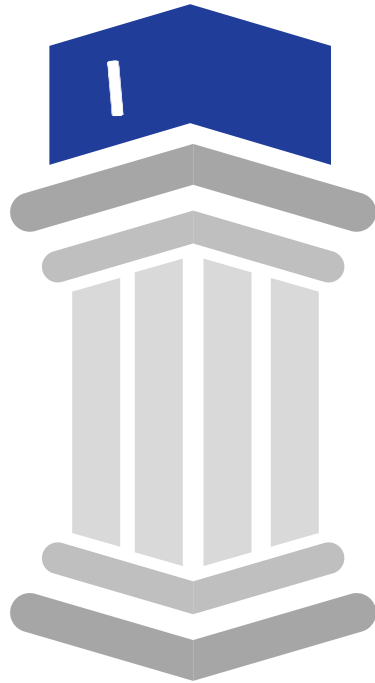
+

2.5 GW

Entirely Renewable
Under-Construction – 2,233 MW
LoA Received (SECI XII) – 300MW

* Corporate structure post Acquisition and restructuring.
All subsidiaries shown are wholly owned subsidiaries

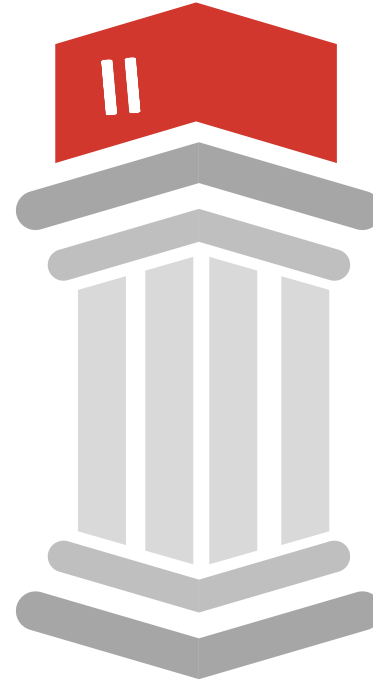
Value Accretive Business Model



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



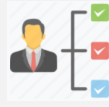
Group's project execution excellence

- Fast execution (in spite of Covid and supply chain issues) while ensuring all safety guidelines

Conservative assumptions for business model



Prudent selection of growth opportunities to target a niche segment of market offering healthy returns – **Mid teen IRRs**



High quality offtakers - Captive PPAs with JSW Group companies (strong credit ratings) at arm's length pricing



Modular nature of commissioning of projects; potential for early onset of revenues and earnings



Bidding with prudent assumptions and approach backed by strong data backup

- ✓ Bidding based on **P90 generation assumption**
- ✓ Reasonable Interest rate assumptions
- ✓ Targeting **mid-teen post-tax equity IRRs**

Project Construction and Land Acquisition

- De-scoping of EPC packages to have competitive edge
- Synergies with group businesses (steel, cement, paints, etc.) for better material availability
- Systematic approach of deploying in-house experienced land acquisition team in all resource-rich states
- Deployed experienced legal teams for title search and execution of lease deeds; dedicated team for securing Right-of-Way (RoW)

Power Evacuation

- Strategic selection of ISTS substations for connectivity with high capacity margins to facilitate future expansions
- Identification of land parcel near to substation in order to reduce transmission line cost
- Effective due diligence & route surveys for risk mitigation
- Futuristic planning & designing to optimize use of evacuation infrastructure



Long Term PPA ensuring steady cashflow



Typical timelines for PPA signing & Tariff adoptions

- ✓ PPA signing – 90 days from LoA issuance
- ✓ Tariff Adoption – 120 days from the Effective date of the PPA

JSW approach:

- ✓ Proactive approach **to get the PPA/PSA executed and tariff adoption** instead of other competitors to get time extension on above reasons.
- ✓ Faster resolution of proposed changes in PPA in consultation with SECI & Discoms
- ✓ Quick submission of requisite information and performance bank guarantees to cut short timelines
- ✓ Continue follow up with SECI, Discoms & Regulators to fast track tariff adoption process



DNA: Group's project execution excellence

Achieved best in the industry project commissioning timeline for solar projects



- ✓ Commenced operations at 225 MW solar power plant at Vijayanagar in Apr'22. The plant is installed on approximately 1000 acres' land.



- ✓ Construction completed in a record time of less than 12 months despite several headwinds like Covid-19 related disruptions, elevated commodity prices, and global supply chain outages.
- ✓ Project executed in a safe manner complying to all Environment, Health, and Safety norms of the Group and without any Loss Time Injury.



- ✓ 25-year PPA under group captive scheme, provides long term and predictable cash flows.

- Achieved commissioning timeline for 225 MW solar project
- **25% faster compared to peers despite Covid related challenges**

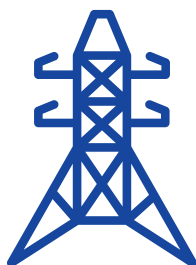
Kutehr project completion expected well before scheduled timelines



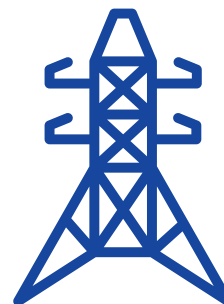
- **75% tunnelling (16km) tunnelling work completed at the end of Q1 FY 23**
- **Expected to be completed by Sept 24 well ahead of scheduled timeline**

Growth Framework leading to industry-leading returns

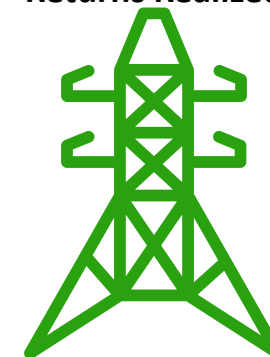
Single digit to lower
teen IRR%



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

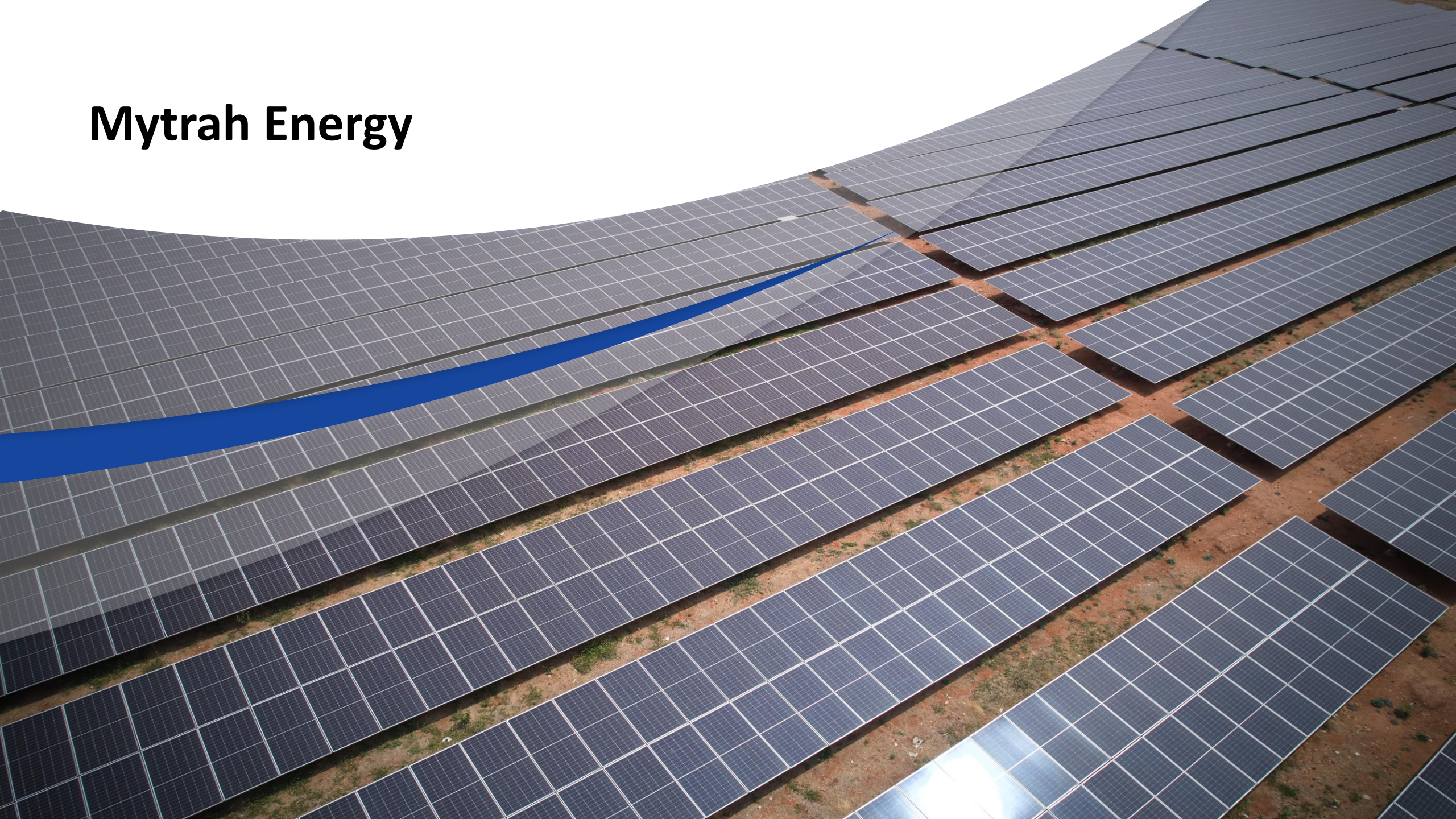
**Potential Upside
Levers Post COD**

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

**Realized
Returns**

Enhancement
In Returns Realized

Mytrah Energy



Acquisition of 100% of Mytrah Energy RE Assets

- JSW Neo Energy* has executed a binding agreement with Mytrah Energy India Private Limited (MEIPL) for acquisition of it's 18 SPVs housing RE assets**
- Operating Renewable Energy Portfolio of 1.75 GW
- Structure: The assets are held by 17 SPVs
 - ✓ 1,331 MW of Wind portfolio by 10 SPVs
 - ✓ 422 MW of Solar portfolio by 7 SPVs

- Expect mid-teen Equity IRR– with focused interventions
- JSW to drive capital and operational efficiencies. Major transformation of the business via asset optimization planned over next 12 to 18 months
- MEIPL team brings more than a decade of deep development and operation experience of RE projects



422 MW




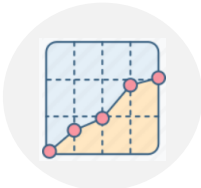
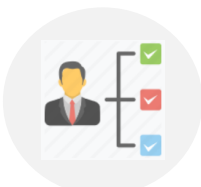

1,331 MW



Fully operational Portfolio

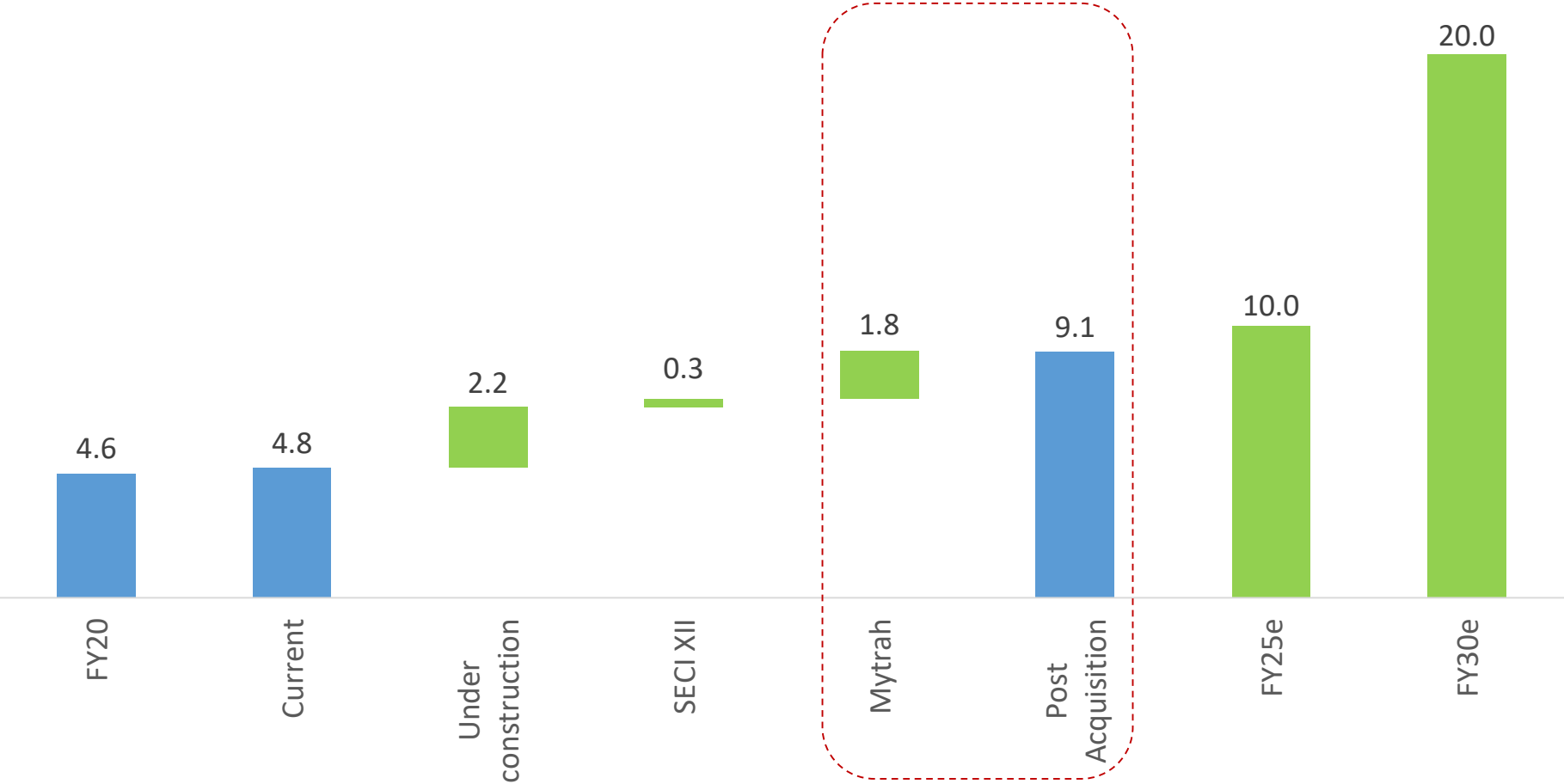
A strategic deal providing long term sustainable value creation and rapid scaling of the RE portfolio

Acquisition Rationale (1/3)

Bolt-On Capacity Growth		<p>Offers a fillip to JSW Energy's renewable-led growth objectives and with platform capacity enhanced to 9.1 GW, supports achievement of the near-term target of 10 GW much ahead of the envisaged timeline of FY25.</p>
Accelerated Clean Energy Portfolio		<p>A greener portfolio with the share of renewables in JSW Energy platform, increasing to 65% from 57% previously (including the under-construction projects and LoA received under SECI XII auctions)</p>
Enhanced Knowledge & Expertise		<p>Access to a pool of resource and domain expertise enabling us to propel towards our medium term objective of 20GW by 2030.</p>
Strong Cash Flow Profile		<p>Long term PPA tie up having average remaining life of ~18 years with attractive tariffs, high cash returns.</p>
Propel the growth momentum even in a challenging scaling environment		

Acquisition Rationale (2/3)

Achieving 10GW capacity target before 2025 : ahead of timelines

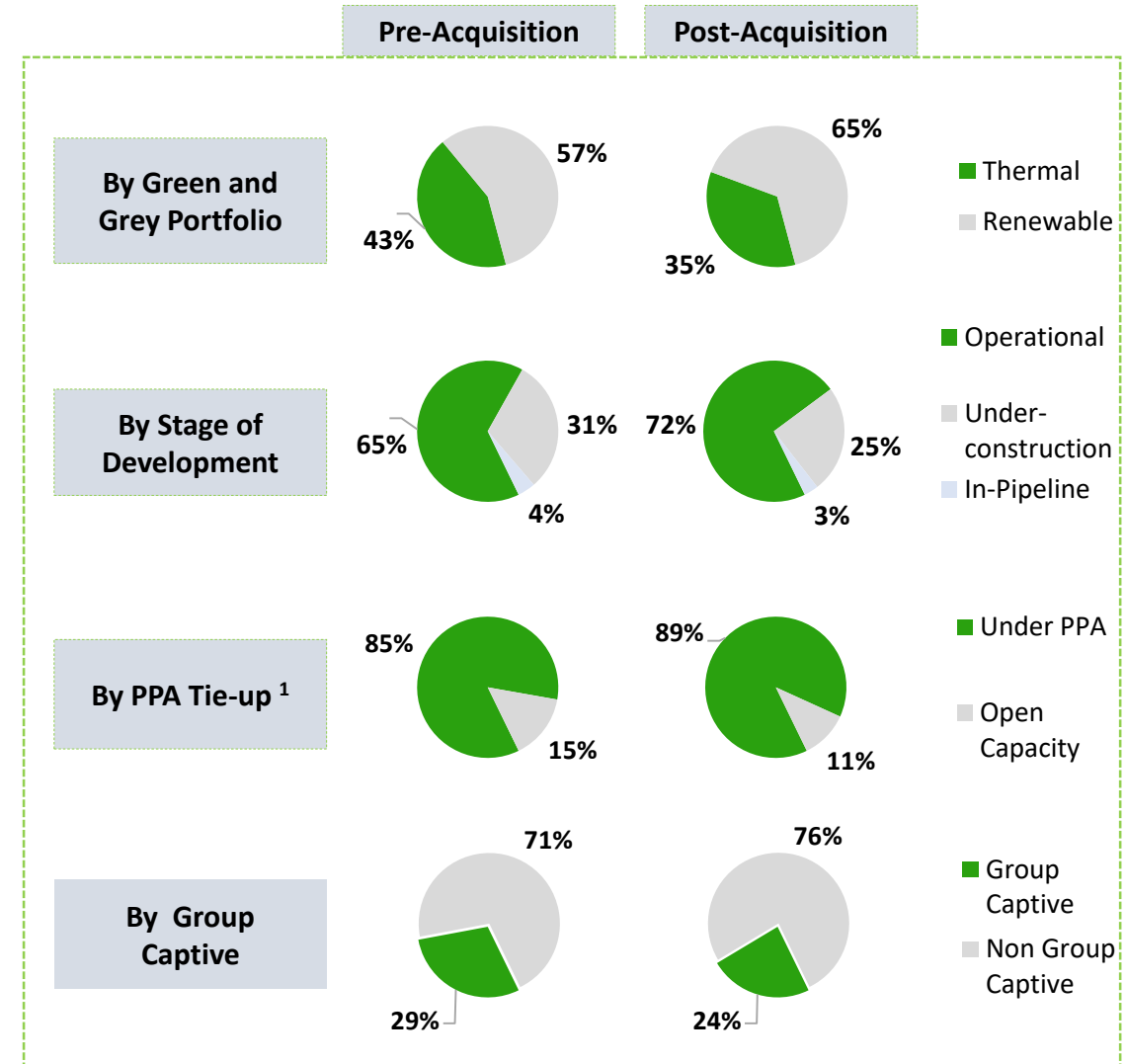
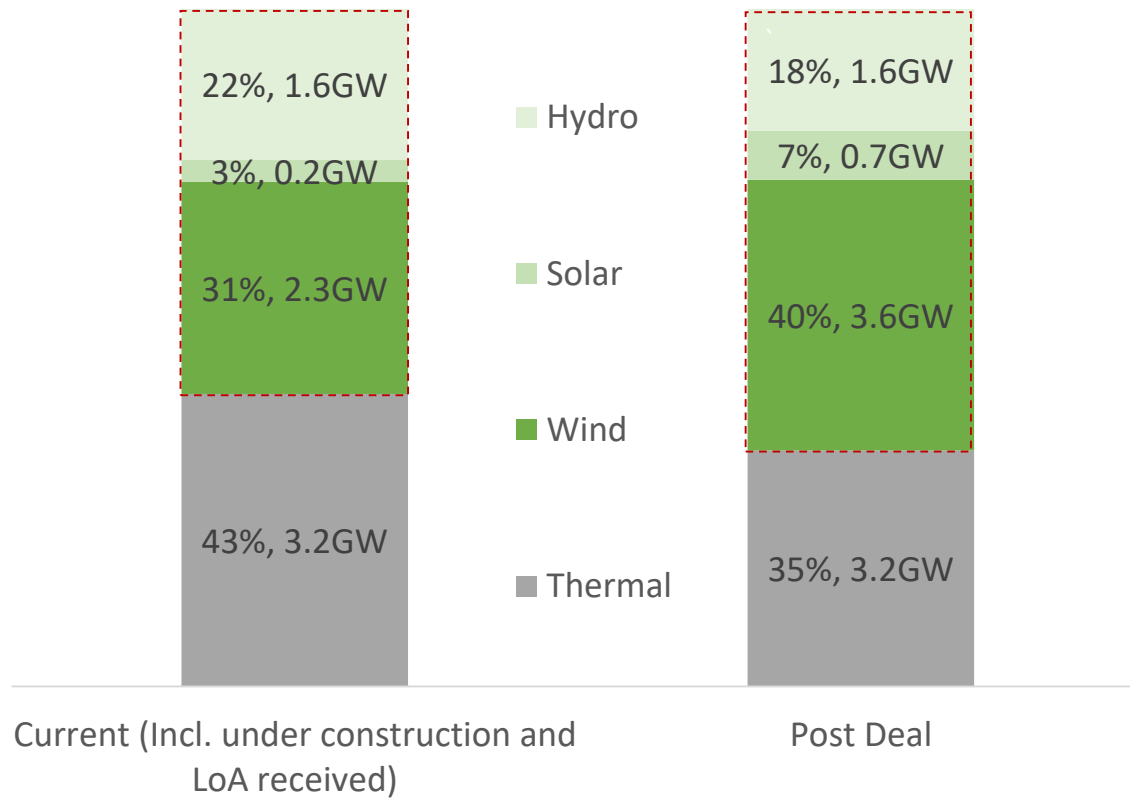


- Operational:**
- Thermal – 3,158 MW
 - Wind – 1,331 MW
 - Hydro - 1391 MW
 - Solar - 657 MW
- Under-Construction:**
- Wind – 1,993 MW
 - Hydro - 240 MW
 - Hybrid *- 300 MW

* SECI XII : LOA won : In pipeline

Acquisition Rationale (3/3)

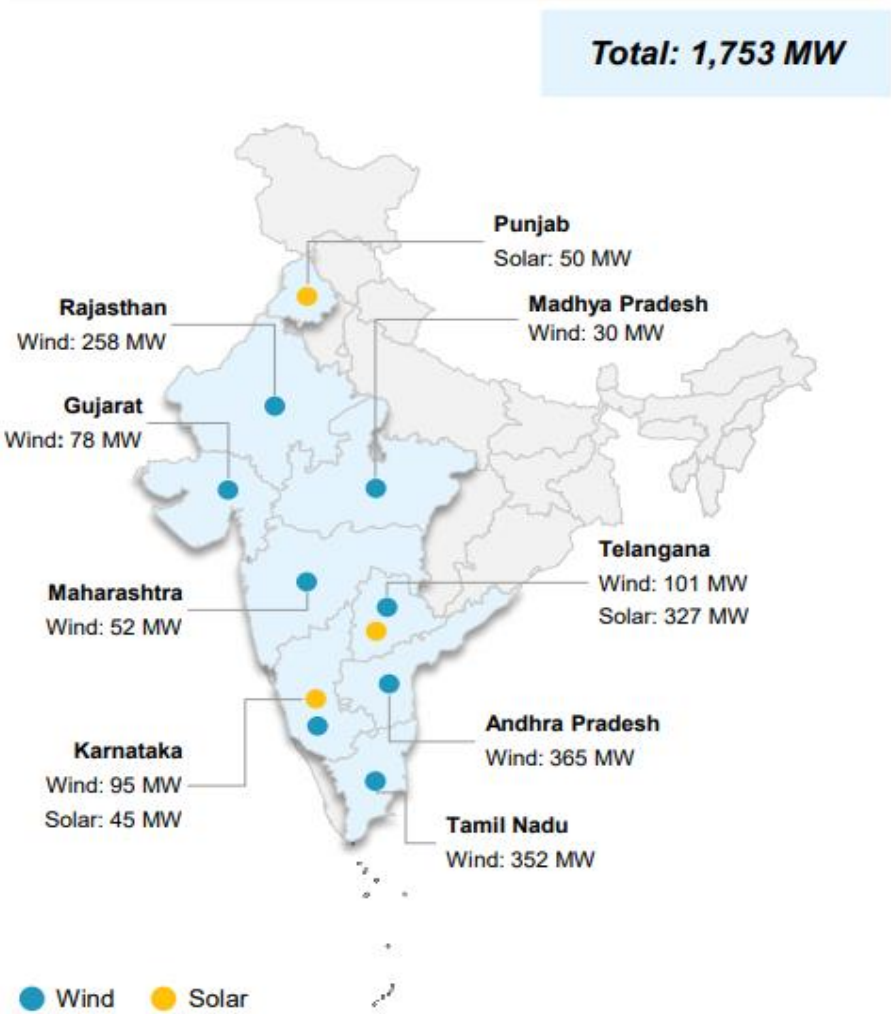
Faster capacity growth, reducing Execution Risk: attractive on Build vs Buy



- 1. Based on current operational capacity of 4.8 GW

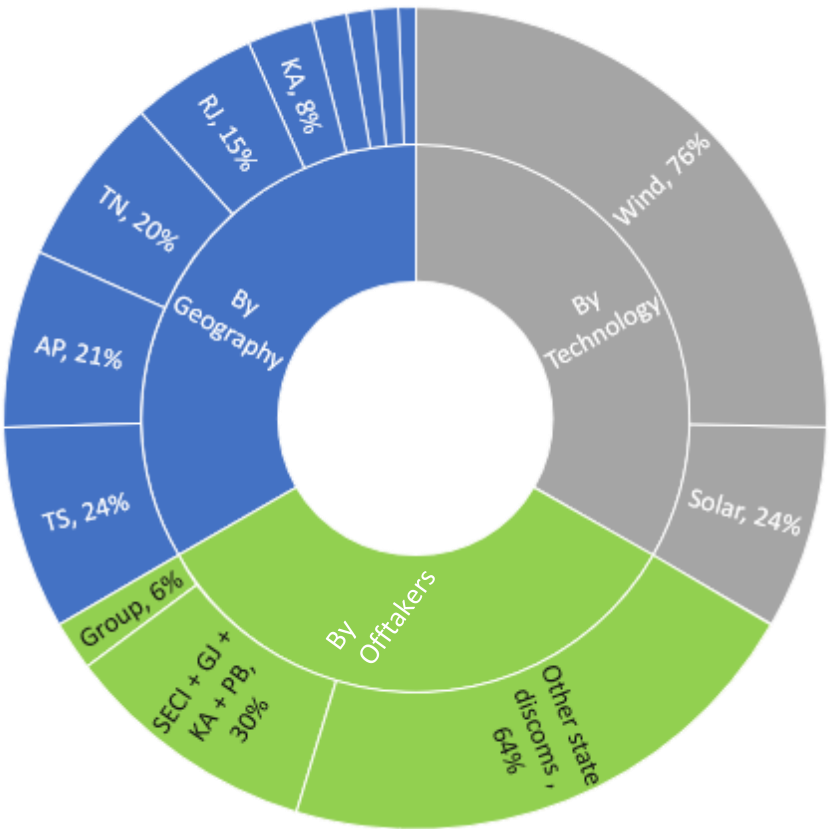
Mytrah RE Portfolio Overview

Geographical Spread of Mytrah Portfolio



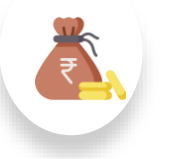



Map for illustrative purposes, showing project locations

Mytrah Portfolio Overview



Asset Optimisation Plan and JSW Energy Advantage

Significant EBITDA improvement through capex intervention		Significant improvement in EBITDA with active intervention and asset optimization plan over the next 12-24 months
O&M Reduction		Portfolio is operating below P90 performance due to various controllable operational issues - Optimisation of O&M practices over next 12-18 months
Financial Strength		Refinancing of existing high interest cost debt would result into significant improvement in PBT; lack of adequate working capital tie-up impacting operation of plants
Receivables / Cash flow Management		365 MW of portfolio impacted by exposure to Andhra Pradesh Discom Receivable cycle of more than 6 months in projects exposed to Telangana Discoms - 101 MW wind and 327 MW Solar.
Optimisation and Intervention Plans to enhance returns from the Asset		

Transaction Consideration – Attractive Valuation

Particulars	Amount in ₹ Cr
Enterprise Value excluding Net Working Capital (EV) *	11,934
Net Working Capital ** (B)	1,403
Enterprise Value including Net Working Capital (A-B)	10,531
Normalized EBITDA #	~1,650
Normalized EV / EBITDA*	~6.4x

* Net of working capital

- Portfolio of 1,753 MW and normalised EBITDA of ~ ₹1650 Crores: ~ ₹940 Crores per GW
- New RE project building of same capacity will be much more costly and time consuming, with lower cash returns