

# Corporate Presentation

February 2023

# Forward Looking and Cautionary Statement



Certain statements in this report concerning our future growth prospects are forward looking statements, which involve a number of risks, and uncertainties that could cause actual results to differ materially from those in such forward looking statements. The risk and uncertainties relating to these statements include, but are not limited to risks and uncertainties regarding fluctuations in earnings, our ability to manage growth, intense competition within Steel industry including those factors which may affect our cost advantage, wage increases in India, our ability to attract and retain highly skilled professionals, time and cost overruns on fixed-price, fixed-time frame contracts, our ability to commission mines within contemplated time and costs, our ability to raise the finance within time and cost client concentration, restrictions on immigration, our ability to manage our internal operations, reduced demand for steel, our ability to successfully complete and integrate potential acquisitions, liability for damages on our service contracts, the success of the companies in which the Company has made strategic investments, withdrawal of fiscal/governmental incentives, impact of regulatory measures, political instability, legal restrictions on raising capital or acquiring companies outside India, unauthorized use of our intellectual property and general economic conditions affecting our industry. The company does not undertake to update any forward looking statements that may be made from time to time by or on behalf of the company.



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**Key Investment Highlights**

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**Digitalisation at JSW Steel**

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# Sustainability Framework and Priorities



## 17 Focus Areas



### Climate Change:

- Aligned to India's Nationally Determined Contributions for Climate Change as per Paris Accord
- Carbon neutrality at JSW Coated by 2030
- >42% reduction in specific CO<sub>2</sub> emissions by 2030 (vs. base year 2005)



**Biodiversity:** No Net Loss for Biodiversity



**Waste Water:** Zero Liquid Discharge



**Water Resources:** >39% reduction in fresh water consumption by 2030 (vs. base year 2005)



**Waste:** 100% solid waste utilization



Resources



Sustainable Mining



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



[JSW Policies for each Focus Area are available on our website](#)

## Governance & Oversight By Board-level Business Responsibility And Sustainability Committee

Independent Directors

Ms. Fiona Paulus (Chair)

Dr. (Mrs.) Punita Kumar Sinha

Mrs. Nirupama Rao

Executive Directors

Mr. Seshagiri Rao M. V. S.

Mr. Jayant Acharya

## Integrated Reporting



FY 2019



FY 2020



FY 2021



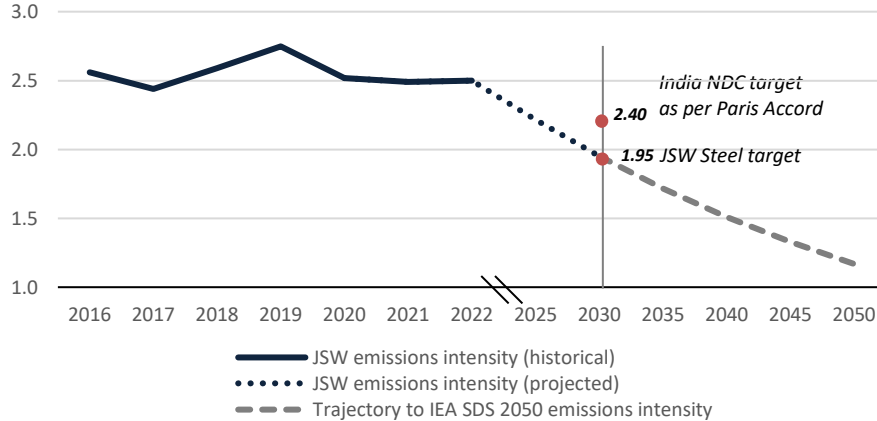
FY 2022

Click on images for reading online.

# Climate Change: Emission Target and Initiatives

## Derivation of carbon emission target for 2030

- The Sustainable Development Scenario (SDS) <sup>(a)</sup> requires direct emission intensity of crude steel production in India to **fall over 60% by 2050 on the path to net zero in 2070**
- The 2030 target is based on following the trajectory needed to reach a derived **emissions intensity of 1.17 tCO<sub>2</sub>/tcs by 2050** <sup>(b)</sup>
- India's Nationally determined contribution (NDC) as per Paris Accord for 2030 is 2.4 tCO<sub>2</sub>/tcs



## Planned/ Potential initiatives to reduce CO<sub>2</sub> intensity

- ✓ Energy Transition from thermal to Renewable in steel making
- ✓ Reduction of Coke rate through iron ore beneficiation, PCI, use of natural gas in BF and DRI
- ✓ Increased use of scrap in steel making
- ✓ Implementation of Best Available Technologies (BATs)
- ✓ Process Improvements based on the world steel 'step up' global benchmarking process
- ✓ Scaling up Carbon Capture & Use (CCU)



Issued Global Steel Industry's First USD Sustainability-Linked Bond in Sept 2021

Note:

- (a) Based on the International Energy Agency's (IEA) Iron and Steel Technology Roadmap, published in 2020
- (b) Taking account of both the direct (Scope-1) and indirect energy (Scope-2) emissions



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# JSW Group: Key Verticals



- India's largest steel producer
- Capacity of 29.2 mtpa, growing to 38.5 mtpa
- Listed on NSE, BSE. Market cap of US\$21bn



- Capacity of 4.8 GW (Hydro, Renewable and Thermal)
- Growing to 20 GW by 2030 with **81% renewable portfolio**
- Listed on NSE, BSE. Market cap of US\$4.9bn



- Capacity of **130,000 ktpa**
- Only fully-automated, water-based plant in India



- Ports capacity of **158 mtpa**
- Operations across East, West & Southern coasts of India



- Capacity of **17 mtpa, growing to 25 mtpa**
- India's leading green cement company



- Social development arm of the Group, with footprint across 11 states and 15 districts
- **Reaching out to +1 mn individuals** around the operating locations



- Aims at nurturing the sporting dream of India
- Trained **Olympic medal winners**
- Associated with champion teams like Delhi Capitals, Bengaluru FC and Haryana Steelers



- Early stage, tech focused **Venture Capital fund**
- Invests in companies building innovative solutions that leverage India's demographic dividend, consumption drivers and technological advancements



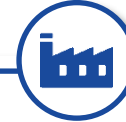
## One of the leading steel players in India

- Most geographically diversified steel company in India
- Sustainability and Governance at the core of the enterprise.



## Diversified product portfolio

- **Extensive product portfolio**  
HRC, CRC, Coated, Tinplate, Electrical steel, TMT bar, wire rod, rails, grinding balls, LRPC, etc.



## Integrated manufacturing process

- From raw material processing plants to downstream value-added product capacities



## Technological competence

- Combination of state-of-the-art steel making technologies: Corex, DRI, Conarc, Blast Furnace, BOF



## Global presence

- International presence in Steel making (US), Value-added facilities (US, Italy)



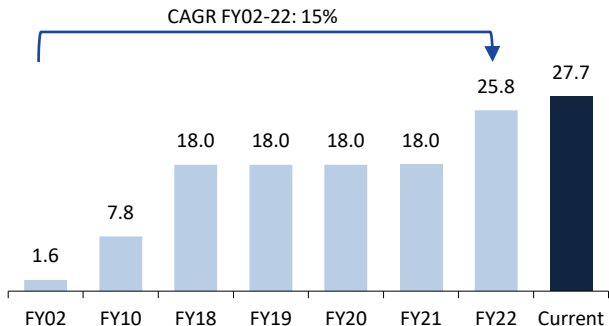
## Strong distribution network and export presence

- Pan-India marketing and distribution network
- Export footprint in over c.100 countries across 5 continents

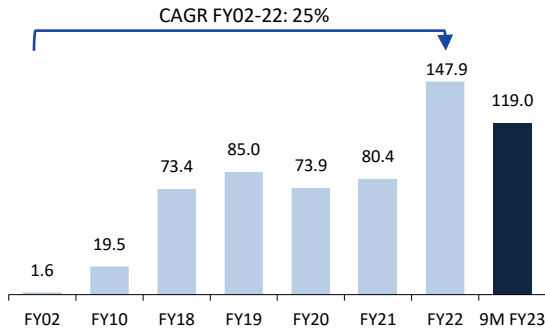
# Transformational Growth and Value Creation



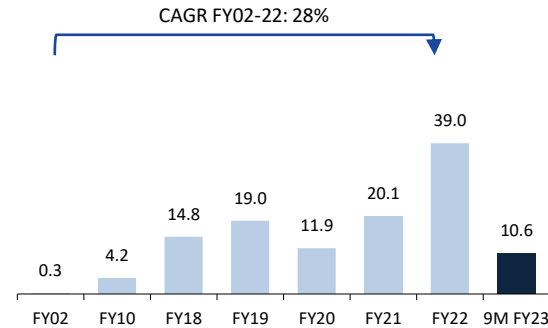
### India Capacity (mtpa)



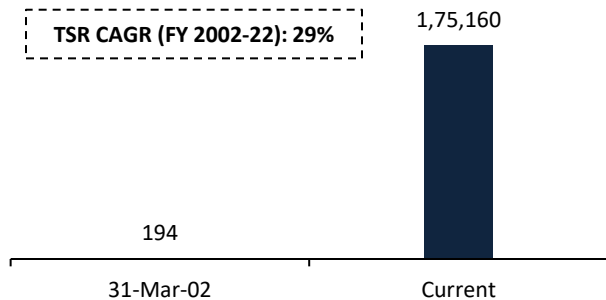
### Total Revenue (₹ 000's Cr)



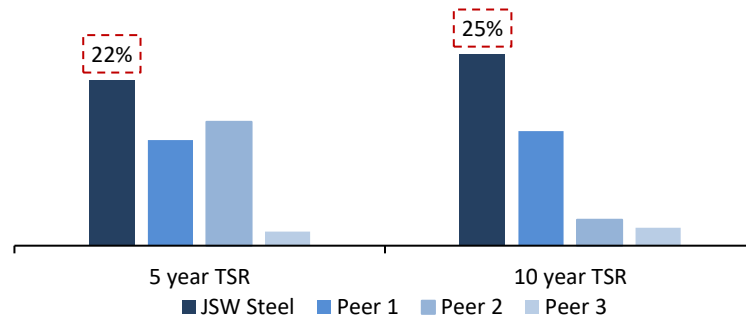
### EBITDA (₹ 000's Cr)



### Market cap (₹ Cr)



### 5 year and 10 year Total Shareholder Return



# Improving Near Term Outlook Post Recent Volatility

## H1 FY23

**Strong external headwinds impacted EBITDA**

- Sharp decline in steel price after peaking in April; coking coal remained elevated
- Export duties from May-Nov 2022 hurt volumes, while falling prices led to destocking in Q1
- Unrealised MTM losses on FX debt due to INR depreciation
- Inventory & NRV losses due to lower steel prices

## H2 FY23

**Margins recovered in Q3 FY23; healthy outlook for Q4**

- Best ever quarterly domestic sales in Q3
- Lower costs in Q3, primarily due to lower coking coal prices
- Withdrawal of export duties in Nov'22 and increase in global prices to aid exports in Q4 FY23
- Improving domestic prices to offset rising iron ore costs and support margins for Q4
- Potential for working capital reduction in Q4

## Near Term Outlook

**Healthy demand drivers in India**

- India's infrastructure push and increased govt. spending are positive for steel sector
- Expected recovery in rural economy to further boost steel demand
- China re-opening to support steel demand and global prices
- Moderating inflation globally could reduce Central Bank tightening and limit economic downside



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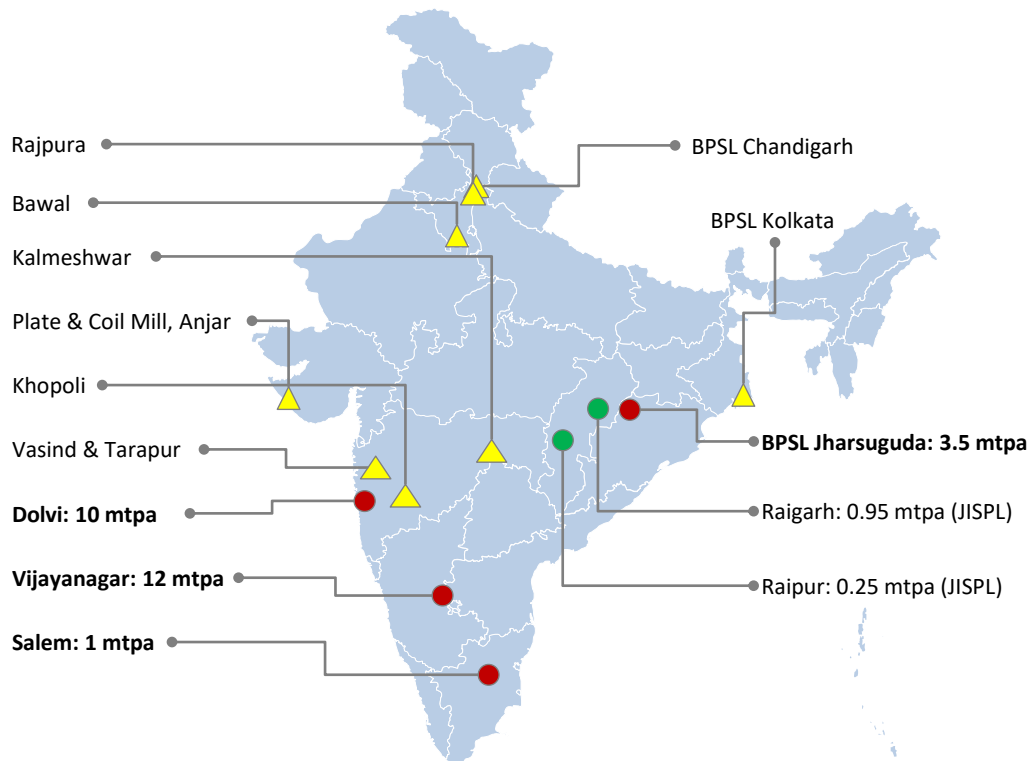
Appendix

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# Key Investment Highlights

- 1 Size, Scale & Growth** Leading steel producer in India with near-term growth to take domestic capacity to 37 mtpa
- 2 Efficiency** Lowest cost of conversion in India, one of the lowest globally. Strong domestic iron ore linkage
- 3 Product Mix** Strong margins further enhanced by significant downstream capacities producing value added and special products
- 4 ESG** Sustainability at the core of the enterprise. Actively pursuing climate change agenda
- 5 Governance & Management** Strong board and experienced management team
- 6 Track Record of Growth** Track record of efficient organic and inorganic growth: India capacity growth of 15% CAGR (FY02-FY22)
- 7 Shareholder Value** Prudent capital allocation: 20 year TSR CAGR of 29% (FY02-FY22), and uninterrupted dividends
- 8 Balance Sheet Strength** Strong balance sheet and access to diversified funding sources globally

## India

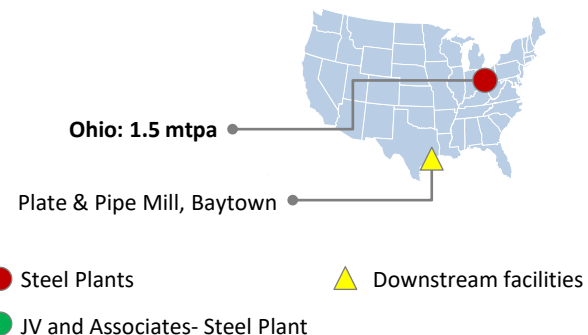


## International

### Europe



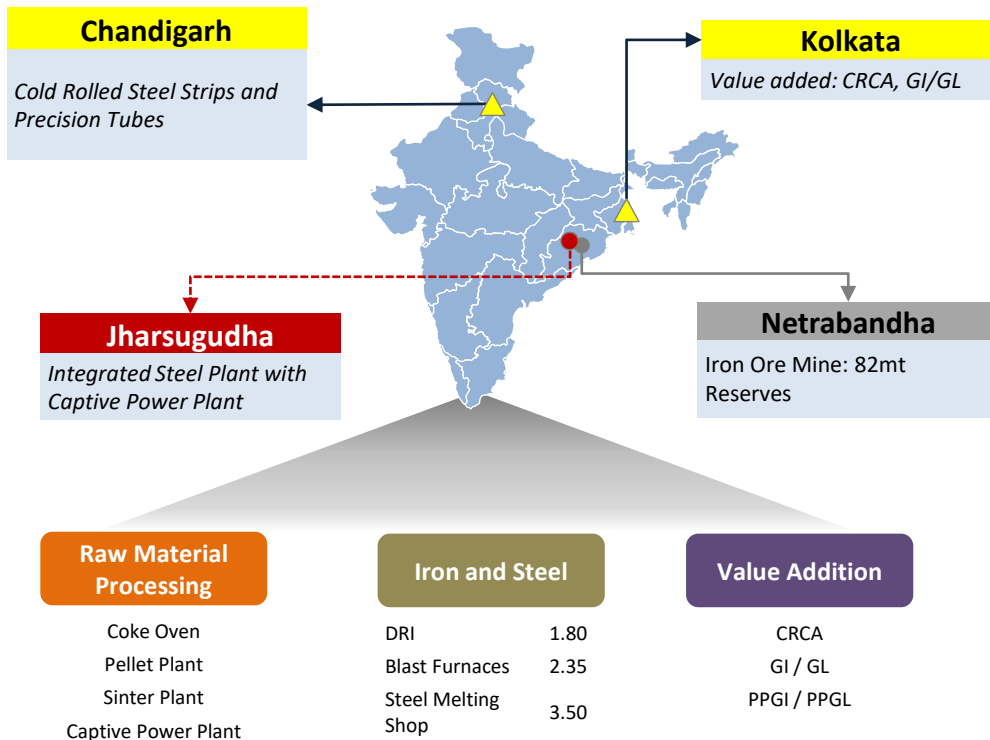
### USA



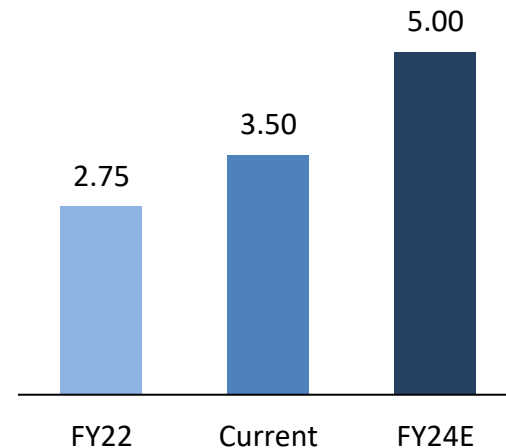
# 1 BPSL- Facilities and Capacities Overview

**Crude Steel Capacity**  
3.50 mtpa

**Downstream Capacity**  
1.7 mtpa

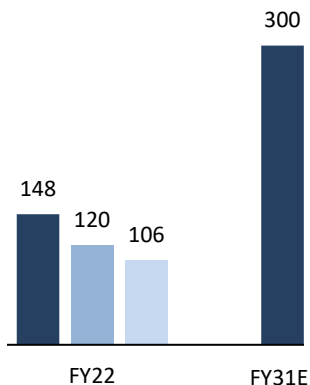


**Expansion Plan**

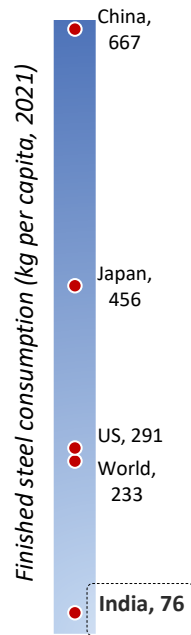


## India Steel: Strong Fundamentals (mt)

■ Crude Steel Capacity   ■ Crude Steel Production   ■ Finished Steel Demand

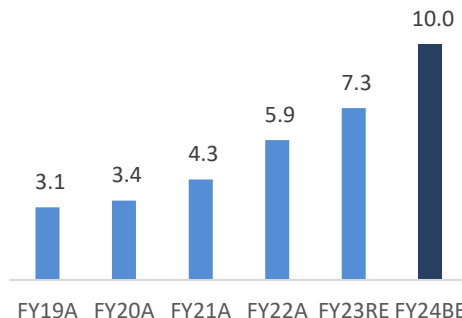


## Significant room for growth in steel consumption in India



## Healthy Steel Demand Outlook in India

### Government Capex (INR tn)#



### Production-Linked Incentive Scheme\*

Govt. incentive ₹1.97 tn

Spread across 14 Sectors

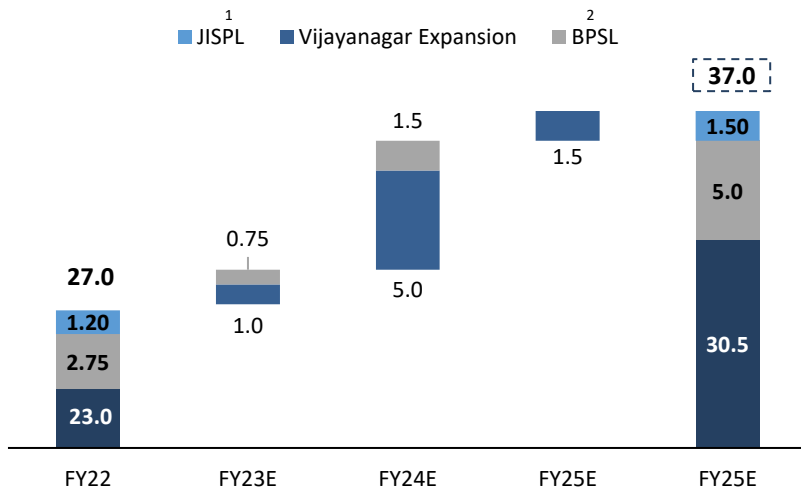
717 Applications approved

Estimated Capex ₹3 tn

- Govt. thrust on infra, housing and increasing share of mfg. in GDP
- Productive investments like NIP, PLI scheme and defence indigenisation to drive capex
- Robust demand from auto, residential real estate and energy transition
- India to remain competitive exporter of steel and steel products
- JSW has industry-leading volume growth to meet rising domestic demand

**Best placed Indian steel producer to benefit from strong domestic demand growth**

## Near-term growth in JSW Steel's India steel capacity (mtpa)



- 5 mtpa Dolvi expansion commenced integrated operations in FY22 and has been fully ramped-up within a year
- 5 mtpa brownfield expansion at Vijayanagar
  - Value-accretive with low capex of c.\$400-500/ton
- Incremental expansion at Vijayanagar of existing facilities to enhance capacity by further 2.5 mtpa (1.0 + 1.5) in phases
- BPSL capacity expanded to 3.5mt (from 2.75mt); on track to expand to 5mt by FY24
- Organic brownfield capacity expansion capex well below global benchmarks of replacement cost of c.\$1,000/ton for BF-based capacity

## Value-accretive brownfield growth at low capex per ton

## Resilient business model based on continued focus on cost leadership



Leading position on global conversion cost curve

- Conversion cost of c.\$136/tonne in FY22



Technology, analytics and innovation continue to be the key levers to further optimize cost and operational efficiencies



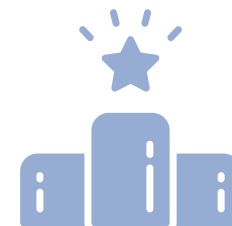
Implementation of cost reduction projects targeting overall cost savings and reduced dependencies

- Pellet plant and coke oven facilities at Vijayanagar and Dolvi
- Utilisation of pipe conveyor system for transporting iron ore fines

## WSD Aggregate Ranking<sup>(a)</sup>

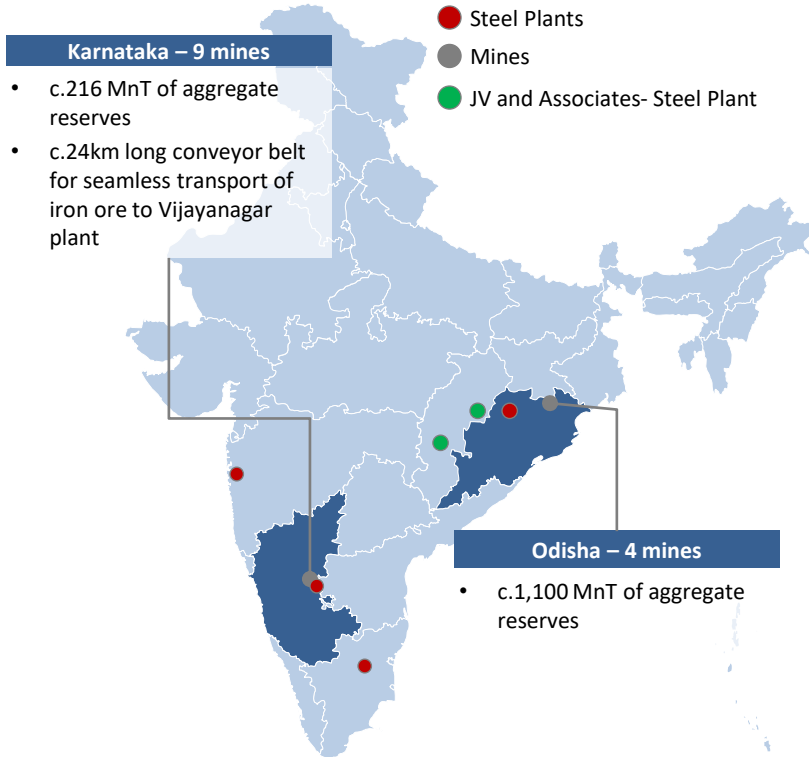


**# 5 ranked  
in Asia**



**# 8 ranked  
Globally**

## 13 Captive iron ore mines ensuring adequate raw material supply



## Raw material security

- Won 6 iron ore mines in Karnataka through auctions in 2016 and 2018, and 3 mines in FY20.
  - Targeting 6-7 mtpa from the Karnataka mines
- Acquired 4 iron ore mines in Odisha with c.1.1bn tonne reserves
  - Strategic long term iron ore security for Dolvi and Salem works
  - Consistent and high quality iron ore grade to enhance BF productivity
  - Opportunity to optimize and significantly reduce logistics cost over time
- Cost of captive iron ore comprises
  - Bid premium based on prevailing domestic prices declared by IBM
  - Royalties & other statutory levies
  - Mining & logistics costs

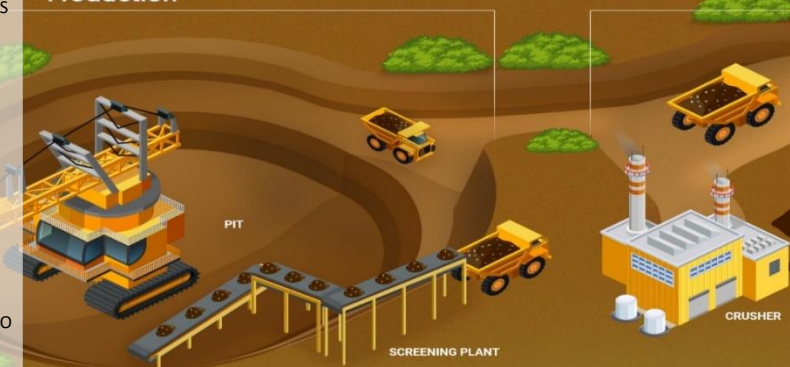
## Strengthening Mining Operations in Odisha

- Enhance mining capabilities and efficiencies
  - Estimated capex of ₹3,450 crore over FY22-24
- Key strategic benefits of the project
  - Enhance own mining infrastructure to reduce reliance on outsourced mining
  - Grinding and washing facilities to improve the quality of the ore, aiding higher productivity at the steel-making operations
  - Implement digitalization across the mining operations

## Non-DLMS

- 1 **Integration with i3MS**  
Permit details generated in i3MS and fetched
- 2 **Integration with SAP**  
DO creation in SAP  
DO-Permit Tag
- 3 **Despatch scheduling**  
(Day-wise despatch scheduling)
  - By Rail
  - By Road
- 4 **Transporter Management**  
Transporter accepts permits/ DO to despatch
  - ✓ Transporter tags i3MS verified vehicle
  - ✓ Transporter checks for proper FASTag. Flags if FASTag not available
  - ✓ Post JSW approval of tagged vehicles, transporter tags in i3MS
- 11 **Receipt at railway siding/plant/port**
  - Mobile app
  - RFID

## Production



## Stockyard



## DLMS

- 5 **Parking Management**  
(Day of despatch activities)  
Entry control through RFID authentication and Boom Barrier/traffic lights
- 5a **Parking Entry**  
(DO-Tagging validation)
  - ✓ Through FASTag reader (primary)
  - ✓ Through vehicle number punch (failover)
- 5b **Parking Exit**  
LED display to show trucks to proceed to mines for tare weight
  - ✓ FIFO
- 6 **Mines (Tare weighbridge)**  
Automated tare weight  
Proceed to loading point
- 7 **LED displays** for assisting navigation from primary bifurcation
- 8 **Loading Point**  
Mobile app based authentication  
Geofence based authentication
- 9 **Gross Weightment**  
Automated gross weightment  
Proceed to mines exit
- 10 **Mines Exit**  
eTP, eWaybill and invoice generated

# Strong Margins Further Enhanced by Significant Downstream Capacities Producing Value Added and Special Products

## Coated Products



Pipes & Tubes, Roofing,  
General Engg., Solar,  
Appliance, Colour Coater

## Colour Coated Products



Appliance, Roofing,  
Sandwich panel

## Tin Plate



Oil Can, Non-oil Can,  
Food Cans

## Hot Rolled Products



Construction, Infrastructure,  
General Engg., Pipe & Tubes,  
Yellow goods

## Cold Rolled Products



Automotive, General Engg.

## Electrical Steel










Automotive, General Engg.

## Alloy Steel Products



Automotive

Colour Coated	 <p>Advanced Roofing Technology</p>	<ul style="list-style-type: none"> <li>• Super premium, colour coated coils &amp; sheets, with a 20 year warranty</li> </ul>
	 <p>Premium Colour Coated Roofing Sheets</p>	<ul style="list-style-type: none"> <li>• Premium colour coated coils &amp; sheets, with a 15 year warranty.</li> <li>• 3 variants - Cool Roof, Anti Dust &amp; High Gloss</li> </ul>
	 <p>Colour Coated Sheets</p>	<ul style="list-style-type: none"> <li>• High quality Al-Zn alloy &amp; colour coated roofing sheets with anti-corrosion technology</li> </ul>
	 <p>Superior Quality Colour Coated Sheets &amp; Coils</p>	<ul style="list-style-type: none"> <li>• Superior colour coated sheets for OEM customers</li> <li>• 6 variants – Anti Microbial, Anti Graffiti, Anti Dust, Anti Statics, Cool Roof and High Gloss</li> </ul>
Galvalume	 <p>Premium Al-Zn Sheets</p>	<ul style="list-style-type: none"> <li>• Premium category Al-Zn coated roofing sheets &amp; coils with 7 year warranty</li> </ul>
	 <p>Premium Al-Zn Sheets</p>	<ul style="list-style-type: none"> <li>• Desired weight as per customer requirements</li> <li>• Corrosion protection and enhanced durability</li> </ul>
GC	 <p>Premium GC Sheets</p>	<ul style="list-style-type: none"> <li>• Premium GC (galvanized corrugated) sheet with high durability</li> </ul>

## Strong focus on building brands and increasing value added sales



- Tinplate coils and sheets with high strength and formability, used in food and non-food packaging



- Al-Zn coated coils and sheets designed for complete requirement of solar structures (purlin, rafter, bracers, etc.)



- Galvanised steel that is lead free, suited for consumer durable sector with high safety and non-hazardous-material needs



- Greenpro certified TMT bars. Manufactured through primary production process to ensure purity & superior quality
- Unique rib pattern that provides best bonding with cement

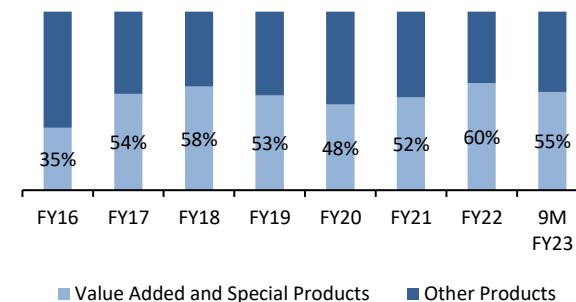


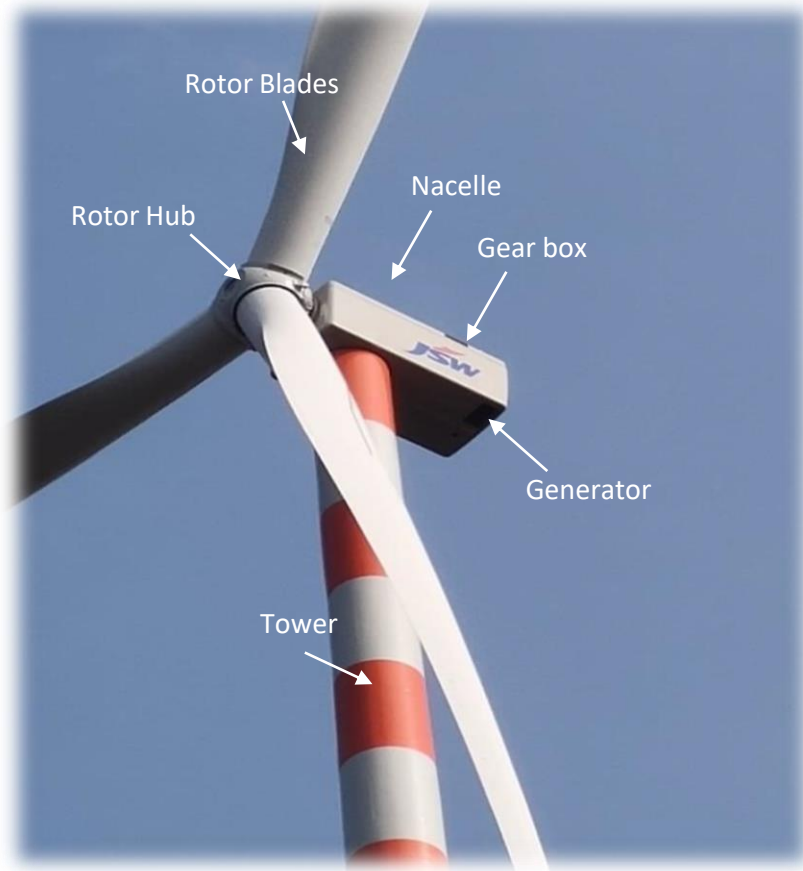
- Cut-to-Length HR sheets available in wide variety of sizes and grades



- Steel doors designed to overcome the common issues associated with wooden doors like seasonal door jams, fire, termites and heavy-handed installation process

### JSW Share of Value added products





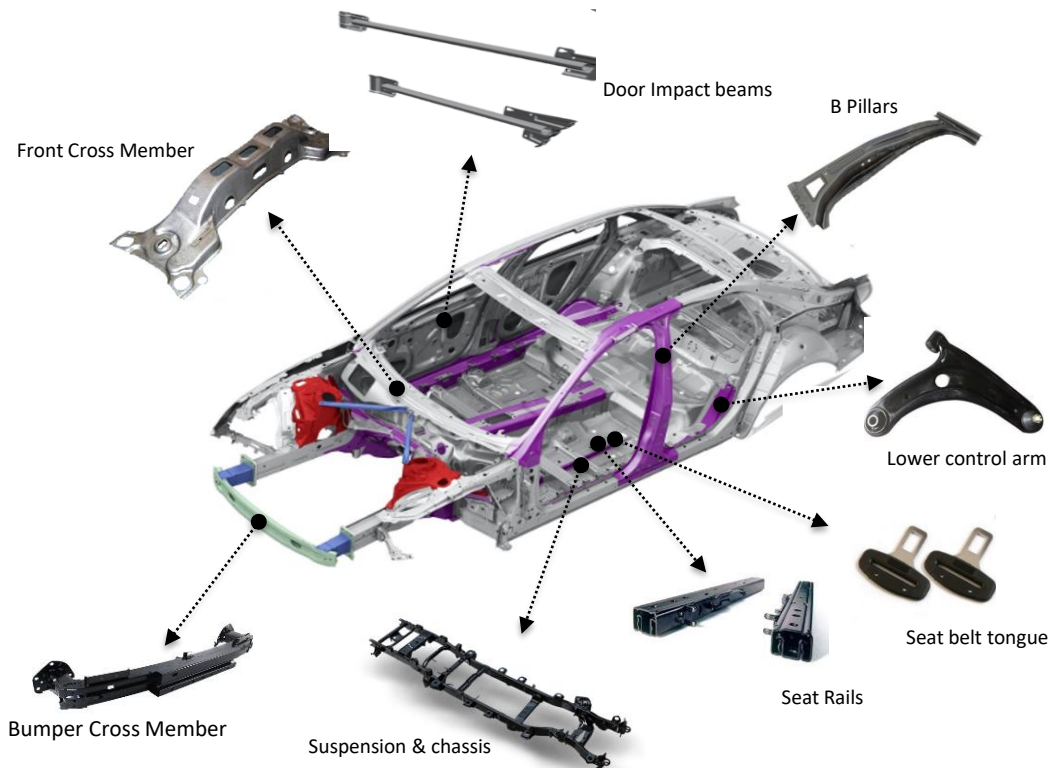
#### Supplying Steel for Wind Mills

- JSW Steel is on the way to become one of the preferred and leading suppliers to the wind sector
- JSW currently supplies HR Plates for Tubular Tower which is being used for Top, Middle, Bottom section and door floor. The tower uses the maximum tonnage of steel
- JSW Steel supplied steel to ~620 MW of wind projects in FY22 and ~1.5 GW during 9M FY23

#### Did you know..?\*






The percentage of steel used in the components of a large wind turbine assembly is as follows:

- Tower: 98%
- Rotor-hub : 95%
- Rotor-blades: 5%
- Gearbox: 98%
- Generator: 20-60%
- Nacelle frame and machinery: 85%



## Focus on safer, lighter and fuel efficient cars

- Indian automotive industry is evolving to adopt consumer demand for 5-star rated cars for safety
- JSW Steel is working closely with auto makers to make cars safer, lighter and fuel efficient
- JSW's AHSS (advanced high strength steel) with high tensile strength and optimum formability enables low cost product solution with clear edge over high cost materials such as Aluminium & Carbon Fibre, to achieve high safety ratings
- All major crash and safety components - A & B pillars, cross-beams, door impact beams, etc. - are being built from JSW's AHSS steel
- JSW has also developed steel for suspension parts, which require optimum fatigue life in addition to high strength
- JSW Steel has become one of the preferred and leading suppliers to the automotive industry

SD Targets	FY05	FY30 Targets	Improvement	Strategic Approach
 <b>Climate Change</b> <ul style="list-style-type: none"> <li>Specific Energy GCal/tcs</li> <li>GHG Emissions tCO<sub>2</sub>e/ tcs</li> </ul>	6.94	5.65	19%	<ul style="list-style-type: none"> <li>Transition from thermal to renewable energy</li> <li>Reduction of fuel rate in BF and DRI</li> <li>Increased use of scrap in steel making</li> <li>Energy efficiency and process efficiency improvements through BATs</li> <li>Process improvements based on the World Steel 'Step Up' global benchmarking process</li> </ul>
 <b>Water Security</b> <ul style="list-style-type: none"> <li>Specific water consumption (steel production) (m<sup>3</sup>/tcs)</li> </ul>	3.60	2.21	39%	<ul style="list-style-type: none"> <li>Maintaining zero liquid discharge across operations</li> <li>Installation of technology for reduction of fresh water in cooling towers</li> <li>Adopting digitalisation for better water control and monitoring</li> </ul>
 <b>Waste</b> <ul style="list-style-type: none"> <li>Specific Waste (Kg/tcs)</li> <li>Waste Recycled (%)</li> </ul>	NC	677	-	<ul style="list-style-type: none"> <li>Integrated Strategy towards efficient waste management</li> <li>Focus on 'Zero waste to Landfill'</li> <li>Promoting Circular Economy</li> </ul>
 <b>Air Emissions</b> <ul style="list-style-type: none"> <li>Specific process dust emissions (Kg/tcs)</li> </ul>	0.93	0.26	70%	<ul style="list-style-type: none"> <li>Adoption of best available technologies like MEROS in sintering, Oven pressure Control technology and CDQ in Coke Plants, TRT's in BF</li> <li>SOx &amp; NOx emission targets for FY30 have been revised to 0.82 kg/tcs and 0.91 kg/tcs respectively</li> </ul>
 <b>Biodiversity</b> <ul style="list-style-type: none"> <li>Biodiversity at our operating sites</li> </ul>	-	Achieve 'no net loss' of biodiversity		<ul style="list-style-type: none"> <li>Continue to enhance Biodiversity at all our locations and operations to achieve 'no net loss'</li> <li>Increase green cover across operations</li> </ul>

JSW is committed to providing a safe and healthy working environment and achieving an injury- & occupational illness-free workplace.

## Our vision is to achieve 'Zero Harm'

### Building a Culture of Health & Safety

### JSW's Roadmap to Vision 000



#### Health & Safety Initiatives

- Risk Management and DuPont Process Safety Management implementation review at Vijayanagar
- Wellbeing survey conducted at Dolvi
- Skill assessment audit at Vijayanagar and Dolvi
- 94,000+ safety observations carried out in Q3 FY23
- 7800+ Inspections and Audits in Q3



#### Competency Development

- Process Quality Assessment and JSW CARES (Contractor Assessment & Rating for Excellence in Safety) third party audit at Vijayanagar & Dolvi
- 14,000+ Safety E-Learning Modules completed in Q3 FY23
- 640+ Contractors assessed during Q3
- 828 staff has undertaken safety champions program and successfully qualified as "Safety Champions"

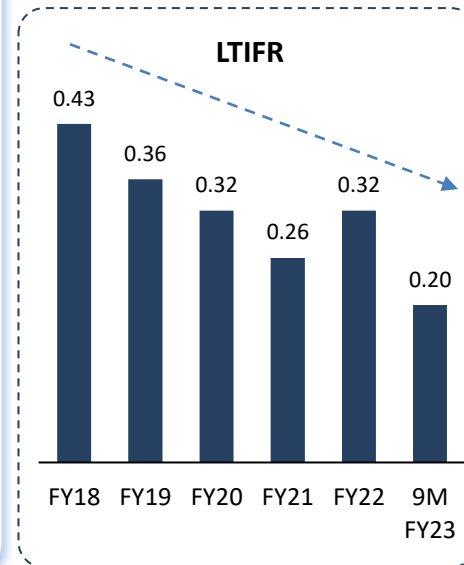


#### Awards & Recognitions

- Salem Works won the prestigious "Sword of Honour" award from British Safety Council



Zero major incidents | Zero injury | Zero harm



### Key Intervention Areas

- 
Health & Nutrition
- 
Agriculture
- 
Water, Environment & Sanitation
- 
Education
- 
Waste Management
- 
Skill Development
- 
Art, Culture & Heritage
- 
Sports

### Maternal and Child Healthcare



400 bed Maternal & Child Healthcare wing at VIMS Ballari Medical College being built by JSW in collaboration with Karnataka State Government and VIMS Ballari



### Miyawaki Forest



Developing a Miyawaki Forest in Salem to improve Biodiversity in the area and sequester carbon for long-term benefits





Partnering 'Department of Drinking Water & Sanitation' Govt. of India through ISC for a PPP model in Sanitation across 2 locations



Devising a first-of-its-kind Climate Solutions Marketplace in India with ICC



Initiated wildlife project to mitigate Human-Elephant Conflict in Odisha in partnership with Wild Life Research & Conservation Society



JSW Foundation  
FELLOWSHIP

Two year youth leadership program for deep insights in social development. 12 Fellows have been selected for first batch



Partnership with Rotary, SRCC & Govt. of Maharashtra to support corrective surgeries for "hole-in-the-heart" among children



Two startups in Waste Management working at Dolvi & Vijayanagar, focusing on industrial, household and organic waste upcycling

# Sustainability Initiatives & Recognitions



## 'SEED' - Decarbonisation Initiative



- Initiative at Vijayanagar for Decarbonisation
- Shop-specific climate action plans with climate action centres setup from agile information
- Digital and tech enablers for accurate tracking, monitoring and progress review

### Shop-level

CO2 emissions baseline established; emissions being tracked daily

**100+**

Initiatives identified with granular shop level climate action plans

**5**

Climate action centers set up for agile implementation

**>9mtpa**

CO2 emission reduction estimated by 2030



## Recognitions

JSW Steel upgraded to **CDP A** climate rating.

JSW Steel is the only manufacturing company from India, and one of three steel companies globally to achieve this topmost rating



JSW Steel joined ResponsibleSteel, the steel industry's first global multi-stakeholder standard and certification initiative



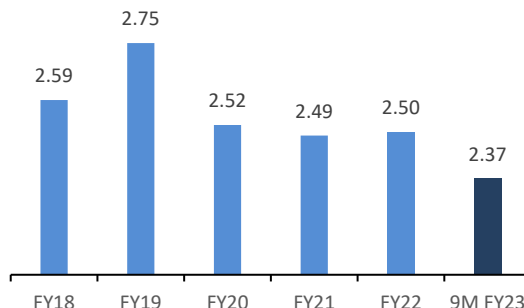
Excellence in Sustainability Innovation Award by World Sustainability for Waste-to-Sand initiative at Vijayanagar



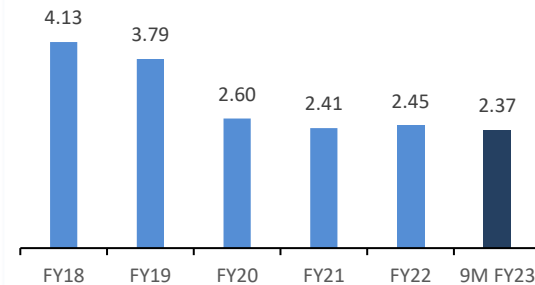
**Specific Energy Consumption (Gcal/tonne)**



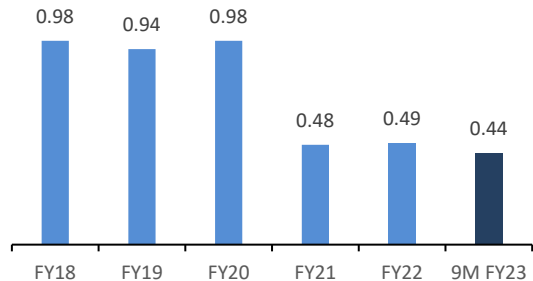
**GHG Emission Intensity (tCO<sub>2</sub>/tcs)**



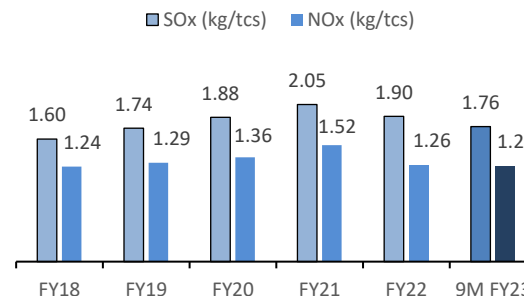
**Specific Freshwater Consumption (m<sup>3</sup>/tcs)**



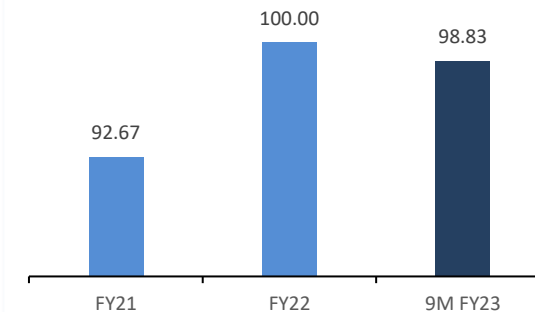
**Dust Emissions (kg/tcs)**



**SO<sub>x</sub> & NO<sub>x</sub>**



**Waste Utilization (%)**



## Chairperson - Emeritus



Savitri Devi Jindal

## Chairman and MD



Sajjan Jindal



## Executive Directors



**Seshagiri Rao M.V.S**  
Joint Managing Director  
and Group CFO



**Jayant Acharya**  
Deputy Managing Director

## Independent Directors



**Seturaman Mahalingam**  
CA, Ex-CFO of TCS, Ex member  
of Tax Admin. Reform  
Commission



**Harsh Charandas Mariwala**  
Chairman of Marico, Chairman  
and MD of Kaya



**Nirupama Rao**  
40 years of experience as a  
diplomat, Ex-Foreign Secretary  
of India



**Dr. Punita Kumar Sinha**  
Former CIO at The Asia  
Tigers Fund



**Haigreve Khaitan**  
Senior Partner at  
M/s. Khaitan & Co



**Ms. Fiona Jane Mary Paulus**  
37 years of experience in  
resources and energy  
investment banking, risk mgmt.



**Marcel Fasswald**  
Former COO & CTO of SMS  
Group, Germany

## Nominee Directors



**Dr. M.R. Ravi, IAS**  
Nominee Director  
of KSIIDC



**Hiroyuki Ogawa**  
Nominee Director  
of JFE Steel Corporation

## JSW-JFE partnership

### Partnership overview

- 14.99% minority stake bought by JFE in 2010
- Access to cutting edge technologies
- Operational excellence for cost reduction
- Balance Sheet deleveraging to support growth

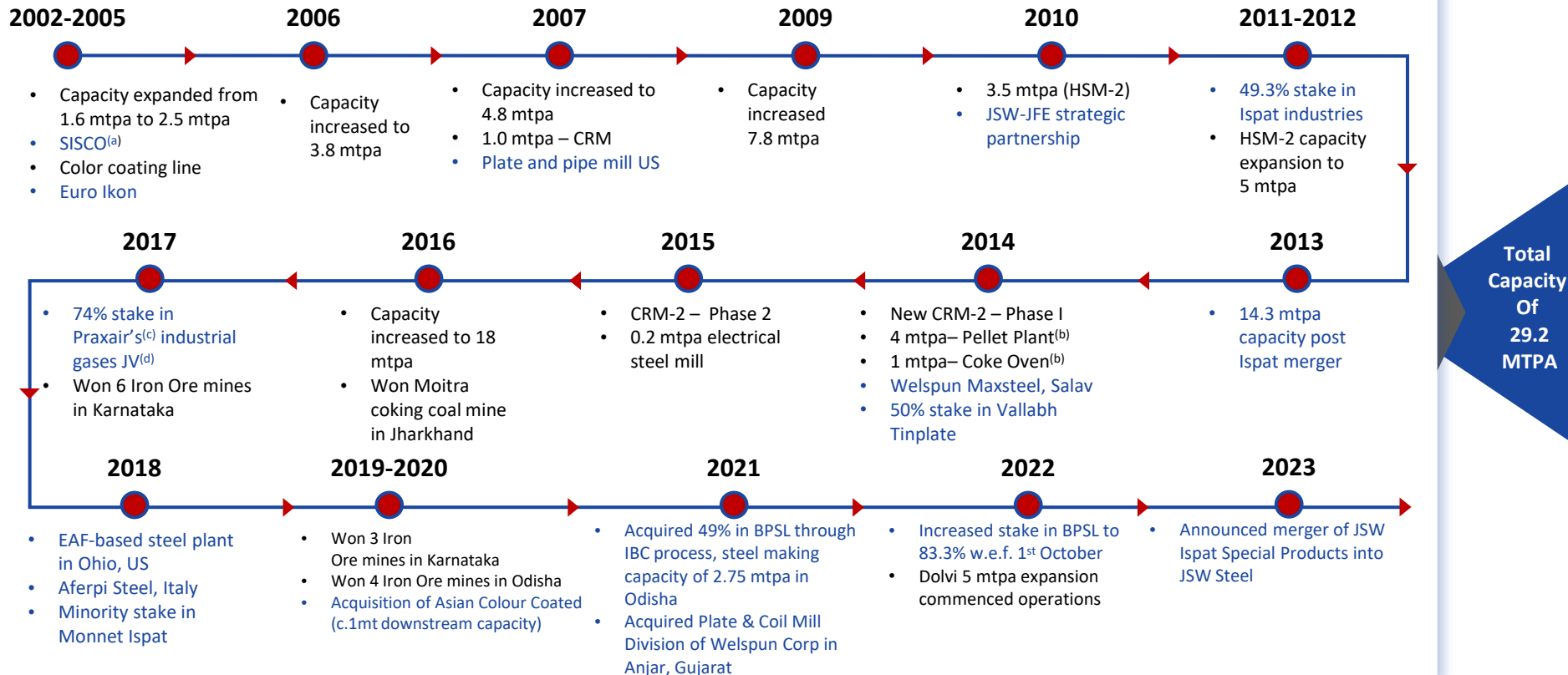
### Technology agreements benefits:

- ✓ Access to fast growing auto steel market
- ✓ Technical know-how for electrical steel manufacturing
- ✓ Short learning curve
- ✓ Application engineering
- ✓ New product development
- ✓ Benchmarking and personnel training

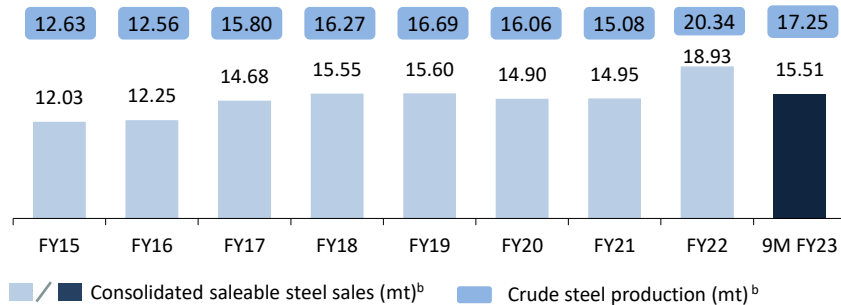
### Other benefits:

- ✓ Improvement in quality, productivity, yield, energy efficiency
- ✓ Sharing best maintenance, environment and safety practices
- ✓ Benchmarking, training and talent sharing
- ✓ Standardization of processes

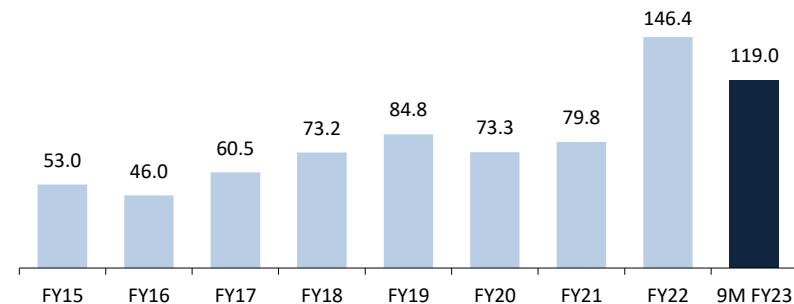
## Combination of organic and inorganic growth



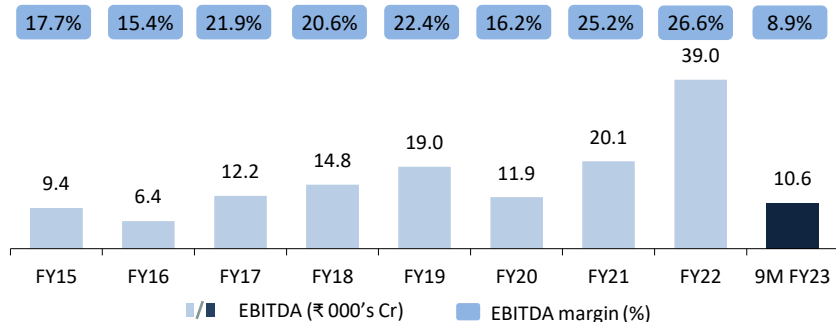
## Strong track record of volume growth



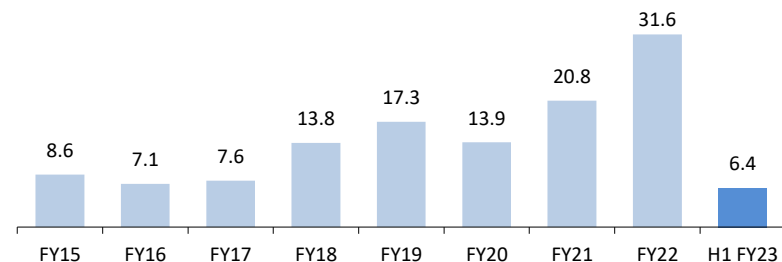
## Track record of Operating Revenues (₹ 000's Cr)



## Robust EBITDA Margin through the cycle

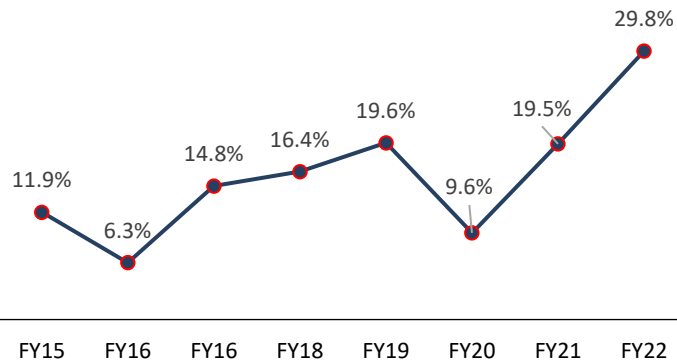


## Cashflow from Operations (₹ 000's Cr)

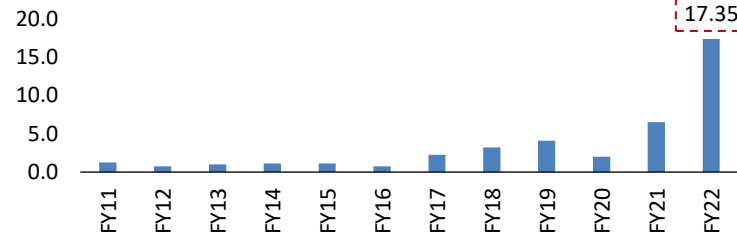


Note: (a) FY18 numbers based on restated financials (b) Production and Consolidated Sales Volume comprises JSW Steel Indian operations and excludes JV's. BPSL has been included since H2 FY22 as it became a sub from 1 Oct 2021. Sales volumes are after netting-off inter-company transactions.

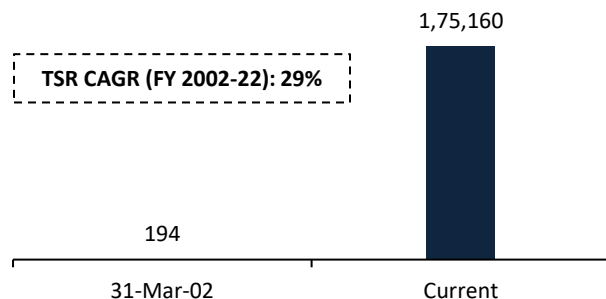
## ROCE



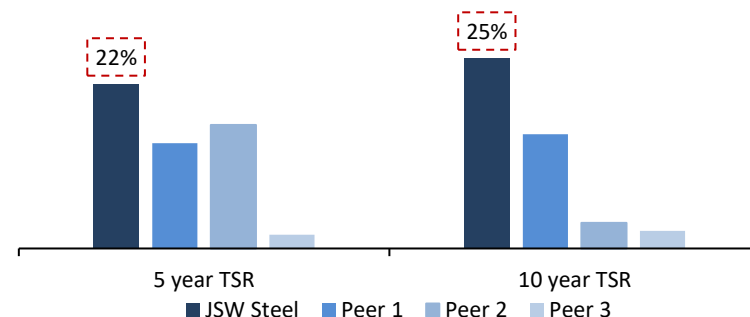
## Uninterrupted Dividends

Dividend Policy of paying out 15-20% of Consol. Net Profit<sup>1</sup>

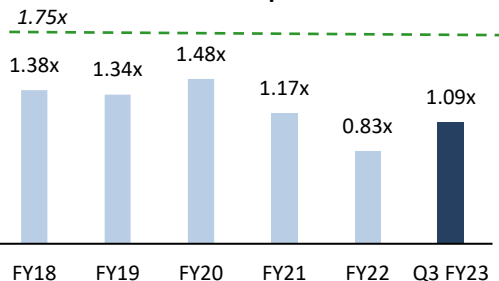
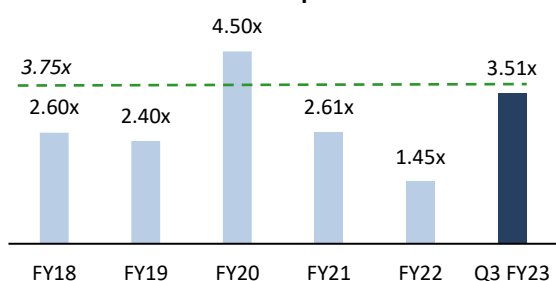
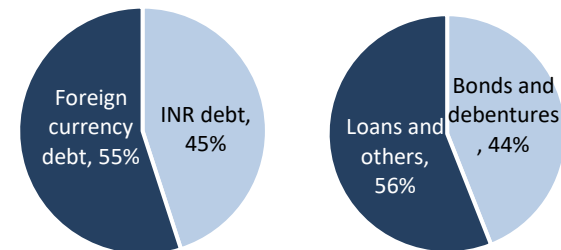
## Market cap (₹ Cr)



## 5 year and 10 year Total Shareholder Return



## Value-accretive growth through economic cycles

**Net Gearing (ND/Equity) within the stated cap of 1.75x**

**Leverage (ND/EBITDA) within the stated cap of 3.75x**

**Diversified Funding Sources**


### Strong Liquidity and Credit Ratings

- Cash and Cash equivalents of ₹11,176 crore
- Credit Ratings:
  - International: Fitch: BB (Stable Outlook) and Moody's: Ba1 (Stable Outlook)
  - Domestic: CARE: AA (Stable Outlook), IndRa: AA (Stable Outlook), ICRA: AA (Stable Outlook)

### Debt Profile

- Access to diverse pools of liquidity. Strong relationships with domestic and international banks and financial institutions
- Net Gearing and Leverage within stated caps of 1.75x and 3.75x, respectively
- Successfully raised US\$3.69bn through global bond markets since 2014
- Issued global steel industry's first USD Sustainability Linked Bond in September 2021
- Successfully raised Unsecured Rupee NCDs of Rs.875 crore in December 2022



Sustainability

5

Overview

8

Key Investment Highlights

13

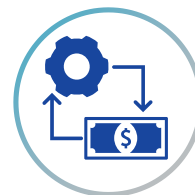
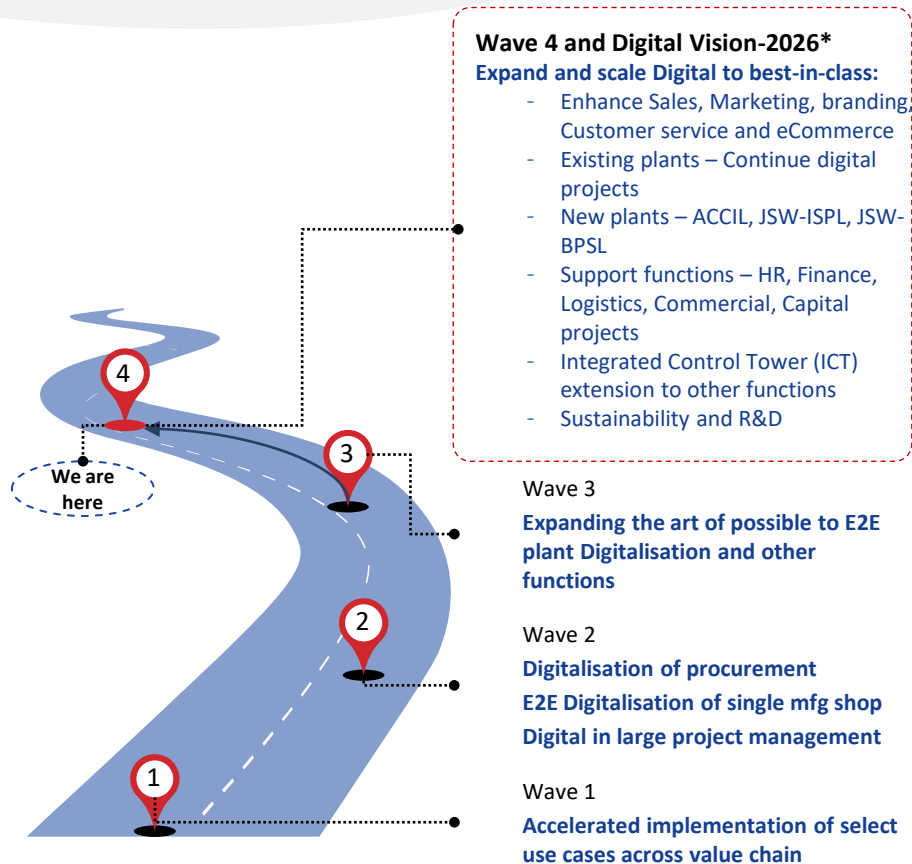
**Digitalisation at JSW Steel**

**38**

Appendix

42

# Digitalization: JSW's Approach & Impact Created



**130+**

**Digital Assets**  
Created



**6,000+**

**Employees** engaged in the digital journey



**400+**

Digital lighthouses and **projects**

## Guiding principles behind Digitalisation



**Agile**

- Fail-fast approach
- Continuous improvement
- Addressing discreet problems



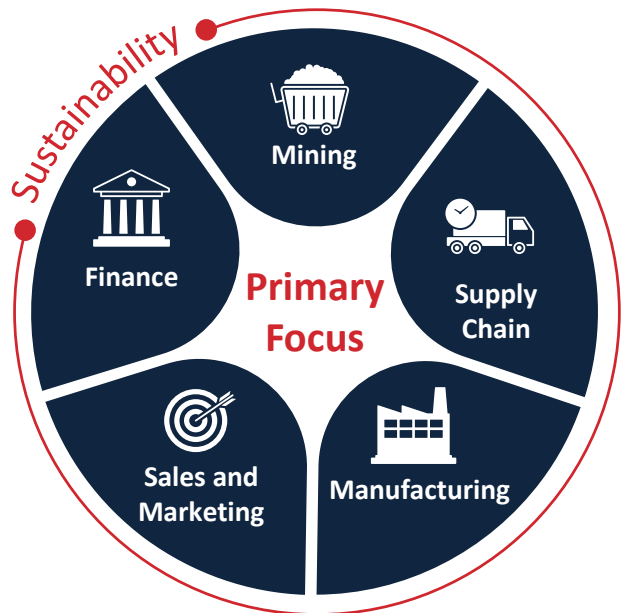
**Value lens**

- ROI is the key to “digital investment”
- Special focus on Safety and Sustainability projects
- Enhancing customer, supplier and employee experience



**Sustenance**

- Continuous learning culture
- Nurture in-house talent and “Citizen Data Scientists”
- Promote Horizontal and Vertical deployment
- Digital PMO and Governance



## Additional Focus

**Safety, Security, Governance**

**Sustainability led R&D**

**Cultural Transformation**

**Integrated Control Tower**

## Anticipated Impact

**Increased Sales**

**Cost Optimization**

**Asset Availability**

**Emission Reduction**

**Improve Safety**

**Great Place To Work (GPTW)**



## Technologies Used

Core Systems (SAP, Salesforce, Microsoft Azure, DarwinBox), IoT, AI/ML, Analytics, Cloud/Edge Computing, RPA, Intelligent Cameras  
 → Leveraging JSW Digital team, Tech Partners and Startup ecosystem



## End-to-End Functional Transformation focus

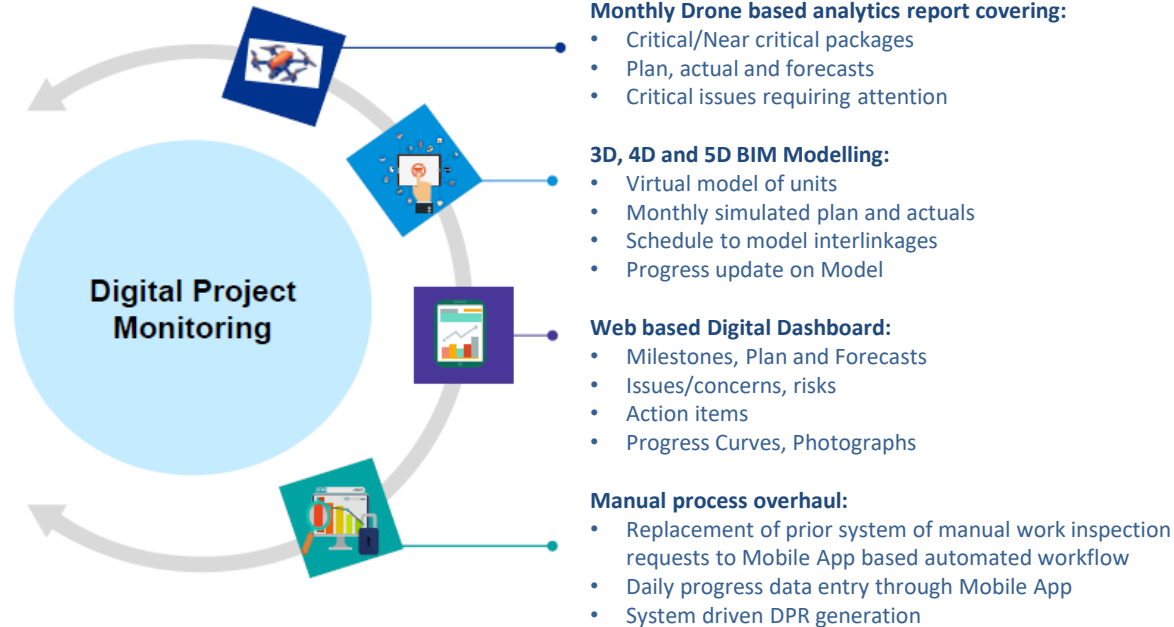
From point projects to E2E Transformation approach enabled by platform-driven strategy



## People Upskilling

- Target 9000 hours of Digital and Data Science training in FY23
- Tech sessions, Online courses, Symposiums enabled through Cultural Transformation efforts

## Digital Initiatives for project monitoring at 5mtpa Vijayanagar expansion



Drone visual of 5mtpa expansion

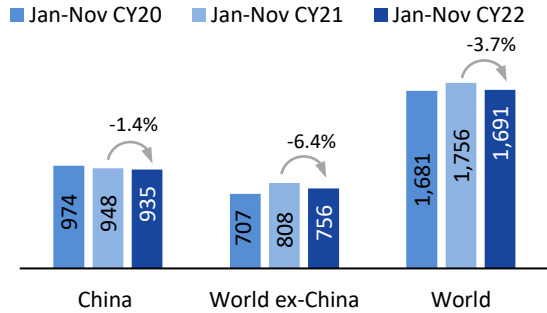


Web based Digital Dashboard for new BF

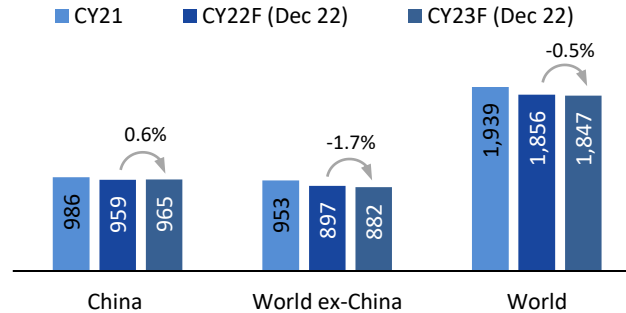


Sustainability	5
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<b>Appendix</b>	<b>42</b>

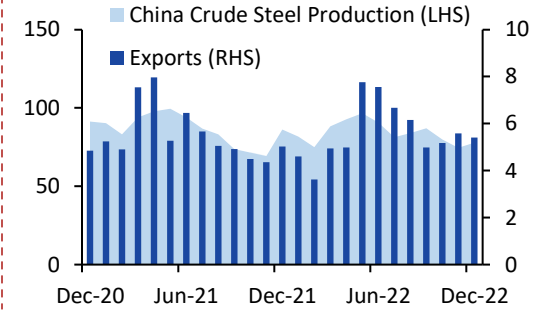
## Crude Steel Production – Jan-Nov (mt)



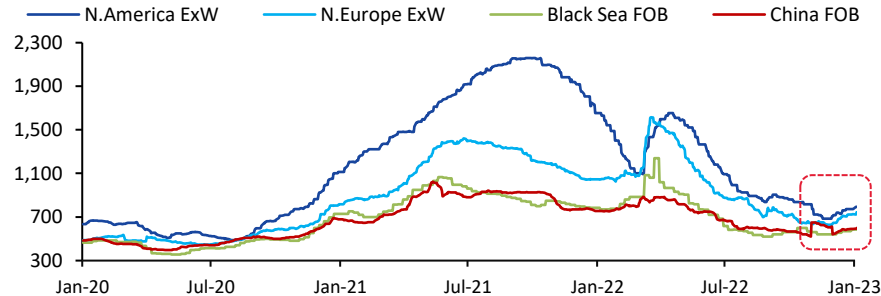
## Crude Steel Demand (mt)



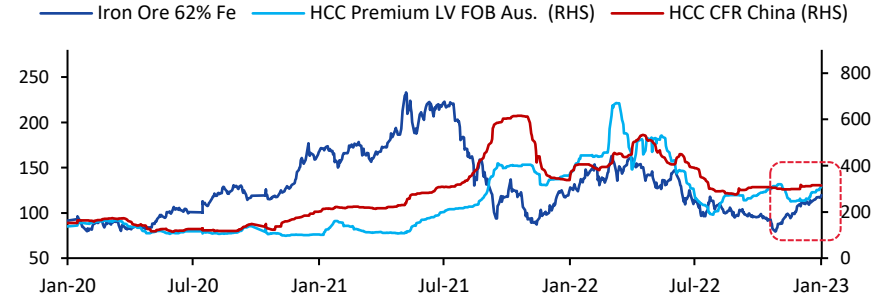
## China Steel Production and Export (mt)



## HRC Prices US\$/t

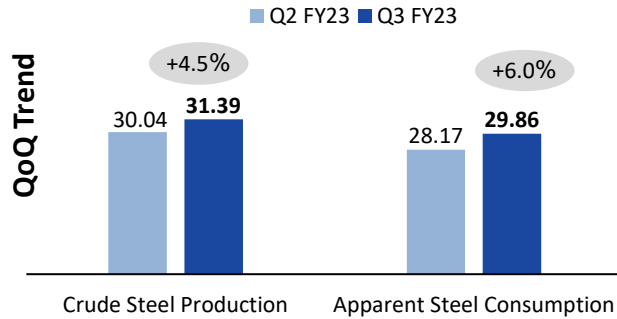


## Raw Material Prices (US\$/t)

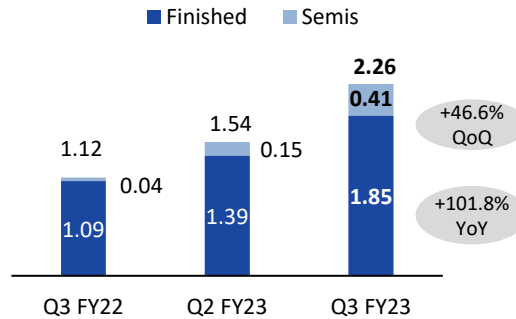


**Steel prices improving post sharp correction; high RM prices keeping spreads subdued**

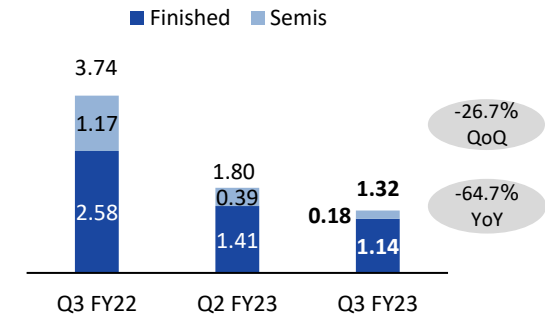
## Production and Consumption (mt)



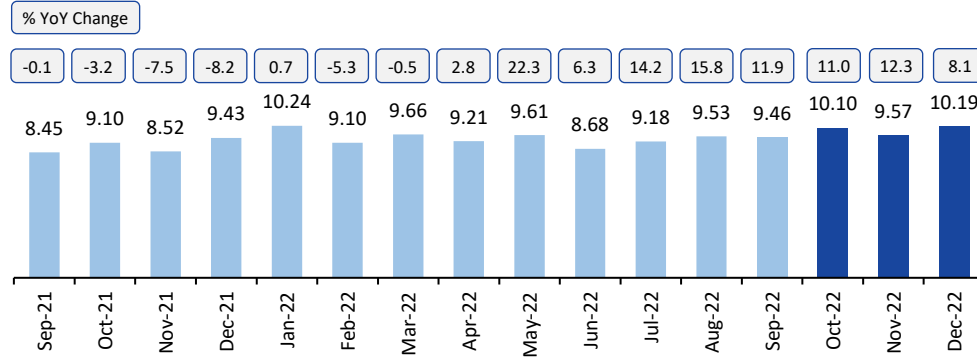
## Steel Imports (mt)



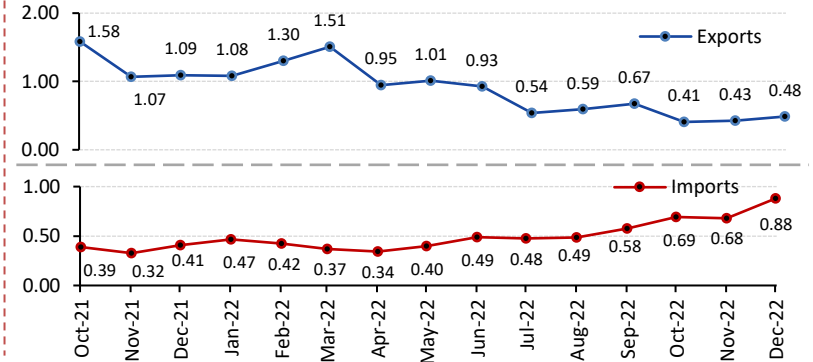
## Steel Exports (mt)



## Apparent Steel Consumption (mt) and YoY Growth



## Monthly Steel Exports (mt) and Imports (mt)



Healthy domestic demand but rising imports remain a threat

- Committed to Sustainability targets with focus on 5 key areas: Climate Change, Water Security, Waste, Air Emissions, Biodiversity
- Maintain healthy margins despite challenging external environment:
  - Leverage low conversion cost advantage
  - Optimise raw material costs by increased usage of Odisha captive ore and optimum blending of coking coal
  - Continued focus on value-added and special products
  - Remain nimble and adapt to evolving market scenario
- Realise full benefits from 5mt Dolvi-II expansion, BPSL expansion, and expanded downstream capacities
- Focus on delivering next phase of growth: value-accretive 5mtpa brownfield project at Vijayanagar
- Continued focus on adoption of Technology and Digitalisation to create value and drive sustainability
- Committed to maintaining a strong balance sheet and credit ratings

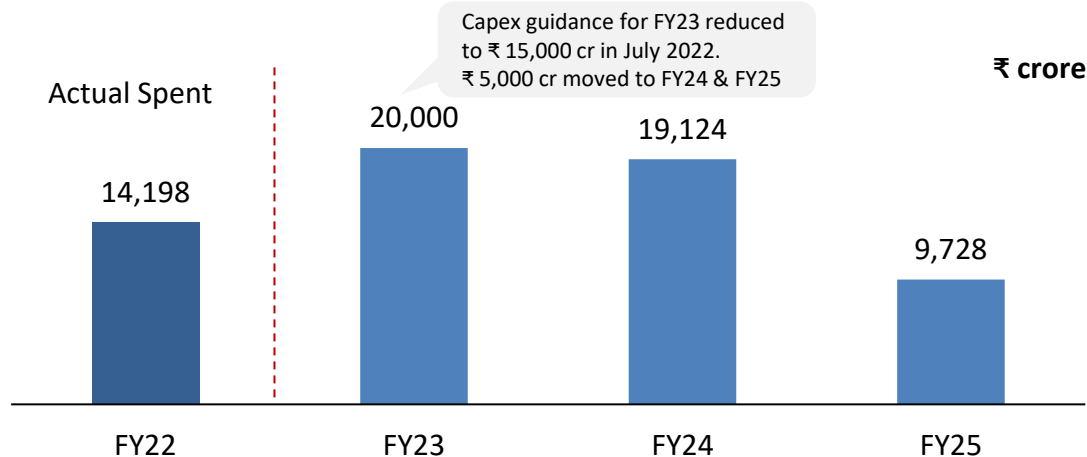
**Continued focus on creating shareholder value**

All fig. in million metric tonnes

Particulars	FY23	
	Crude Steel Production	Sales
<b>Consolidated Indian Operations</b>	<b>23.60</b>	<b>22.60</b>
<b>Joint Control Entity:</b>		
JSW Ispat Special Products Ltd.*	0.70	0.70
<b>Indian Operations incl. Joint Control</b>	<b>24.30</b>	<b>23.30</b>
JSW Steel USA Ohio*	0.70	0.70
<b>Total Combined Volumes</b>	<b>25.00</b>	<b>24.00</b>

\* - Given adverse market conditions, we expect slippages in production and sales at JSW Ispat Special Products Ltd and at JSW Steel USA Ohio from the guidance given earlier

# Annual Capex Update



Particulars	₹ Cr
Unspent Capex including creditors & acceptance	33,259
Sinter plant and other facilities to support 5mtpa expansion at Vijayanagar <sup>1</sup>	5,000
LRPC <sup>2</sup> and Other Projects	1,401
Sustenance Capex	4,704
<b>Sub Total</b>	<b>44,364</b>
BPSL: Expansion from 2.75mtpa to 5mtpa in 2 phases & Sustenance Capex	4,488
<b>Total</b>	<b>48,852</b>

## 5mtpa brownfield project

- Construction activities for all packages underway
- Equipment erection commenced for all packages
- Project to be completed by end of FY24

## Coke Oven Plant

- 1.5 mtpa Coke Oven battery: Battery A commissioned in September 2022. Battery B expected commissioning by Q1 FY24
- Capacity enhancement of further 1.5 mtpa to support the 5 mtpa steel-making expansion. Phased commissioning in FY24



Blast Furnace under construction

# Key Project Updates – BPSL & Other Downstream

## Phase-I expansion to 3.5 MTPA

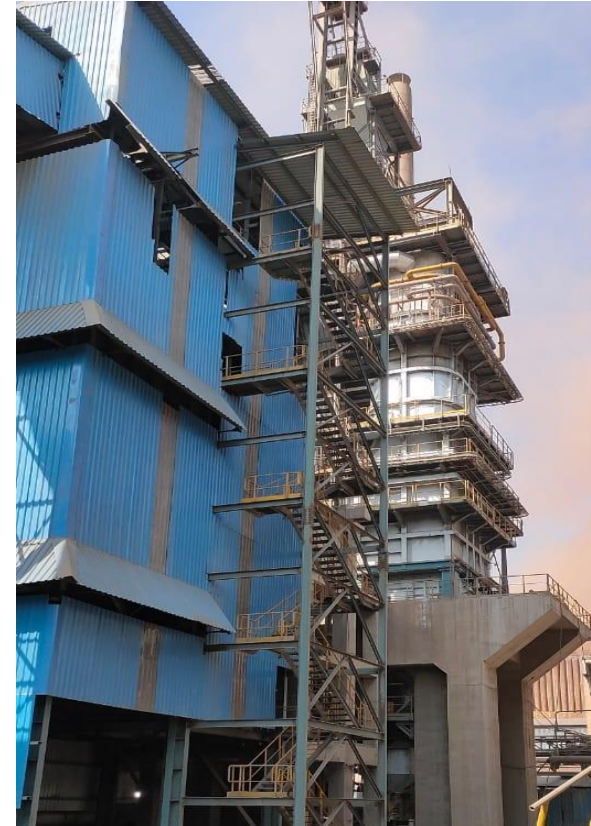
- Phase-I expansion completed
- Ramp-up in progress

## Phase-II expansion to 5 MTPA

- Long lead-time items ordered (new Wire Rod Mill-2 and SMS-2, PCI upgradation for BF-1 & 2, Lime Calcination Plant-6)
- Civil work & Structural Erection work in progress in new Wire Rod Mill-2 and SMS-2 Project
- Project to be completed by FY24

## Other Downstream projects

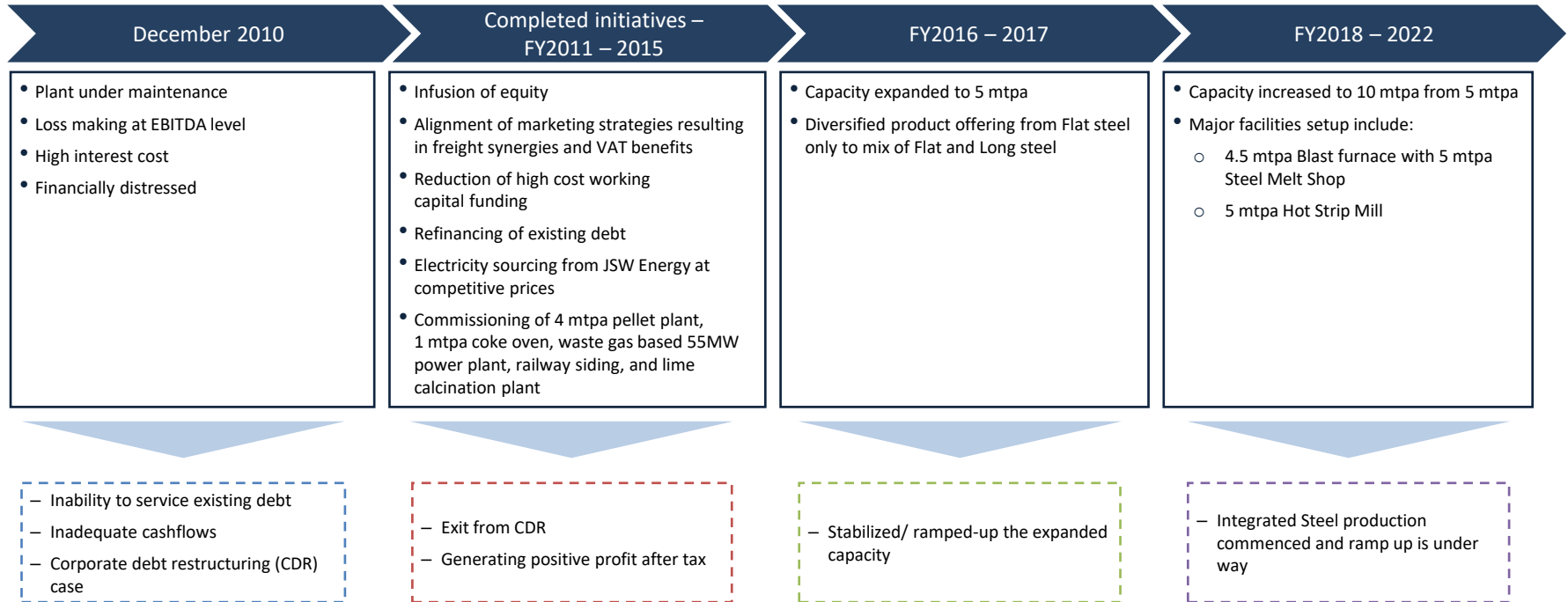
- 0.25 MTPA Colour Coating line at Rajpura, Punjab: To be commissioned in Q4 FY23
- 0.12 MTPA Colour Coating line in Jammu & Kashmir: To be commissioned in FY24



Lime Calcination Plant-4 at BPSL

# Case study: Turnaround Strategy at JSW Ispat's Dolvi plant

JSW Steel has a proven track record of identifying, acquiring and integrating assets creating synergies and optimizing costs



**Able to leverage an acquisition to maximum value accretion through application of knowledge and experience**

# Awards & Recognitions



- Rated at **Leadership Level (A-)** by CDP
- **JSW Steel** included in the **Dow Jones Sustainability Index** for Emerging Markets
- **WSA Steel Sustainability Champions** for 4<sup>th</sup> consecutive year in 2021
- **Corporate Governance & Sustainability Vision Awards 2020**
- **“Steelie Award“** by WSA for **Excellence in Life Cycle Assessment** for JSW Neosteel FE550D Grade TMT rebar
- Environmental Product Declarations (EPDs) for all finished steel products
- GreenPro certification for TMT rebars (JSW Neosteel)

**2020 & 2021**

**2019**

- Recognized as one of the **“Steel Sustainability Champion”** by World Steel Association (2018)
- Deming Prize for **Salem Works**

**2018**

- Deming Prize for **Vijayanagar Works**
- JSW Steel included in the **NIFTY 50 Index**

**2017**

**Golden Peacock Innovative Product Award**

**2016**

**“National Award for Supply Chain and Logistics Excellence”** under the steel industry category by the Confederation of Indian Industry

**2015**

**“Industry Leadership Award”** in steel, metals and mining at Platts Global Metals Awards



**Mr. Sajjan Jindal**  
Chairman of World Steel Association (2021-22)  
**First representative from India to serve in this position**

# Our Steel is Helping Build Key Infrastructure in India



**Solar Project:** Contributed **9.1 GW**  
**Wind Project:** Contributed **620MW**



**Metro Projects:** c.41km of metro project lines (Mumbai, Pune, Nagpur, Bengaluru, Ahmedabad, Chennai, Indore, Kochi & Delhi)



**Water Pipelines:** c.916 km of water pipelines across major projects



**Oil & Gas Pipelines:** c.1,020 km of pipelines across major projects



**Railway Freight Corridors:** c.217km of railway corridors (Mumbai-Haryana WDFC & Ludhiana-West Bengal EDFC)



**High Speed Rail** (Mumbai - Ahmedabad)  
c.90kT supplied



**Expressways and Highways:** Over **1,145km of roads**. Over **121km of expressways** (Dwarka, Purvanchal & Mumbai-Nagpur Samruddhi)



**Sealinks and Bridges:** Over **219 km of major projects** (Trans-Harbour Nhava Seva Link-Mumbai, Zuari river eight lane bridge- Goa & Nadia Bridge- West Bengal)



**Nuclear Power Plants:** Supplied for Kudamkulam, Tarapur, Kakrapar Power Projects



**ISRO & Airports** (Bangalore, Pune, Chennai, Hyderabad, Goa, Gujarat)

THANK YOU

Investor Relations Contact:  
[ir.jswsteel@jsw.in](mailto:ir.jswsteel@jsw.in)