



Forward Looking and Cautionary Statement



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Overview

Growth Plans & Strategy

Sustainability

Appendix

JSW Group – Overview

- ✓ India's leading integrated steel producer
- ✓ Installed crude steel capacity of 26 mtpa, growing to 36 mtpa
- ✓ Market Cap: ~USD 21.7 Bn



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



- ✓ 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



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



**USD 13 Bn¹ Group
Amongst India's
leading
conglomerates**



- ✓ **Power producer with 7 GW generation portfolio (Hydro, Renewable and Thermal)**
- ✓ **20 GW Target (85% Renewable) by 2030**
- ✓ **Market Cap: ~USD 6.8 Bn**



- ✓ India's leading Green cement company
- ✓ Current capacity of 14mtpa, with a medium term target of 25mtpa
- ✓ Product range includes PSC, GGBS, Concrete & Construction Chemicals

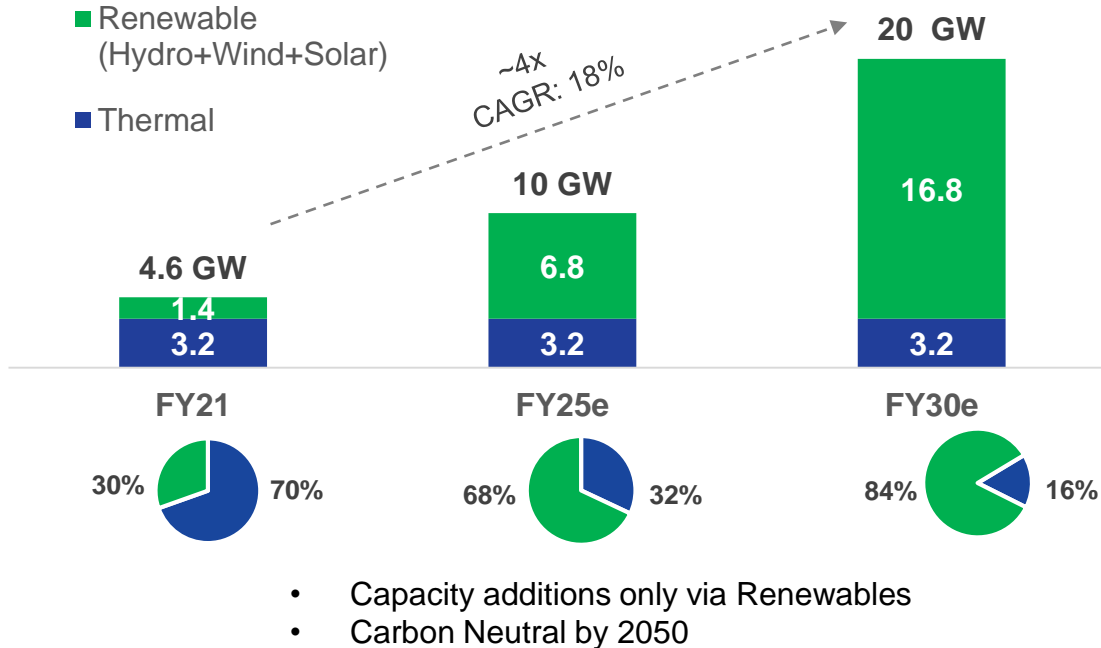


- ✓ Early-stage, tech-focused, VC fund
- ✓ Portfolio: Purple, IndusOS, LimeTray, Homelane



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

Transforming to ~70% Renewable by FY25 and ~85% by FY30



Diversified Asset Portfolio (7 GW : 55% Renewable)

4.6 GW
Installed
30% Renewable

2.5 GW
Under-construction
100% Renewable

Re-organizing business into Grey and Green Businesses

Plant	Capacity (MW)	Segment	Status
Grey Business			
	3,158		
Ratnagiri	1,200	Thermal	Operational
Barmer	1,080	Thermal	Operational
Vijayanagar	860	Thermal	Operational
Nandyal	18	Thermal	Operational
Green Business			
	3,859		
Karcham Wangtoo	1,091 ¹	Hydro	Operational
Baspa II	300	Hydro	Operational
Solar	10	Solar	Operational
Group Captive – JSW Steel	225	Solar	Near Commissioning
	733	Wind	Under-Construction
SECI – IX	810	Wind	Under-Construction
SECI - X	450	Wind	Under-Construction
Kutehr	240	Hydro	Under-Construction

Capitalizing on Opportunities in New Energy Growth Platforms

- ✓ Green Hydrogen
- ✓ Energy Storage:
 - Hydro Pumped
 - Battery Energy
- ✓ Energy products & services

Re-organisation of Green and Grey Business*

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/ \$962mn²

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/ \$740mn²

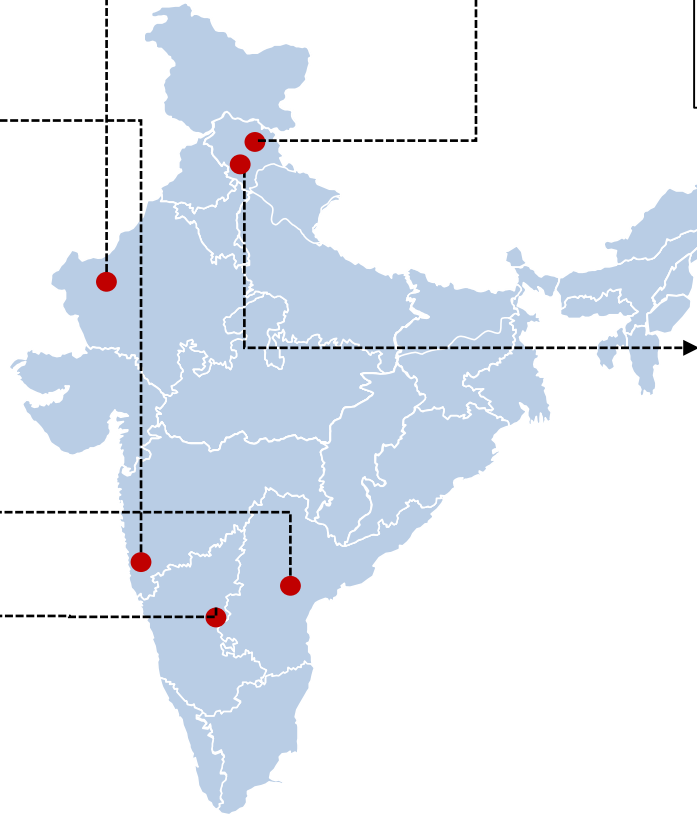
Nandyal: 18 MW

- 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/ \$416mn²

4.6 GW Installed	2.5 GW Under-Construction
30% Renewable	100% Renewable
70% Thermal	



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/\$1,245mn²

Solar: 10 MW

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

Kutehr: 240 MW (Under - Construction)

- **Configuration:** 3x80MW
- **Fuel Source:** Hydro Power Plant
- **Power Offtake:** PPA with Haryana under finalization

Renewable : 2,218 MW (Under - Construction)

- 810 MW, Wind: SECI IX – PPA Signed
- 450 MW, Wind: SECI X – PPA Signed
- 733 MW Wind, 225 MW Solar : JSW Steel – PPA Signed

Green - 3859 MW (55%)
Grey -3158 MW (45%)

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

*Currently under progress
 Long term FSA with BLMCL for supply of lignite from its captive mines (2)) USD/ INR = 74.5
 (3) Denotes start of first unit in respective calendar year; TPP – Thermal Power Plant
 (4) Current approved operational capacity at 1,045 MW. CEA approval received for uprating from 1,000 MW to 1,091 MW, in a phased manner over CY21 and CY22

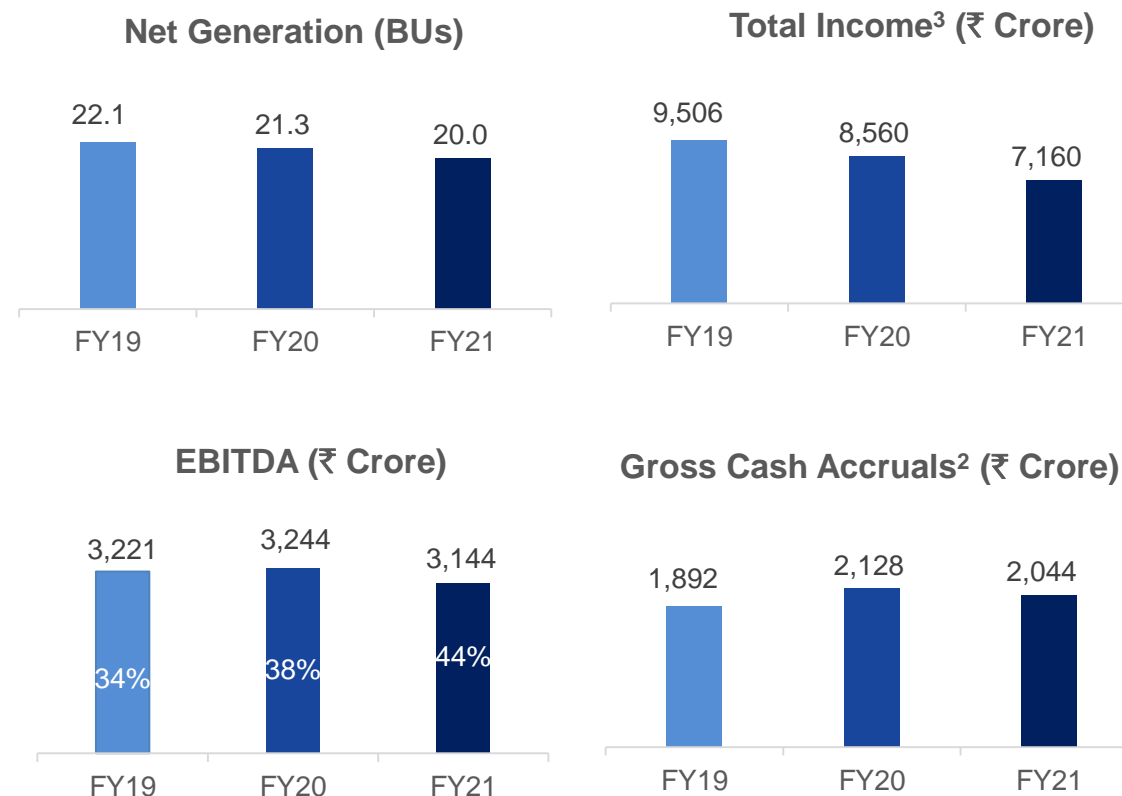
Healthy Operations and Financials

86% Capacity under LT PPA ¹	~95% EBITDA contribution from LT
20 BUs Net Generation	₹ 2,004 Crore Gross Cash Accruals ²

Figures are for FY21

- ✓ **Stable operations despite Covid pandemic impact**
- ✓ **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)
- ✓ **Steady EBITDA and Cash Profit Generation**
- ✓ **One of the lowest O&M cost in the sector**
- ✓ **Diversified off-takers**
 - All plants placed favorably in Merit Order Despatch
 - Hydro projects under 'must-run' status

Business model resilient with steady cashflow generation despite several sectoral headwinds



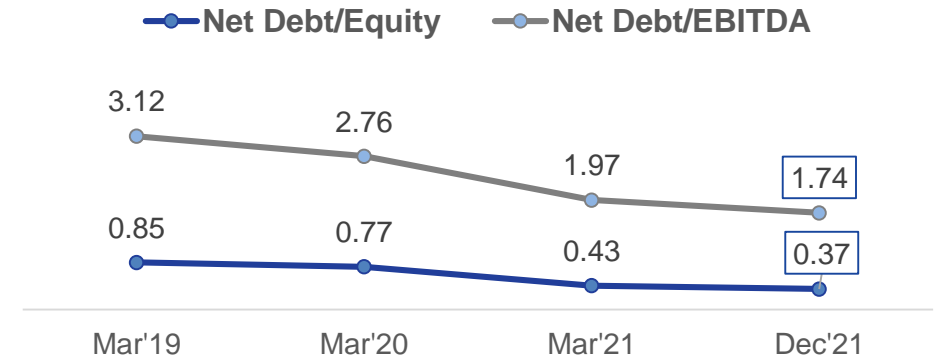
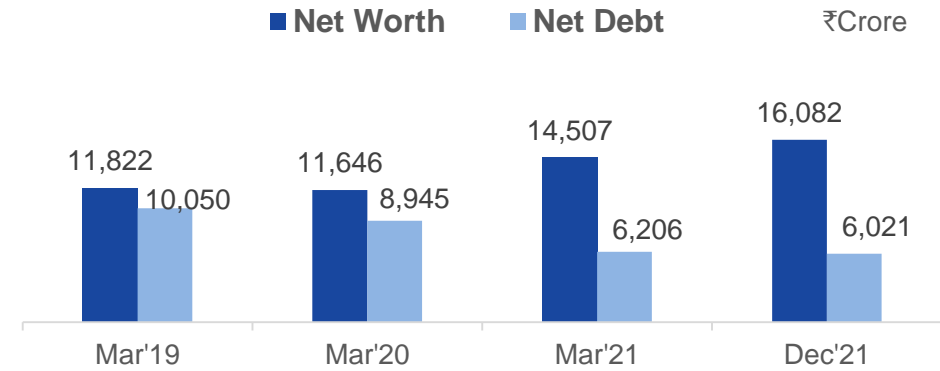
Robust Balance Sheet

1.74x Net Debt/EBITDA	0.37x Net Debt/Equity
7.82 % Wt. average cost of debt	↓ 20% YoY Decline in Receivables Outstanding

Figures as of Dec 31, 2021

- ✓ **Strong Liquidity with healthy cash balances: ₹2,195 Crore**
- ✓ **Financial flexibility enhanced by equity investments:**
 - Holding 7Cr JSW Steel shares (Value¹: ₹~4,590 Crore)
- ✓ **Healthy Credit Ratings:**
 - India Rating & Research: AA- (Stable outlook)
 - Brickwork Ratings: AA- (Positive outlook)
- ✓ **Access to diverse pools of liquidity**
- ✓ **Efficient Receivable Management: down 20% YoY vis-à-vis a 2% increase in sector²**

Large balance sheet headroom & strong cashflow available to pursue growth





Overview

Growth Plans & Strategy

Sustainability

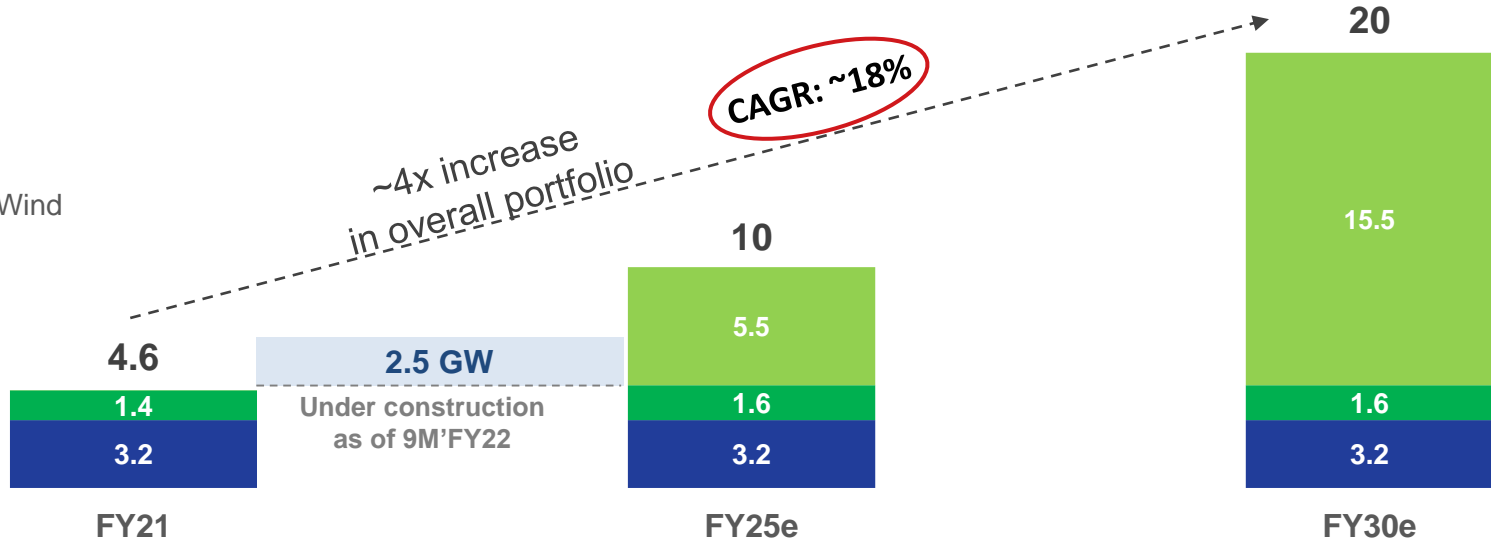
Appendix

JSW Energy: Growth Roadmap to 20 GW

Renewables-led growth to 20 GW by 2030

In GW

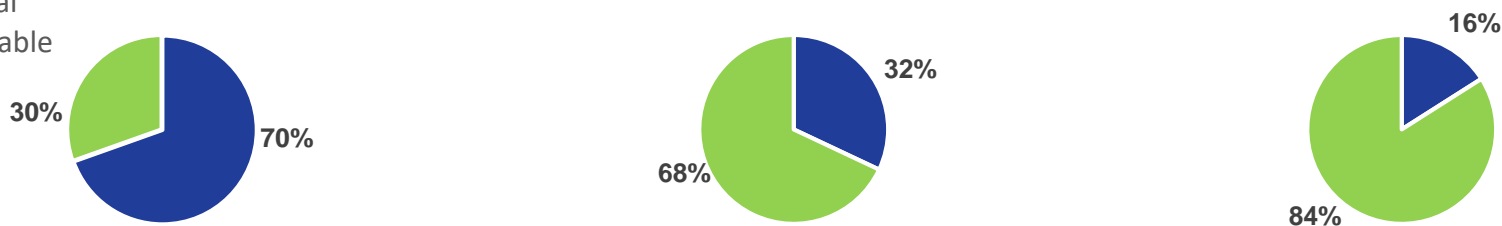
- Thermal
- Renewable - Hydro
- Renewable - Wind & Solar



New Growth Platforms

- Green Hydrogen
- Hydro Pumped Storage
- Battery Energy Storage
- Energy Products & Services

- Thermal
- Renewable



- ✓ No equity dilution envisaged for growth
- ✓ >₹75,000 Crore capex for reaching 20 GW
- ✓ Annual EBITDA to grow ~5x and PAT ~6x for growth from 4.6 GW to 20 GW
- ✓ Diverse Sources of Capacity addition:
 - Solar and Wind bids
 - RTC power bids
 - Storage bids
 - C&I customers
 - RE Power for Green Hydrogen

Being at the forefront of Energy Transition - Commissioning starting Q4 FY22

225 MW Solar Plant Under-construction in Karnataka



Project near completion; Commissioning from Q4 FY22

1.26 GW Wind Plants Under-construction in Tamil Nadu



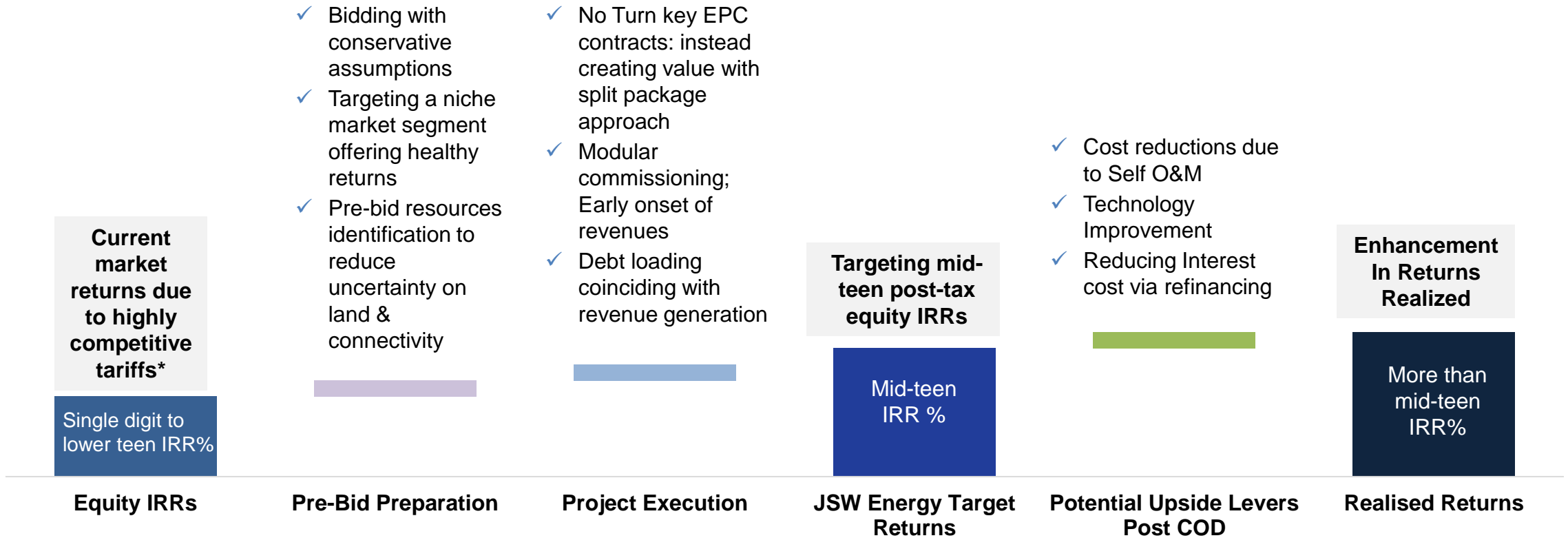
**Dedicated transmission line construction and civil work progressing well
Orders placed for WTG equipment; Commissioning from Q1 FY23**

240 MW Kutehr HEP Under-construction in Himachal Pradesh



**Completed ~60% (12.7 km) tunneling work (~50% in Q2) well ahead of timelines
Targeted Commissioning by Sept 2024**

Value Accretive Growth with Attractive Returns



JSW's differentiated business strategy to enhance project equity IRRs

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

India's Market Potential



Only 3.3 GWh operational out of 90 GWh potential

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



Supporting 2030 RE Target of 500 GW

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 2.5 GW PSP**

- Signed MoUs with Govt. of Maharashtra for 1.5 GW 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

- ✓ Identified further resources in Andhra Pradesh , Telangana, Orissa, Chhattisgarh and Karnataka
- ✓ 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)

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



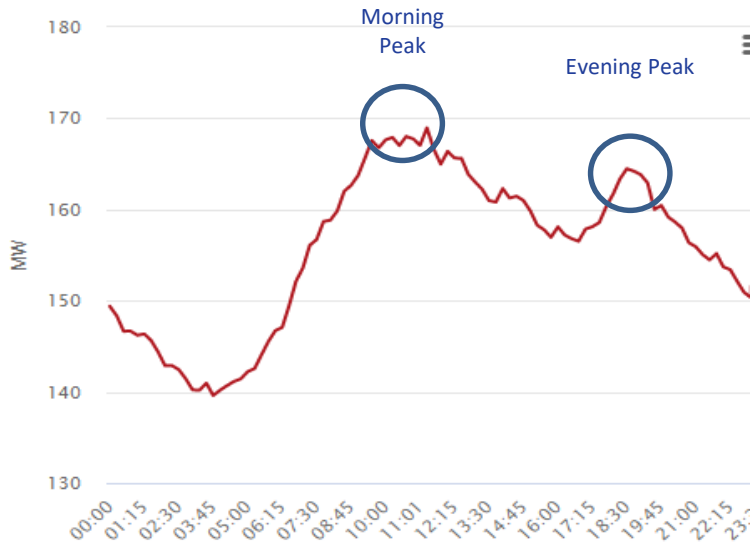
India's Clean Energy commitments

- 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
- ✓ Signed an agreement with Australia's Fortescue Future Industries Pty Ltd (FFI) to collaborate and conduct scoping work on potential projects relating to the production of green hydrogen
- ✓ 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

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)**

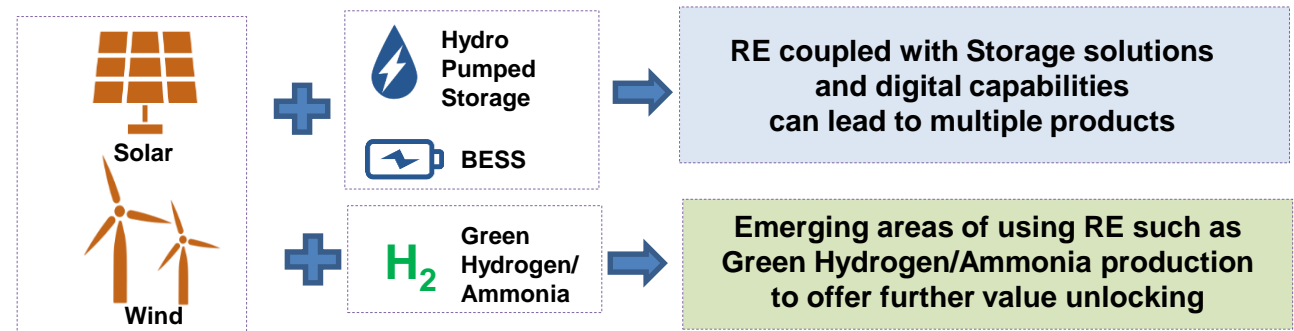
Varying power demand requirements and rise of utility scale renewable projects is leading to innovative approaches that encourage pairing solar/wind with storage technologies to offer “round the clock” (RTC) and on-demand power supply

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



Value Accretive Growth with Healthy Debt & Return Metrics

	4.6 GW (Current)	10 GW	20 GW	New Growth Platforms
EBITDA	~₹3,000-3,200 Cr	~2.5x	~5x	Further Upside ↑
PAT	~₹800 Cr	~3x	~6x	Further Upside ↑
Net Debt/EBITDA	1.74x	< 4.5x	< 4.0x	Maintained at a healthy level

Existing Portfolio (4.6 GW)

- Generating healthy CF & returns¹ of >15%
- Steady operations and robust financial: Gross Cash Accruals (GCA) of > ₹2,000 Crore p.a.
- 86% of portfolio tied-up under Long Term PPA:
 - Remaining Avg. Life of PPA: ~20 years
 - Remaining Avg. Life of Assets: ~30 years



Growth Portfolio:

1. Renewable Capacity Addition of ~15 GW by 2030

- To have similar return profile of mid teen IRRs
- Existing 4.6 GW portfolio and new additions to generate strong cash flows to fund 2 GW p.a. growth upto FY30 and >3 GW p.a. growth post FY30

2. New Energy Growth Platforms to provide further Upside

Calculated as GCA/Adj. NW. 18.6% average return over FY16-21 and 18% for FY21. FCFE/Adj. NW is ~15%

Adj NW : Networth adjusted for non-strategic equity investments held

'Current' figures are as of FY21, except Net Debt/EBITDA which is as on Dec 31, 2021








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 Tripartite agreement (between developer, SECI, discom) to provide payment security to developers Discoms/offtakers entering into new renewable long-term PPAs at commercially attractive tariff given pick-up in economic activity resulting in increase (~12.6% YoY) in spot electricity prices Renewable Power Obligation for RE and Hydro Projects 40GW of solar parks planned – grid connectivity, land, water supply, clearances to be provided 	<ul style="list-style-type: none"> Existing portfolio: 86 % PPA signed which forms about 94% of EBITDA U/C portfolio: All renewable projects PPA signed (except Kutehr, in advance discussion) Mix of Discom 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 (at ~12% p.a) 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

Key Investment 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 - commissioning Q4 FY22 onwards
 - ✓ 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**
 - ✓ 84% 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 decline 20% YoY in sharp contrast to a 2% increase in receivables in the Power sector
 - ✓ Favorable placement in Merit Order Despatch & diversified off-takers mitigate Receivable risk
-  **Strong Balance Sheet**
 - ✓ Amongst the Strongest Balance Sheet in the sector: 1.74x Net Debt/EBITDA; 0.37x Net Debt/Equity
 - ✓ Healthy debt metrics to be maintained while pursuing value accretive growth
 - ✓ A healthy cash balance of ₹2,195 Cr and financial flexibility with JSW Steel equity shareholding
-  **Low Cost of Funding**
 - ✓ Proactive Debt Management: Weighted average cost of debt at 7.82%, declining trend
 - ✓ Raised a US\$ 707 million green bond to refinance debt for hydro entity in May’21



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Sustainability

Appendix

Framework and Priorities

17 Focus Areas with 2030 Targets from 2020 as Base Year

<p>Climate Change: Committed to being carbon neutral by 2050 Reduce our carbon emissions by more than 50%</p> <p>Renewable Power: Enhance the renewable power to 2/3rd of our Total Installed Capacity</p>	<p>Biodiversity: No Net Loss for Biodiversity</p>
<p>Waste: 100% Ash (Waste) utilization</p>	<p>Waste Water: Zero Liquid Discharge</p>
	<p>Water Resources: Reduce our water consumption per unit of energy produced by 50%</p>

Resources	Employee Wellbeing	Social Sustainability	Local Considerations	Indigenous People	Human Rights
Supply Chain Sustainability	Sustainable Mining	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

MSCI	BB
CDP	A- (Leadership Level)
FTSE4Good	FTSE4Good Index constituent

Carbon Neutrality by 2050

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

Integrated Reporting since FY19

JSW Energy signed SDG7 Energy Compact

- Next Decade Action Agenda to advance Sustainable Development Goal 7 (SDG7) on sustainable energy for all
- Alignment with the 2030 agenda on SDG: **JSW to become >80% Renewable by 2030**
- Alignment with Paris Agreement and **net-zero by 2050**

**ENERGY
COMPACT**



JSW Energy launched an online ESG Profile

- A comprehensive ESG Data profile with **~300 factors across 10 sustainability frameworks**
- Link: <https://www.jsw.in/energy/jsw-energy-esg>



Key Sustainability Initiatives during Q3

- Undertaken development of Silvi-pasture plantation near Barmer plant for community welfare through increased green cover and cultivation of plants for animal fodder
- Achieved annual savings of 7,200 kwh/day in auxiliary power consumption by De-staging of Boiler Feed pump at Ratnagiri plant
- 2 lakh m³ water recycled and utilized via Rainwater Harvesting at Ratnagiri.
- Near 100% waste fly ash utilisation across Vijayanagar, Ratnagiri, Barmer and Nandyal plants

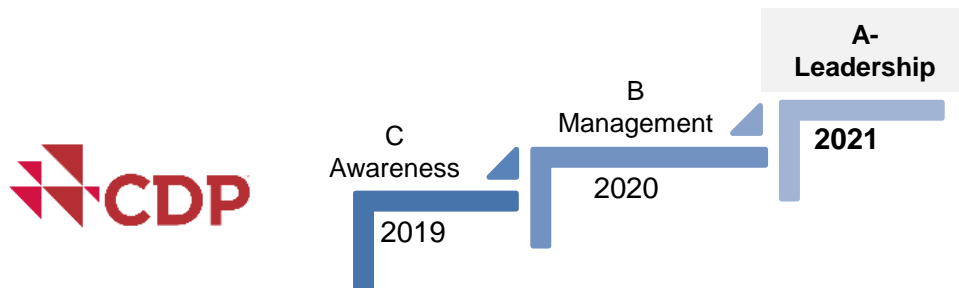


Glimpses of Silvi-Pasture Plantation near Barmer Plant

JSW Energy achieved a Leadership band with 'A-' score in the 2021 CDP Climate Change assessment

JSW Energy is only Indian power generation company to achieve this level

- Higher than the Asia regional average of B-
- Higher than the Thermal power generation sector average of B
- Highest amongst the activity group (#48 companies) of thermal power generation (highest score here: A-)
 - only company in India
 - one of the 2 companies in Asia
 - one of the 12 companies in the world
- One of the 19 companies (of 300 Indian companies) and the only energy company with this score



JSW Energy (Barmer) Ltd awarded 'SWORD OF HONOUR' by British Safety Council



JSW Energy has a majority Independent Board (4/6 Directors are Independent)

	Name of Director	Nature
	Mr. Sajjan Jindal	<i>Chairman & Managing Director</i>
	Mr. Prashant Jain	<i>Joint Managing Director & CEO</i>
	Mr. Chandan Bhattacharya	<i>Independent Director</i>

	Name of Director	Nature
	Mr. Munesh Khanna	<i>Independent Director</i>
	Ms. Rupa Devi Singh	<i>Independent Director</i>
	Mr. Sunil Goyal	<i>Independent Director</i>

Committee	# Directors	Of which Independent directors
Audit	3	3 (100%)
Nomination & Remuneration	3	3 (100%)
Risk Management	3	2 (67%)
Stakeholders Relationship	3	2 (67%)
CSR	3	2 (67%)
Sustainability	3	2 (67%)

Core Principles of JSW Energy	
Accountability	Social Responsibility
Transparency	Environment
Integrity	Regulatory Compliance



Overview

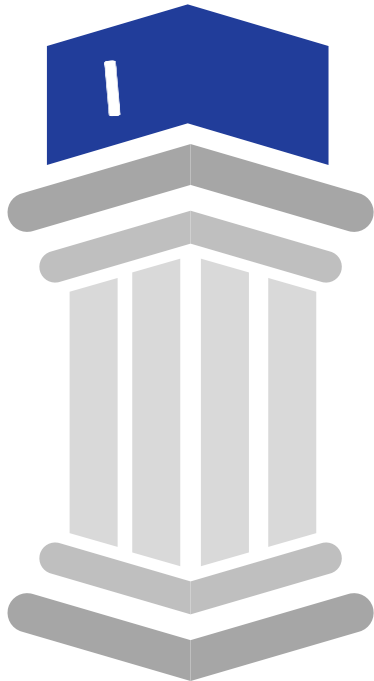
Growth Plans & Strategy

Sustainability

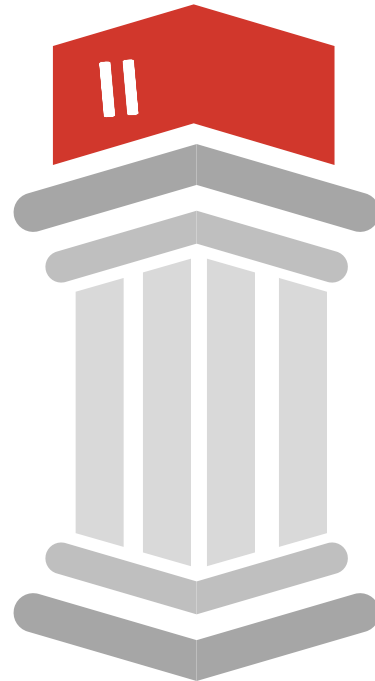
Appendix

Diffentiated Business Strategy

Renewable Energy
Market Opportunity &
Growth Roadmap



Project Execution
and Operational
Excellence



Financial Strength

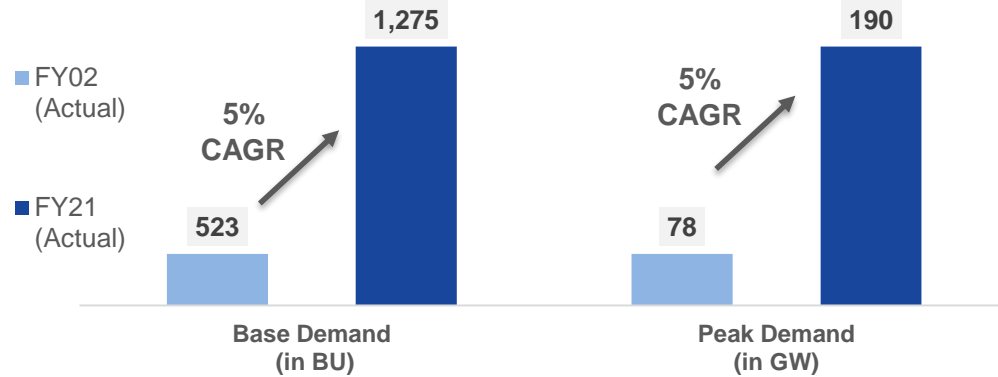


Focus on
Sustainability

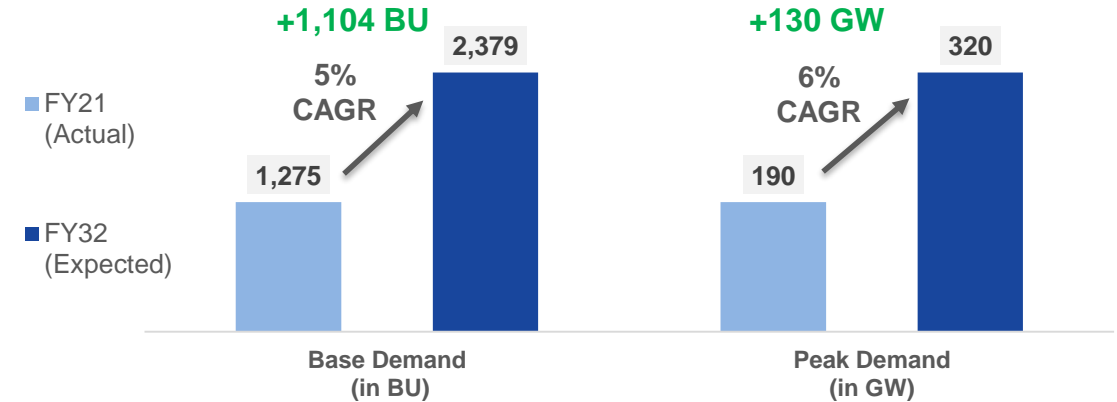


Significant Market Opportunity: Power Demand Growth

Historically, Power demand has grown at a CAGR of ~5%

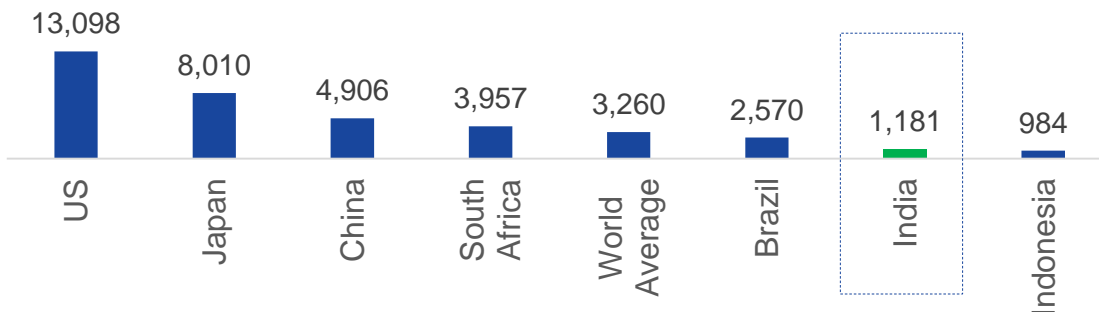


Similar growth expected over next decade



India is world's 3rd largest power producer, however has a low per capita consumption (~1/3rd of world average)

Per Capita Power Consumption (kWh)



Rapid urbanisation and universal electrification to drive power demand

- Sustained economic growth has driven power demand in India: Correlation between Power Demand to GDP growth $\sim 0.7x^1$ between FY03-20
- Going forward, unlocking of demand from increased rural electrification and rapid urbanisation to drive demand for power

Significant Market Opportunity: Demand to be met by RE

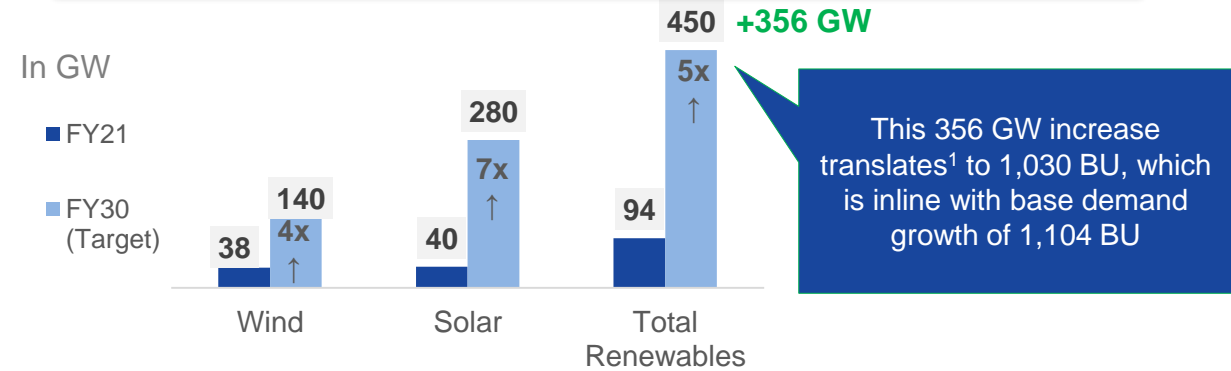
India plans to achieve a low-carbon future, and be Carbon Neutral by 2070

India made 5 commitments at the COP26 summit:

- To increase its non-fossil energy capacity to 500 GW by 2030
- To meet 50% of its energy requirements from renewable energy by 2030
- To reduce the total projected carbon emissions by 1 billion tonne from now till 2030
- To reduce the carbon intensity of its economy to less than 45% by 2030
- To be carbon neutral by 2070



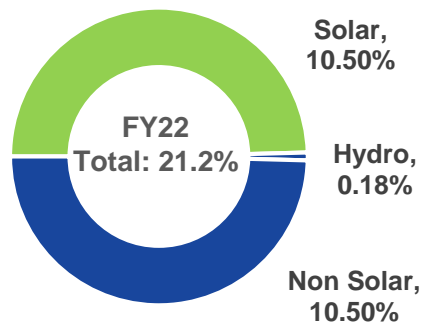
Demand to be met incrementally with Renewable Energy



RPO to provide filip to RE demand

RPO as % of total power purchased

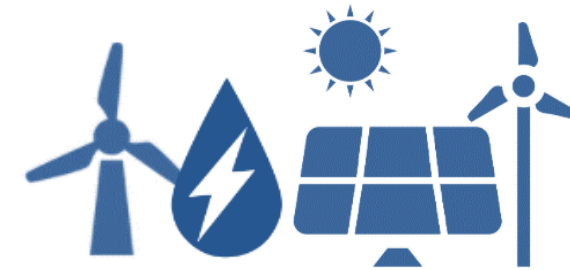
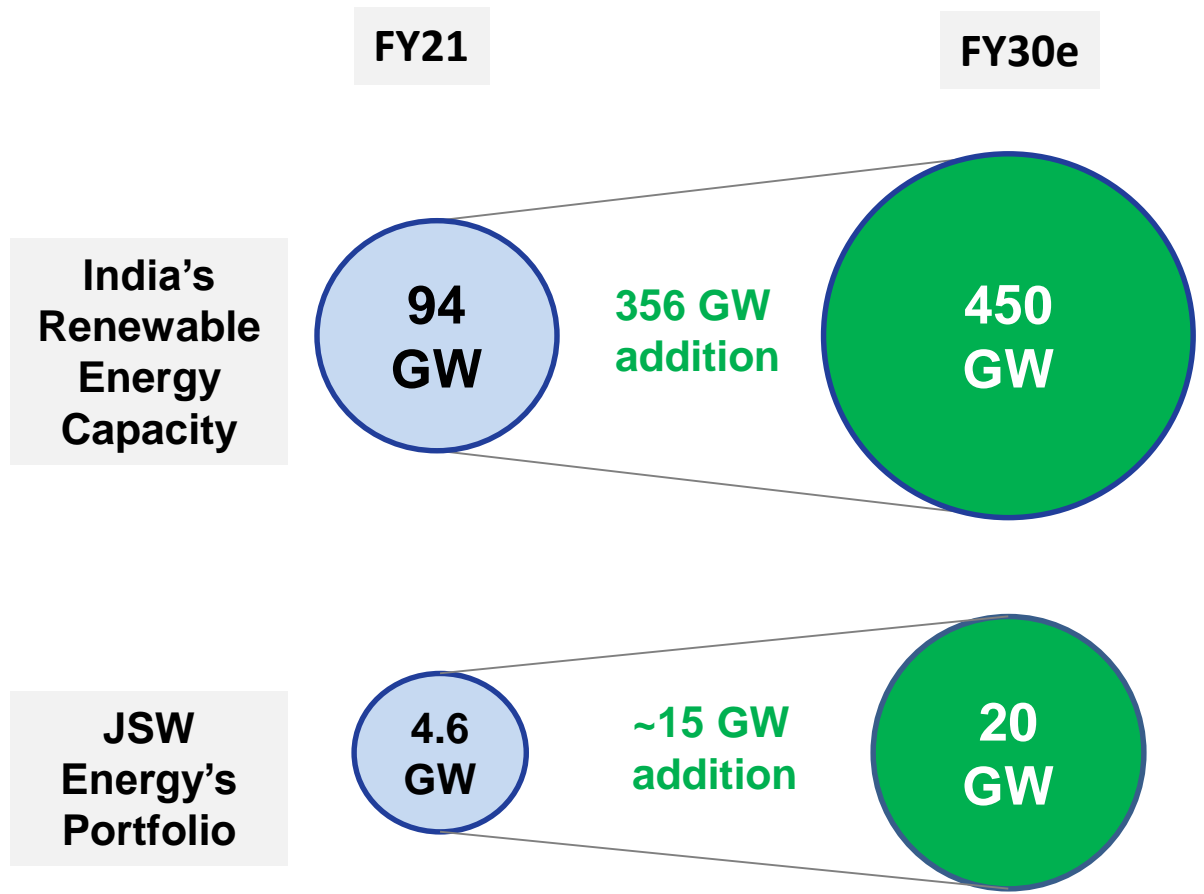
Discoms as well as Commercial & Industrial consumers have to adhere to renewable purchase obligation (RPO) for procuring power



India: Attractive market for Renewable Energy Investments

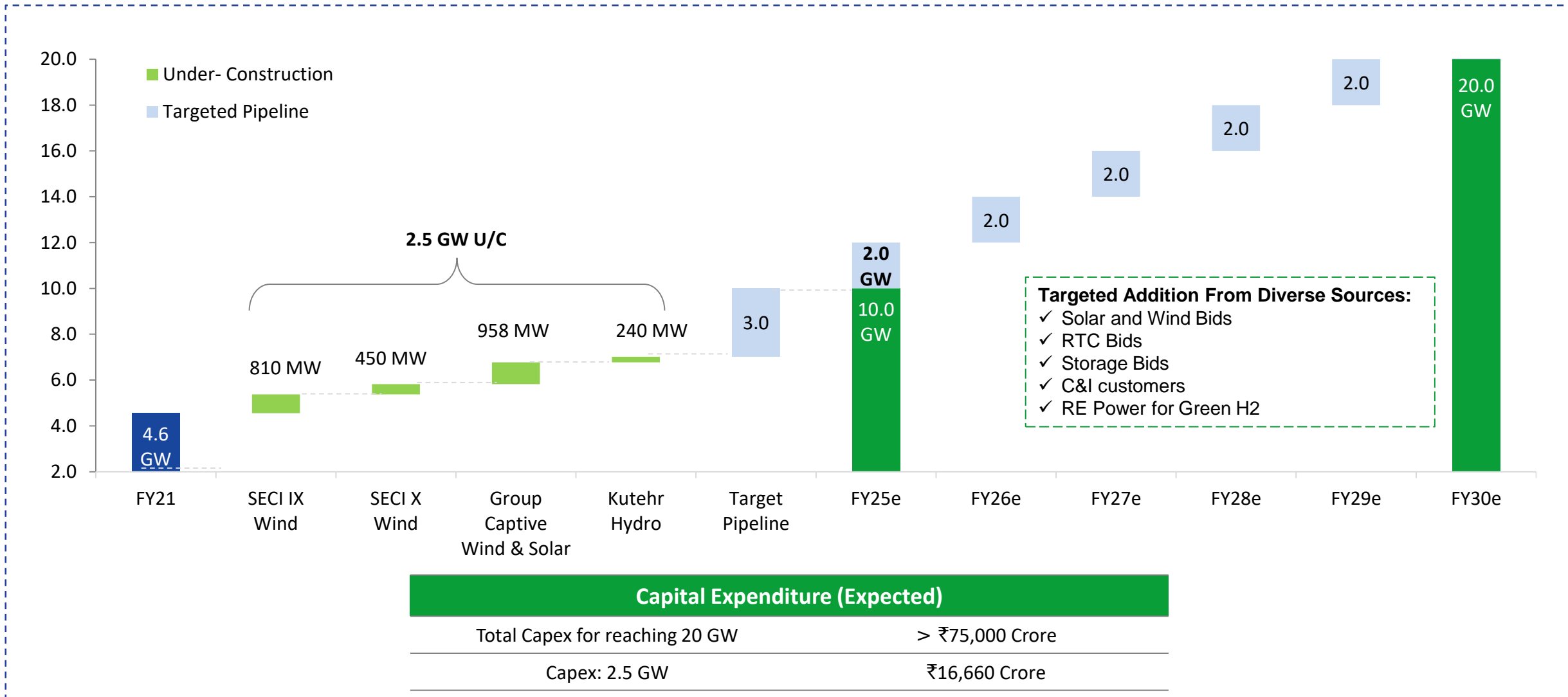
EY's 'Renewable Energy Country Attractiveness Index'

Rank	Country	Rank	Country
1	US	8	Japan
2	China	11	Brazil
3	India	23	Argentina
4	UK	34	Vietnam
5	France	39	Thailand



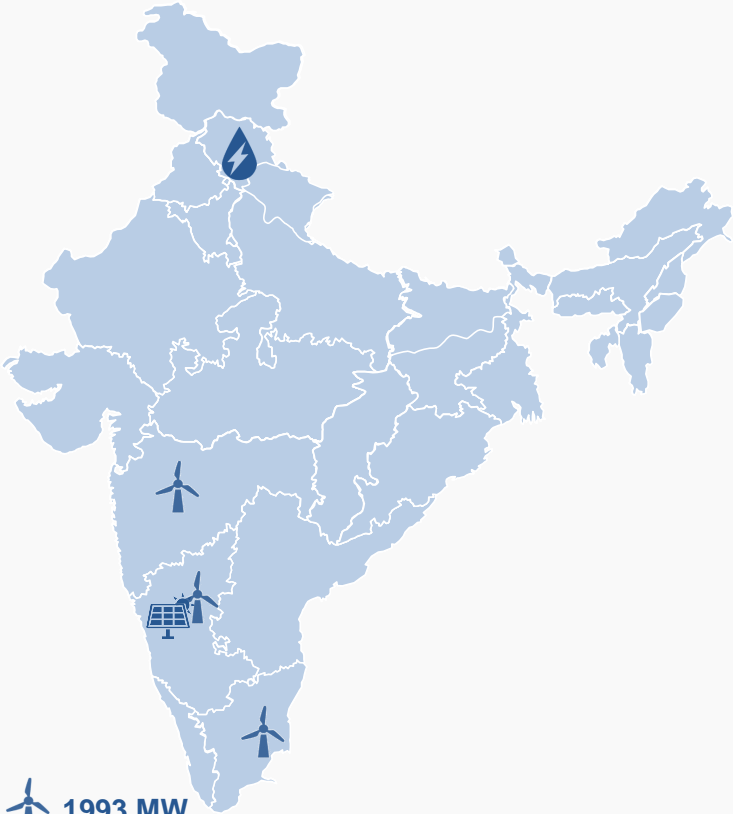
- JSW Energy plans to add 15 GW renewable capacity, which is ~4% of overall renewable additions
- Applying stringent risk return criteria to target a niche segment of market that can offer healthy returns
- No compromise on shareholder returns to meet growth
 - Target mid-teen post-tax equity IRRs

Plan to become 20 GW by 2030



Renewable Energy Projects Under-Construction

2.5 GW Under-construction Projects



Map for illustrative purposes, showing project locations

SECI: Wind Projects Tamil Nadu: 1,260 MW

- SECI IX (810 MW) + SECI X (450 MW)
- Signed 25-year PPA with SECI
- Commissioning: progressively from Q1 FY23

Group Captive: Wind & Solar Projects Karnataka: 825 MW

- Solar : 225 MW; Wind: 600 MW
- Signed 25-year PPA with JSW Steel
- Commissioning: Solar - from Q4 FY22 (Solar), Wind - progressively from Q1 FY24

Group Captive: Wind Project Maharashtra: 95 MW

- Signed 25-year PPA with JSW Steel
- Commissioning: progressively from Q4 FY23

Group Captive: Wind Project Tamil Nadu: 38 MW

- Signed 25-year LT PPA with JSW Steel
- Commissioning: progressively from Q4 FY23

Kutehr Hydro Project Himachal Pradesh: 240 MW

- 3x80 MW Run-of-the-river Hydro Power Plant
- PPA under finalization with Haryana Discom
- Commissioning: September CY24

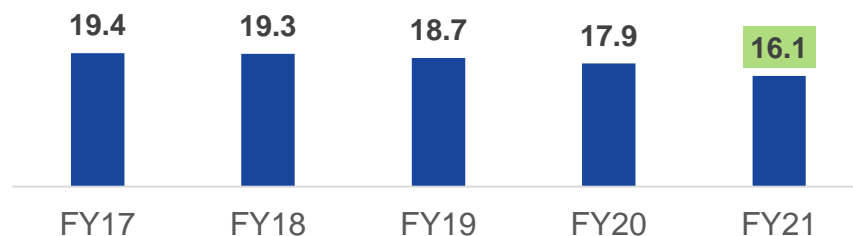
Blended tariff	₹3.08/unit (excl. hydro)
Capex	<ul style="list-style-type: none"> Total : ~₹16,660 Crore Committed: ~₹7,000 Crore, including a spent of ~₹1,660 Crore
PPA	Signed for 2.2 GW
Land & Resources	Acquired/Locked-in
Transmission	Construction progressing well for dedicated transmission lines for all projects
Equipment	<ul style="list-style-type: none"> 1.4 GW wind turbines ordered ; Delivery to start in Q1 FY23
Expected Commissioning	<ul style="list-style-type: none"> FY22: 100+ MW FY23: 1200+ MW FY24: 700+ MW FY25: 240 MW (Kutehr) Modular/phased commissioning to provide accelerated cashflow generation

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

O&M Expenses (₹Lakh/MW)



JSW Energy has one of the lowest project execution cost in the industry

Project Location	Capacity MW	Project cost		1 st COD Year
		₹Crore/MW	\$mn/MW ²	
Coal-based				
Nigrie	1,320	7.92	0.11	2014
Janjgir-Champa	1,200	7.02	0.09	2014
Warora	600	6.25	0.08	2013
Padampur	540	6.18	0.08	2013
Chandrapur	600	6.22	0.08	2014
Amarkantak	600	5.23	0.07	2009
Maithon	1,050	5.24	0.07	2011
Udupi	1,200	4.67	0.06	2010
JSW : Ratnagiri ³	1,200	4.60	0.06	2010
JSW: Vijayanagar	260	4.34	0.06	2000
JSW: Vijayanagar	600	3.28	0.04	2009
Lignite Based ¹				
Giral	250	7.69	0.10	2011
Barsingsar	250	7.00	0.09	2010
JSW: Barmer	1,080	6.63	0.09	2009

Project Selection Philosophy

- Stringent risk return metrics
- Bidding with conservative CUF assumptions of P-90
- High quality offtakers
- Captive PPAs with JSW Group companies (strong credit ratings) at arm's length pricing

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

Supplier & Vendors

- Robust selection process through competitive route; Award of packages to best-in-class / Tier-I vendors only
- Comprehensive Contracts with strong performance & product warranty and performance bank guarantee provisions
- Developing strong relationships with all major OEMs, EPC contractors, BoP contractors

Quality Control

- Dedicated team for quality assurance
- Standard operating procedure for quality checks
- Special checks on quality & type test certifications
- Implementation of TQM, ISO and other relevant standards

O&M

- Skilled in-house O&M team
- Continuous implementation of innovative practices to further optimize O&M cost through TQM
- Operating Stations supported by experienced professionals at corporate office in areas such as Policy, Regulatory, Design & Engineering, Finance, Construction & Maintenance and HR

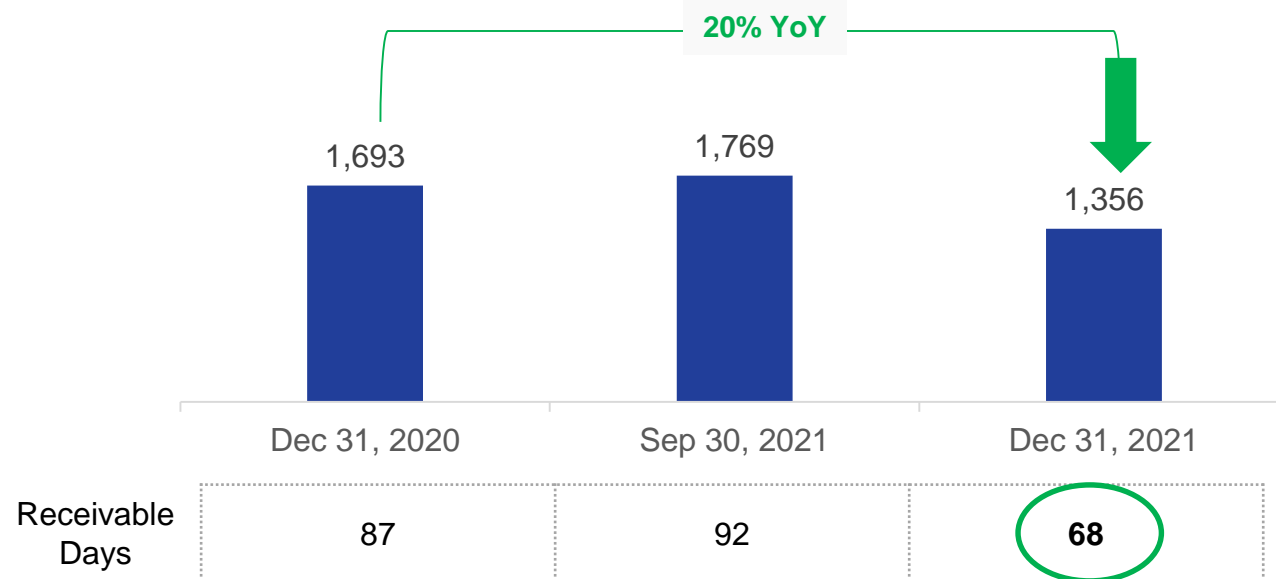
- ✓ Systematic approach of deploying in-house experienced land acquisition team in all resource-rich states
- ✓ Deployed experienced legal teams for title search and execution of lease deeds; dedicated team for securing RoW
- ✓ Acquired/ Locked-in sites in resource rich states, along with requisite transmission connectivity
 - ✓ Signed MoUs with Govt. of Rajasthan for **10 GW** and with Govt. of Maharashtra for **5 GW** Renewable energy resources
 - ✓ Signed MoUs with Govt. of Maharashtra for **1.5 GW** Hydro Pumped Storage Projects and a Letter of Intent with Govt. of Rajasthan for **1 GW** Hydro Pumped Storage projects

Acquired resources for
2.5 GW, which is under-
construction

Another ~18 GW is locked-in














10+ GW resources in process

Consolidated Trade Receivables* (₹ Crore)



- **JSW Energy has sufficient balance sheet headroom & strong cashflow to pursue growth to 20 GW by FY30**
 - Net Debt/EBITDA: 1.74x
 - Net Debt/Equity: 0.37x
 - Wt. Average Cost of Debt: 7.82%
- **Effective management of Trade Receivables**
 - Receivables declined 20% YoY in Q3 FY22
 - This is in sharp contrast to the power sector scenario which has witnessed 2% increase** YoY
 - QoQ values not strictly comparable due to seasonality in hydro plant operations
- **All plants placed favourably in States' Merit Order Dispatch**
 - Further, Hydro plants under 'Must-run status' with no scheduling risk
- **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

Prudent approach to Balance Sheet and Receivable Management – a key financial strength

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
	<hr/>				
 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"> Maintain 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
	<hr/>				
 Waste	<ul style="list-style-type: none"> Specific Waste (Ash) Generation (t/MWh)* 	0.070	 0.032	54%	<ul style="list-style-type: none"> Integrated Strategy towards efficient waste management Optimizing utilisation of low ash coal
	<ul style="list-style-type: none"> Waste Recycled - Ash (%) 	100	 100	-	
<hr/>					
 Air Emissions	<ul style="list-style-type: none"> Specific process emissions(Kg/MWh) 	0.16	 0.053	67%	<ul style="list-style-type: none"> Ensuring ESP (Electrostatic Precipitator) Fields availability Optimising Lime dosing system efficiency Process efficiency improvements
	<ul style="list-style-type: none"> PM 	1.78	 0.683	61%	
	<ul style="list-style-type: none"> SO_x NO_x 	1.01	 0.373	63%	
<hr/>					
 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

Key Highlights

Climate Change

- Steam turbine modernization in 300MW units at Vijayanagar
- Replacement of Condenser tubes with graphene coating at Vijayanagar
- Commissioned 1.06 MWp Solar Plant at Sherpa Camp at Hydro plant
- Sustainability Committee formed for low carbon strategy

Water Security

- Operate Cooling tower with higher Cycles Of Concentration with modified chemical regime
- Operate Existing Effluent recycle plant with 100% utilization
- Efficient Utilization of rainwater for plant & township use

Waste

- Effective utilisation of 100% of fly ash generated
- Fly ash supplied to Cement & Brick industries

Air Emissions

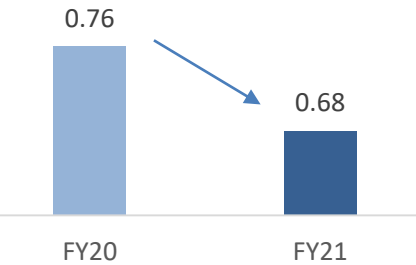
- Calibration of Low NOx burners at Vijayanagar
- Use of low Sulphur coal at Ratnagiri
- Modification of ESP resulting in reduction of Dust at Barmer

Biodiversity

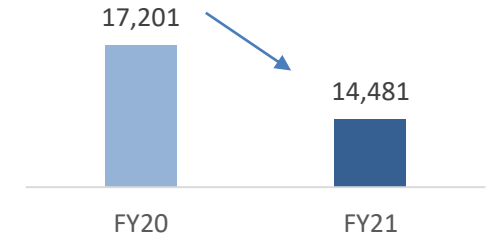
- Plantation of local species by cultivating in own nursery at Ratnagiri
- Two local NGOs engaged for restoration and protection of habitats at Barmer
- Watershed area taken under development of Silvi-pasture plantation at Barmer

Performance

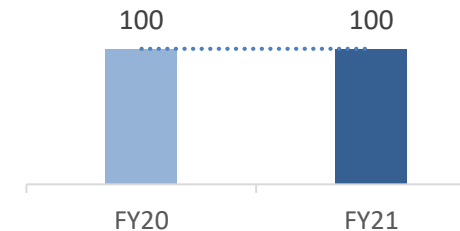
CO₂ intensity (tCO₂e/MWh)



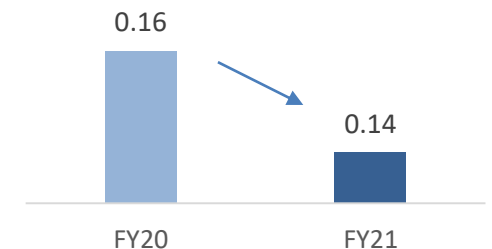
Scope 1 emissions ('000 tCO₂e)



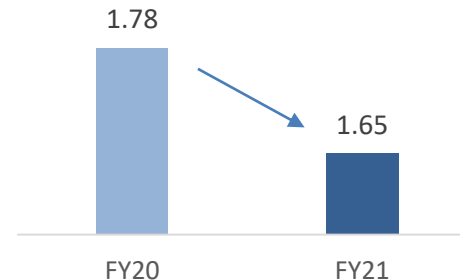
Ash Utilisation (%)



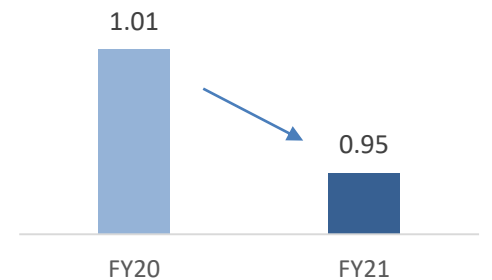
PM Emissions (kg/MWh)



SO_x Emissions (kg/MWh)



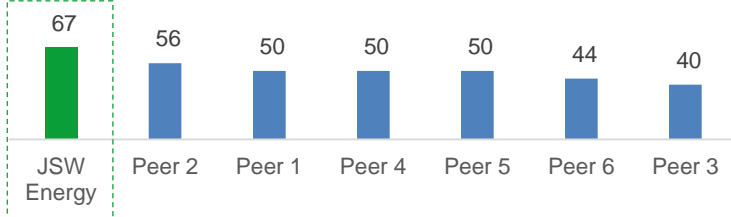
NO_x Emissions (kg/MWh)



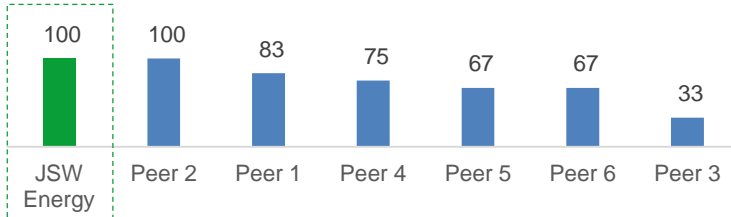


Board & Governance

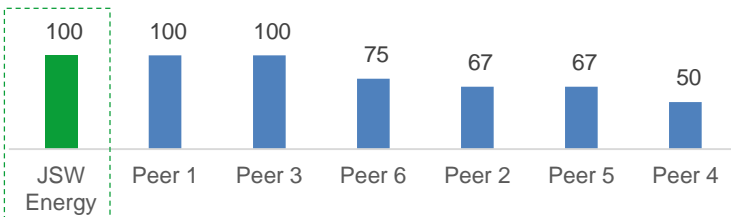
% Board Independent



% Audit Committee Independent

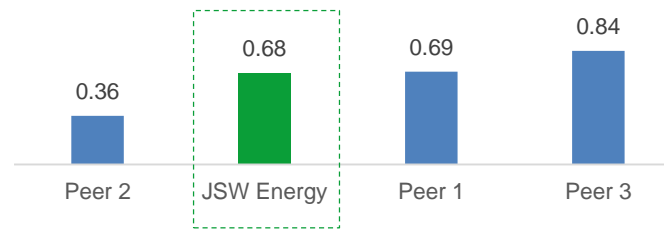


% Nomination & Remuneration Committee Independent

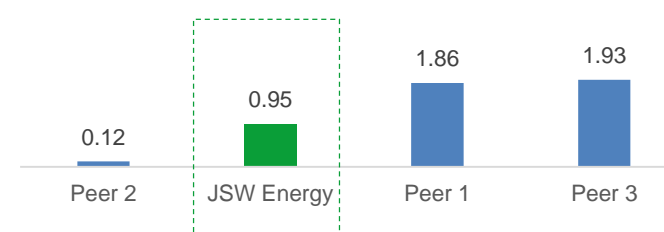


Air Emissions

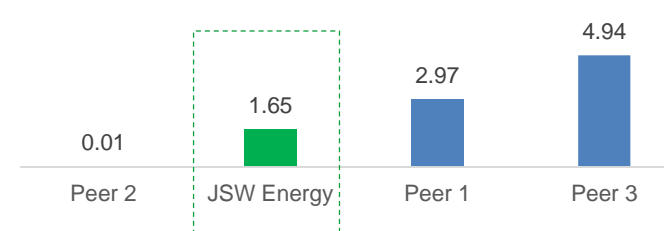
CO₂ Intensity (t CO₂e/MWh)



Specific NO_x Emissions(Kg/MWh)

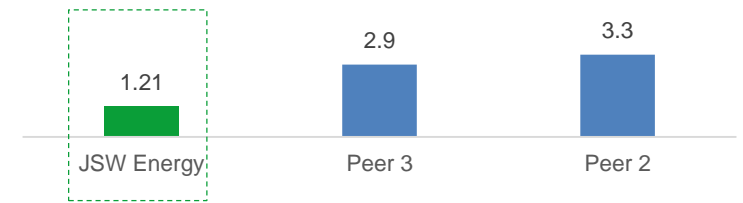


Specific SO_x Emissions(Kg/MWh)

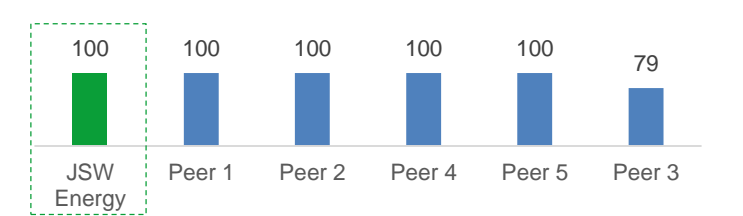


Water & Waste Management

Specific Fresh Water Consumption (m³/MWh)



Ash Utilisation (%)



ESG Ratings*



Entity	CDP Rating
JSW Energy	A-
Peer 6	B
Peer 1	C
Peer 5	C
Peer 3	D
Peer 2	F
Peer 4	F



Entity	MSCI Rating
JSW Energy	BB
Peer 6	A
Peer 1	BB
Peer 4	CCC

Peers include: Adani Green, Adani Power, CESC, NTPC, Tata Power, Torrent Power

Source: Company Annual Reports, Maybank Kim Research; Data as of FY21, as per available public disclosures

*CDP Rating – Climate Change Assessment - 2021



JSWEL

- Certified as 'Great Place to Work' Organisation in 2021
- Won Golden Peacock Award For Occupational Health & Safety-2021



Barmer

- National Energy Conservation Award-2020 by Ministry of Power
- Rajasthan Energy Conservation Award-2020
- Achieved Five-star grading in the British Safety Council's Occupational Health and Safety Audit in FY21
- Awarded 'National Efficiency Awards 2021' for Best Energy Efficient Plant- Lignite by Mission Energy Foundation
- Awarded the 2021 Sword of Honour by the British Safety Council for excellence in Occupational Health and Safety



Ratnagiri

- Recognized as 'Energy Efficiency Unit' at the CII National Award for Excellence in Energy Management -2020
- Awarded State Award for Excellence in Energy Conservation & Management, by Maharashtra Energy Development Agency in FY21
- Awarded 'The Best Operating Thermal Power Generator' by Independent Power Producers Association of India (IPPAI) in FY21
- Winner (Gold Category), by SEEM National Awards for Energy Conservation and Management in FY22



Vijayanagar

- JSW Group's Unit CPP 4 - 300 MW at Vijayanagar, whose Operation and Maintenance (O&M) is undertaken by the Company, set a national record by running continuously for 711 days in FY21
- Recognized as 'Energy Efficiency Unit' at the CII National Award for Excellence in Energy Management - 2020 & 2021
- Golden Peacock National Quality Award for the year 2021 under Power sector (Generation)



Hydro

- Grow Care India Environment Award-2020 (Gold Shield)
- Grow Care India Safety Award-2020 (Gold Shield)
- Silver (Runner-up) Award at 9th FICCI Safety system Excellence awards in FY22



Investor Relations Contact:

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ESG Data Profile: [Link](#)

BETTER EVERYDAY