

JSW Steel Limited
Corporate Presentation
June 2022



Better today. Stronger tomorrow.

Better Everyday

JSW Steel

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.



Sustainability

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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 CO₂ emissions by 2030 (vs. base year 2005)



Waste: 100% solid waste utilization



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)



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 2018



FY 2019

Click on images for reading online.



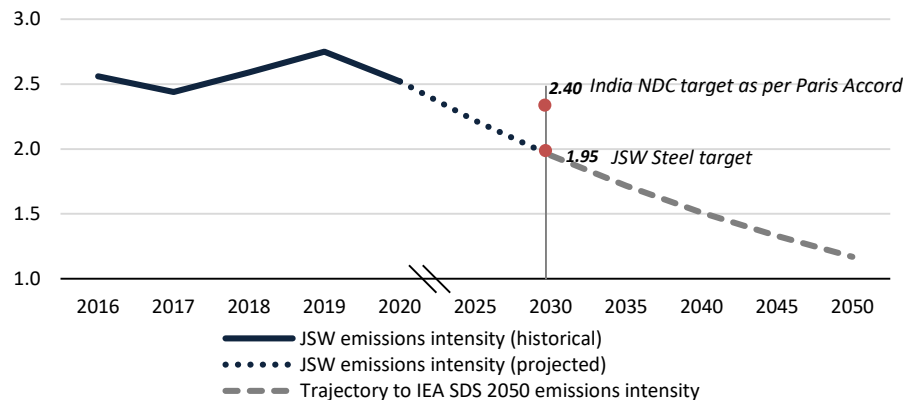
FY 2020



FY 2021

Derivation of carbon emission target for 2030

- The Sustainable Development Scenario (SDS) ^(a) 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 tCO₂/tcs by 2050** ^(b)
- India's Nationally determined contribution (NDC) as per Paris Accord for 2030 is 2.4 tCO₂/tcs



Planned/ Potential initiatives to reduce CO₂ 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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- Power producer with installed capacity of 4.6 GW (Hydro, Renewable and Thermal)
- Growing to 20 GW by 2030 with **85% renewable portfolio**
- Market capitalisation of **\$6.0bn^(a)**



- Engaged in development and operations of ports
- Operational capacity **110 mtpa**
- Operations across East, West & Southern coasts of India



- India's leading integrated steel producer
- Installed crude steel capacity of 27 mtpa, growing to **37 mtpa**
- Market capitalisation of **\$16.8bn^(a)**



- Commenced operations in March 2019
- Annual operating capacity of **130,000 KL**
- Fully automated coil coating capacity
- Only fully-automated, water-based plant in India



**Presence across
the core sectors of
India**



- Manufacturer of Portland Slag Cement (PSC), Ordinary Portland Cement (OPC) and Ground Granulated Blast Furnace Slag (GGBS)
- Operational capacity of 14 mtpa, growing to **25 mtpa**



One of the leading steel players in India

- Most geographically diversified steel company in India
- Sustainability and Governance at the core of the enterprise, with a strong board.
- Actively pursuing climate change agenda



Diversified product portfolio

- **Extensive portfolio of products** – Hot rolled coil, cold rolled coil, galvanneal, galvanized/ galvalume, pre-painted, tinplate, electrical steel (CRNO), TMT bar, wire rod, rails, special steel bars, rounds and blooms, grinding balls



Integrated manufacturing process

- **Integrated steel manufacturing facilities** – 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

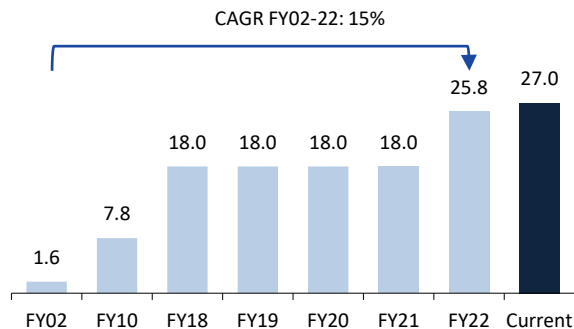
- International presence in **Steel making** (US), **Value-added facilities** (US, Italy)



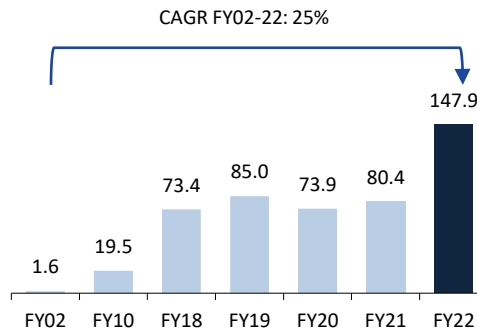
Strong distribution network and export presence

- Pan India marketing and distribution network, export footprint over **c.100 countries** across **5 continents**

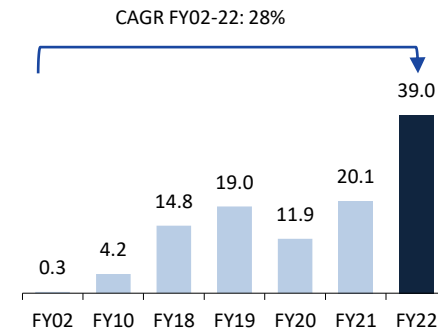
Capacity (mtpa)



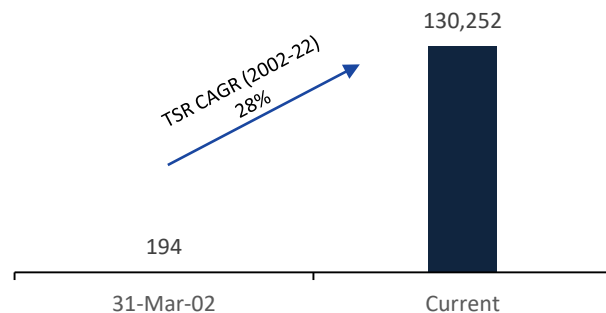
Total revenue (₹ 000's Cr)



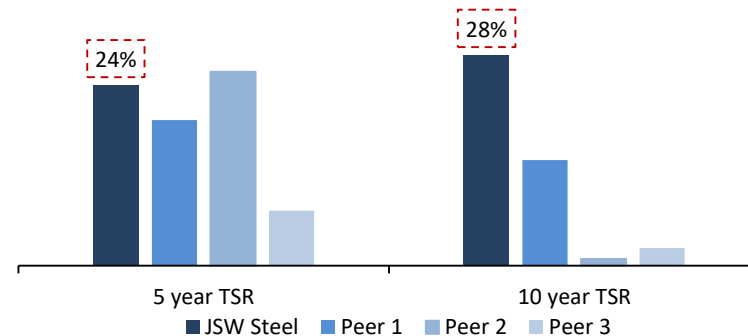
EBITDA (₹ 000's Cr)



Market cap (₹ Cr)



5 year and 10 year Total Shareholder Return





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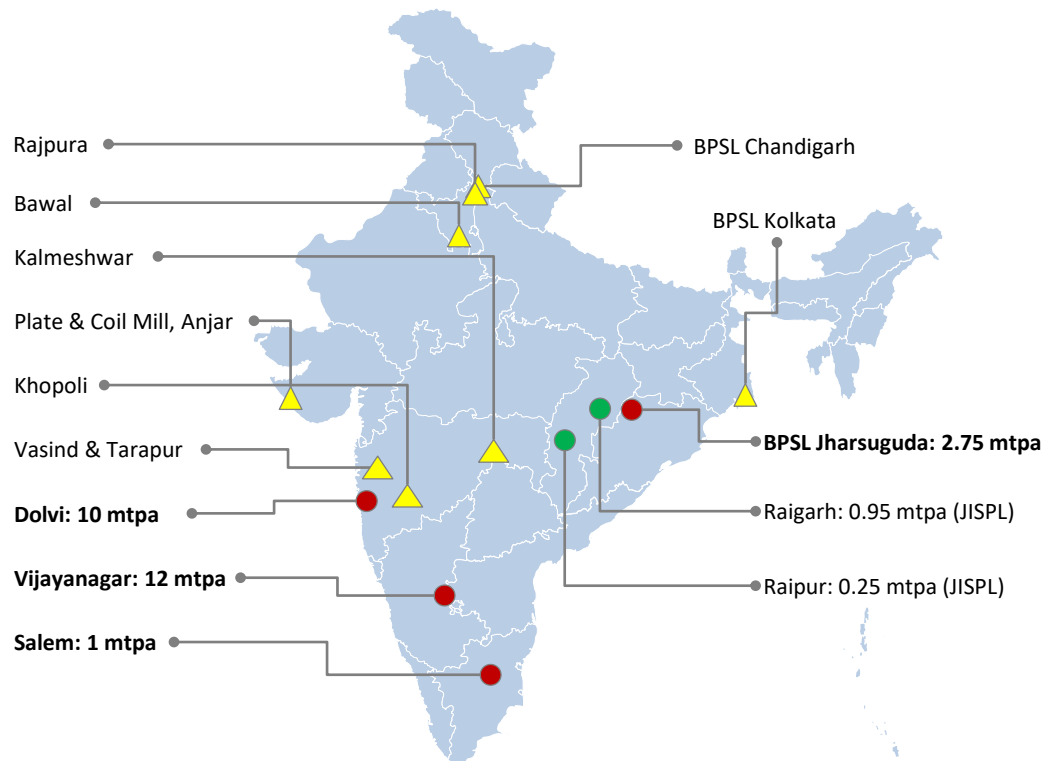
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- 1 Size, Scale & Growth** Leading steel producer in India with near-term growth to take capacity to 37 mtpa
- 2 Efficiency** Lowest cost of conversion in India, one of the lowest globally. Strong domestic iron ore linkage
- 3 Product Mix** Strong 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** Proven track record of efficient organic and inorganic growth: capacity growth CAGR of 15% (FY02-FY22)
- 7 Shareholder Value** Prudent capital allocation: 20 year TSR CAGR of 28%, and uninterrupted dividends
- 8 Balance Sheet Strength** Strong balance sheet and access to diversified funding sources globally

India

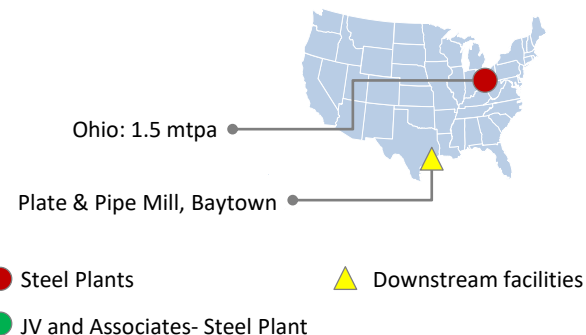


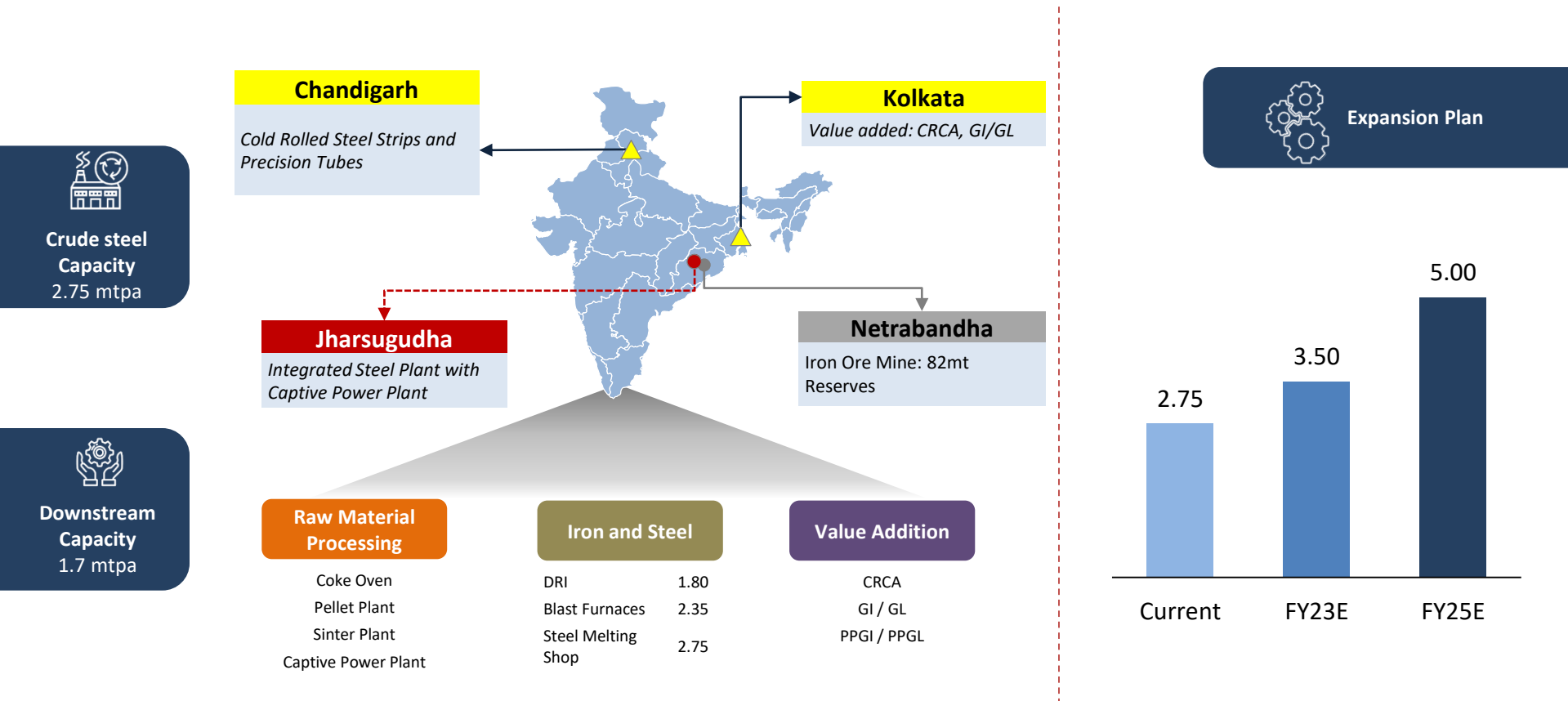
International Footprint

Europe

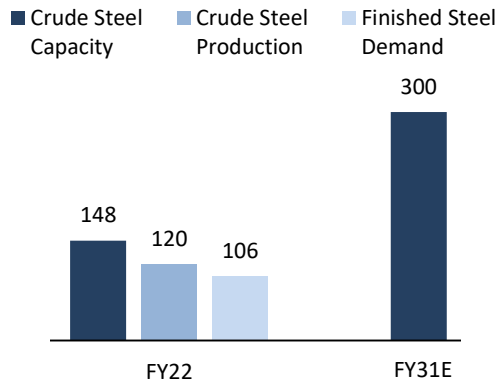


USA



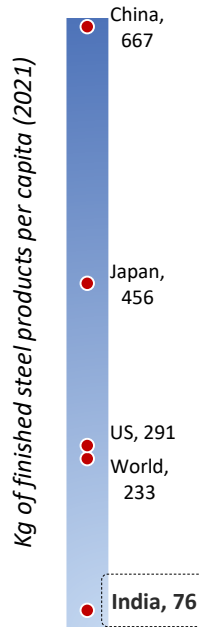


India Steel: Strong Fundamentals (mt)



- Govt. thrust on infrastructure, housing, and increasing the share of manufacturing in GDP
- \$1.4tn National Infrastructure Pipeline over next 5 years
- Realignment of global supply chains and “China+1” sourcing approach of MNC’s
- Production-Linked Incentive scheme launched by govt. to promote manufacturing in select sectors
- Robust demand from energy transition and resi. real estate

Significant room for growth in steel consumption in India



Recent changes of export and import duties on the sector

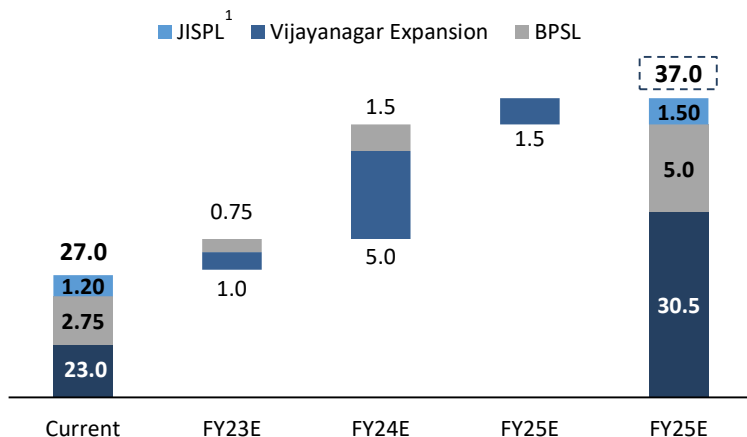
- Govt. of India announced several duty changes on 21 May 2022:

Product	Change in duties	Impact
Steel	Imposition of 15% export duty on most products	Red Circle
Iron Ore	Imposition of 50% export duty on Iron Ore and 45% on Pellets	Green Circle
Coking Coal	Removal of 2.5% import duty on Coking Coal	Green Circle

- JSW Steel continues to service its overseas customers with exports likely to be at 15-20% of total shipments in FY23
- Export duty on Iron Ore has brought down domestic prices
- Benefit from removal of import duty on Coking Coal
- Export duty on steel imposed to address inflation. Expected to be a temporary measure, as was the case in 2008

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
- 5 mtpa brownfield expansion at Vijayanagar
 - Value-accretive with low capex of ₹15,000 crore (c.\$400/ton)
- Incremental expansion at Vijayanagar of existing facilities to enhance capacity by further 2.5 mtpa (1.0 + 1.5) in phases
- BPSL on track to expand capacity from 2.75mt at present to 5mt by FY25
- 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^(a)

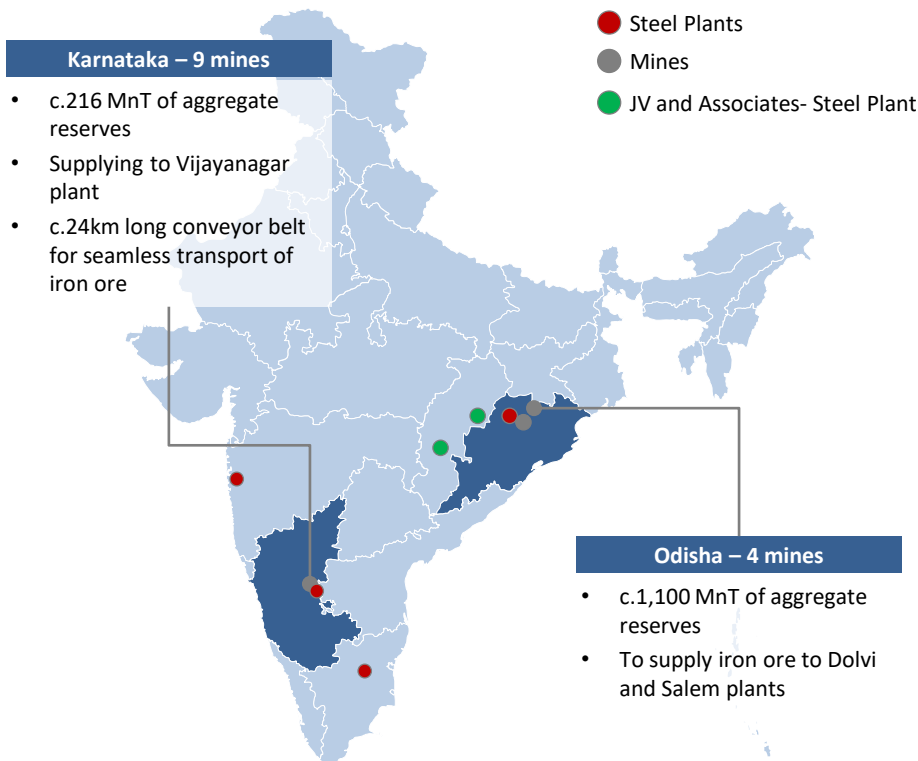


**# 4 ranked
in Asia**



**# 12 ranked
in Globally**

14 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 in FY22 from the Karnataka mines
 - To contribute 30% of total requirement at Vijayanagar plant
- 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

Strengthening Mining Operations in Odisha

- Enhance mining capabilities and efficiencies
 - Estimated capex of ₹3,450 crore; expected completion over two years
- 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

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

Product Category

Hot Rolled Products



Coated Products



Colour Coated Products



Tin Plate



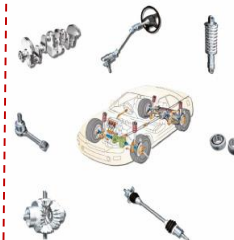
Cold Rolled Products



Electrical Steel Coil & Sheets



Alloy Steel Products



Applications

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

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

Appliance, Roofing, Sandwich panel

Oil Can, Non-oil Can, Food Cans

Automotive, General Engg.

Auto, General Engg.

Automotive

Our Brands

JSW Galvos
Premium Galvalume® Coil & Sheets

JSW Platina
Superior Quality Tinplate Coils & Sheets

JSW Galveco
Lead-Free Galvanized Sheets

JSW Colouren
Premium Colour Coated Sheets

JSW Pragati+
Colour Coated Sheets

JSW Everglow
Advanced Roofing Technology

JSW Neosteel

JSW Silveron

JSW Vishwas+
Premium Al-Zn Sheets

JSW Colouren+
Premium Al-Zn Colour Coated Sheets

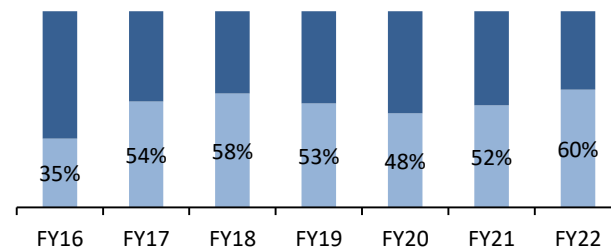
JSW Radiance
Superior Quality Colour Coated Sheets & Coils

JSW Vishwas
Premium GC Sheets

JSW Avante
Smart Steel Doors

JSW Trusteel
Premium Hot Rolled Sheets

Share of Value added products



■ Value Added and Special Products ■ Other Products



All finished products under
life-cycle analysis

Environment Product
Declaration in place for
all finished steel products



- One of the largest domestic suppliers of **Tinplate** products
- Adding 250KTPA capacity at Tarapur, Maharashtra to meet the surging demand of food packaging industry
- **Brand Platina is enabling import- and plastic- substitution**



- **Meeting the requirements of Lightweighting and Safety - a top priority for the Automotive industry**
- Leading Indian producer of automotive steel with capability to produce AHSS to a tensile strength of 1,180 Mpa
- Thrust on R&D and Product Development to be future ready.



- **Preferred and marquee supplier of high-end corrosion resistance steel products for white goods**
- Specialised and customised products offerings to meet the needs of appliance makers



All finished products under
life-cycle analysis

Environment Product
Declaration in place for
all finished steel products



- **Key contributor to India's commitment to Renewable energy**
- **Brand Galvos** being widely used in solar structure installations, replacing imports



Electrical Steel

- **Cold Rolled Non-Grain Oriented:** Manufacturing with technology from JFE Japan
- Largest product range in India, catering to all domestic applications, and substituting imports
- Used in electricity generation as well as consumption applications
- **Cold Rolled Grain Oriented:** feasibility study announced in May 2021 to form JV with JFE Japan
- High-end product currently being imported into India
- Used for transformers in transmission and distribution



**Electrical Steel Products enhance energy efficiency
and reduce carbon emissions**

Sustainability at the core of the enterprise. Actively pursuing climate change agenda

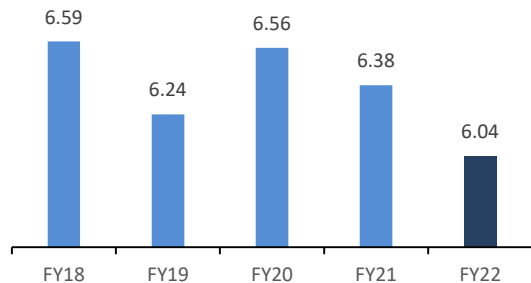
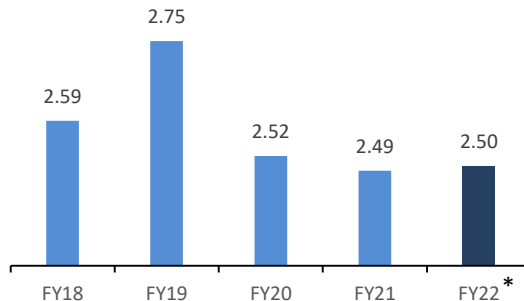
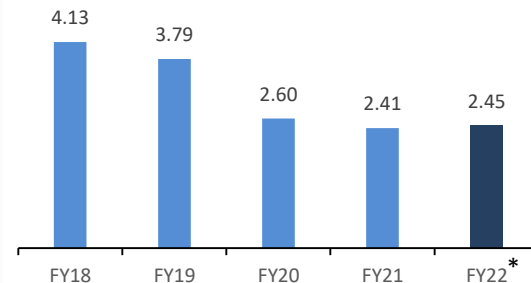
SD Targets	FY05	FY30 Targets	Improvement	Strategic Approach
Climate Change <ul style="list-style-type: none"> Specific Energy GCal/tcs GHG Emissions tCO₂e/ tcs 	6.94	5.65*	19%	<ul style="list-style-type: none"> Transition from thermal to renewable energy Reduction of fuel rate in BF and DRI Increased use of scrap in steel making Energy efficiency and process efficiency improvements through BATs Process improvements based on the World Steel 'Step Up' global benchmarking process
Water Security <ul style="list-style-type: none"> Specific water consumption (steel production) (m³/tcs) 	3.60	2.21*	39%	<ul style="list-style-type: none"> Maintaining zero liquid discharge across operations Installation of technology for reduction of fresh water in cooling towers Adopting digitalisation for better water control and monitoring
Waste <ul style="list-style-type: none"> Specific Waste (Kg/tcs) Waste Recycled (%) 	NC	677	-	<ul style="list-style-type: none"> Integrated Strategy towards efficient waste management Focus on 'Zero waste to Landfill' Promoting Circular Economy
Air Emissions <ul style="list-style-type: none"> Specific process dust emissions (Kg/tcs) 	0.93	0.26*	70%	<ul style="list-style-type: none"> Adoption of best available technologies like MEROS in sintering, Oven pressure Control technology and CDQ in Coke Plants, TRT's in BF SO_x & NO_x emission targets for FY30 have been revised to 0.82 kg/tcs and 0.91 kg/tcs respectively
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

* The above reflects revised & more stringent targets that were approved by the Sustainability Committee during Q3 FY22

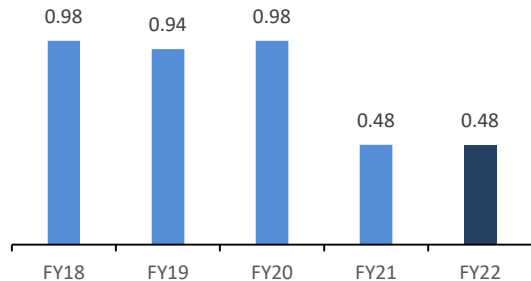
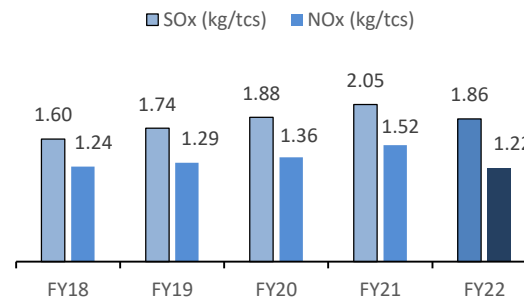
NC: Not comparable.

Note: All nos. are weighted averages for Integrated Steel Plants at JSW Steel Standalone.

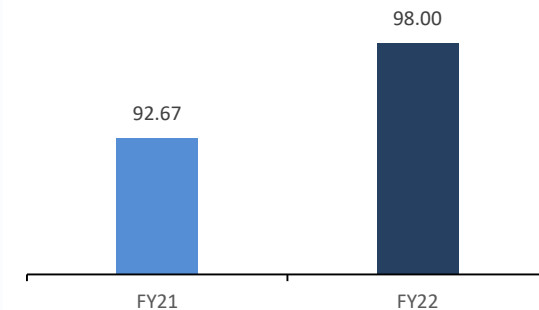
Specific Energy Consumption (Gcal/tonne)

GHG Emission Intensity (tCO₂/tcs)Specific Freshwater Consumption (m³/tcs)

Dust Emissions (kg/tcs)

SO_x & NO_x

Waste Utilization (%)



* Performance in FY22 affected by Dolvi Phase-II startup

Note: All nos. are weighted averages for JSW Steel's integrated steel plants at JSW Steel standalone. FY22 data are yet to be third party assured.

Initiatives



225 MW of Renewable Energy

Solar power supply from 225MW commenced at Vijayanagar, as part of the 958MW renewable energy contracted



Emission Control Equipment

Redesign of emission control equipment to reduce dust emission and improve ambient air quality at Dolvi



Sludge Dewatering

Filter Press Installed in Sponge Iron Plant for Dewatering of sludge, and onward utilization in sinter-making at Dolvi



Recognitions



For the 4th consecutive year JSW Steel recognised as a Sustainability Champion by World Steel Association, for its contribution in 2021



JSW Steel signed the Worldsteel Sustainability Charter
The new Charter reflects the industry's increasing focus on sustainability and its responsibility to generate positive impacts on people, planet, and society.



Eco Labelling and Certifications

Environmental Product Declarations (EPDs) for all finished steel products

GreenPro certification for TMT rebars (JSW Neosteel)

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



Health & Safety Initiatives

- 140,000 and 560,000 safety observations carried out in Q4 FY22 and FY22, respectively
- 8,287 and 28,370 Inspections and Audits at plants in Q4 FY22 and FY22, respectively
- Contractors' Pre-Qualification (PQA) and Performance rating system (CARES) validation was carried out across Vijayanagar, Dolvi and Salem plants



Competency Development

- 4,300+ and 30,000+ Safety E-Learning Modules completed in Q4 FY22 and FY22, respectively
- 1,000+ Contractors assessed through JSW CARES (Contractor Assessment & Rating for Excellence in Safety) up to Q4 FY22
- Skill development program for contractors launched at all ISP's. 12,000+ workmen covered so far



Awards & Recognitions

- Salem became the first Integrated Steel Plant in the world to achieve the British Safety Council 5-star rating for health, safety and well-being



- Dolvi ISP received the "International Safety Award" with *Distinction* from British Safety Council

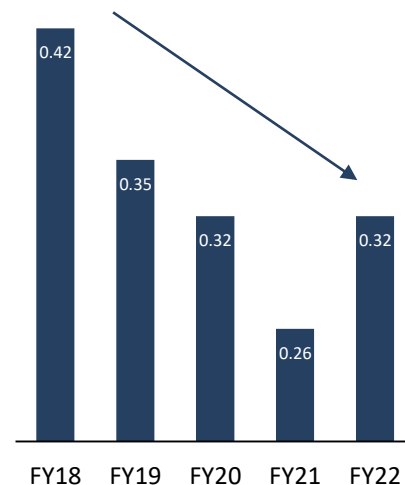
JSW's Roadmap to Vision 000

Zero
major
incidents

Zero
injury

Zero
harm

LTIFR



India's First Skill Impact Bond

- Impact bonds are innovative and results-based finance mechanism that leverage private sector capital and expertise. Private investors (risk investors) initially finance the initiative and are repaid by 'outcome funders', only if agreed-upon outcomes are achieved
- The Skill Impact Bond partnered by JSW Foundation (outcome funder) will provide skills to 50,000 individuals, with a special focus on women
- 4,400 candidates enrolled so far with 70% women candidates

Partners



Human Rights



Labour



Environment



Anti-corruption

JSW Foundation becomes member of United Nations Global Compact



Largest Platform for businesses and non-profit's to ensure greater transparency and accountability in CSR initiatives within the larger ecosystem

Aligns with UNGC



Inculcating Critical Life Skills

- Project reach expanded to 17,000+ children under Project ASPIRE
- We are reaching out to 800,000 students through Smart Shala Project for English and Mathematics learning outcomes.



Enhancing Agri-value Chain

- Targeting 100,000 farmers over the next 4 years
- Outreach to 6 Farm Producer Organisations (FPOs) and 8,000 Farmers



Additional Water Storage Capacity

- Water resource mapping study with CII Triveni Water Institute
- Lake rejuvenation in Karnataka and Gujarat



Facilitating Better Health

- Outreach camps via JSW Sanjeevani hospital Dolvi benefitting 100,000+ individuals in FY22



Health & Nutrition



Water & Environment



Waste Management



Agri-business



Education



Women's BPO & Livelihoods



Skill Enhancement



Art, Culture & Heritage



Sports

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.

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

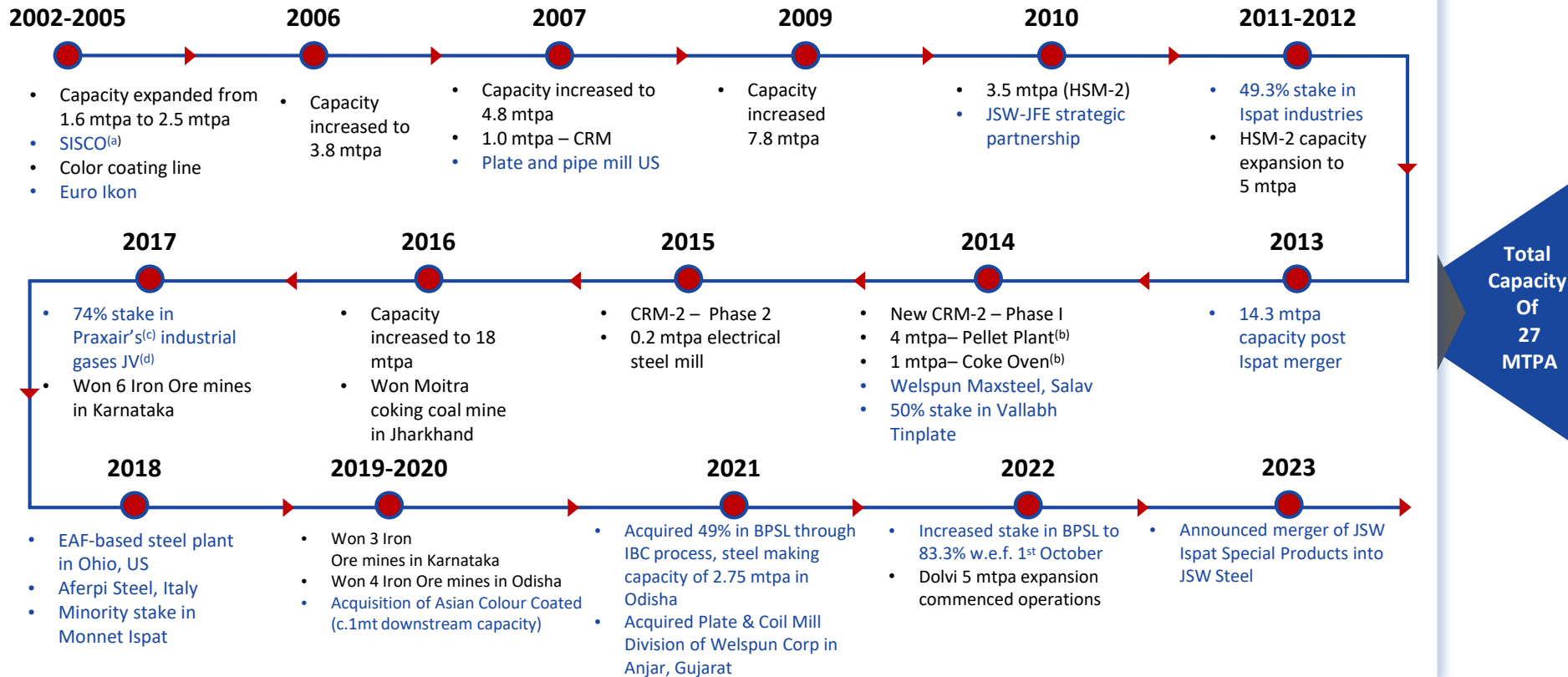
Technology agreements benefits:

- ✓ 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

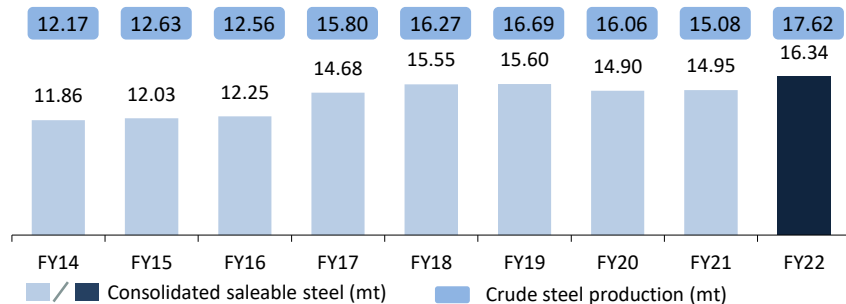
Other benefits:

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

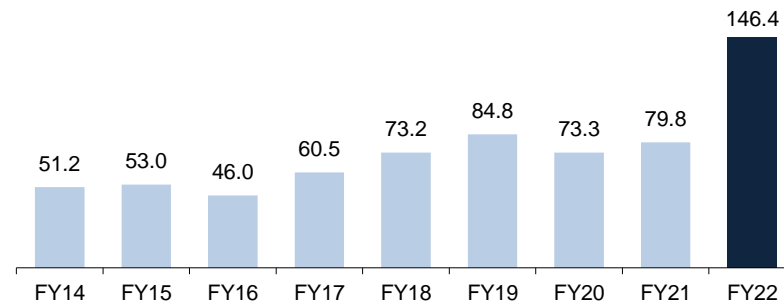
Combination of organic and inorganic growth



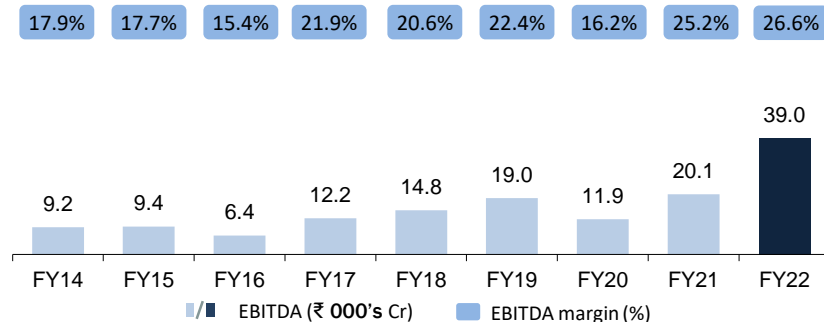
Strong track record of volume growth



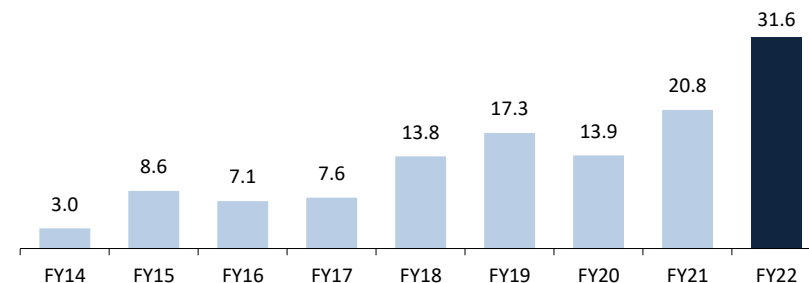
Track record of Operating Revenues (₹ 000's Cr)



Robust EBITDA Margin through the cycle

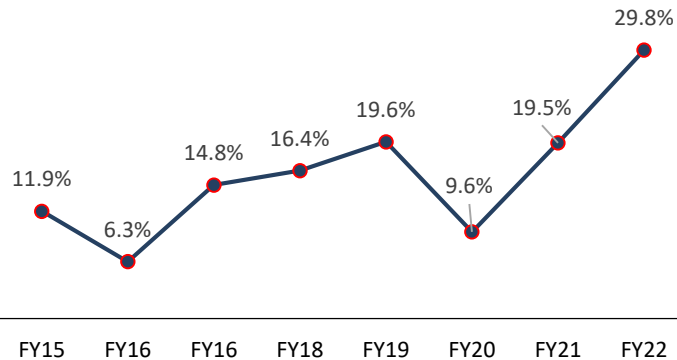


Cashflow from Operations (₹ 000's Cr)

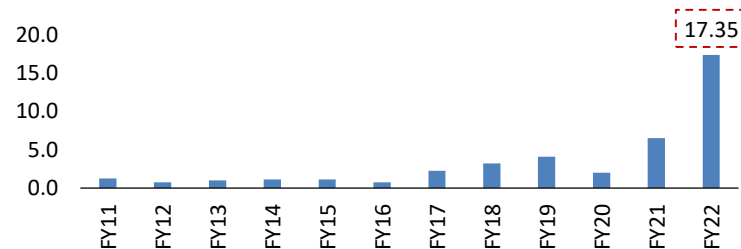


Prudent Capital Allocation: 10 Year TSR CAGR of 38%, and Uninterrupted Dividends

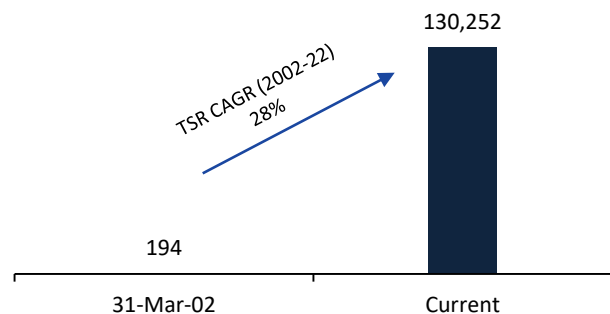
ROCE



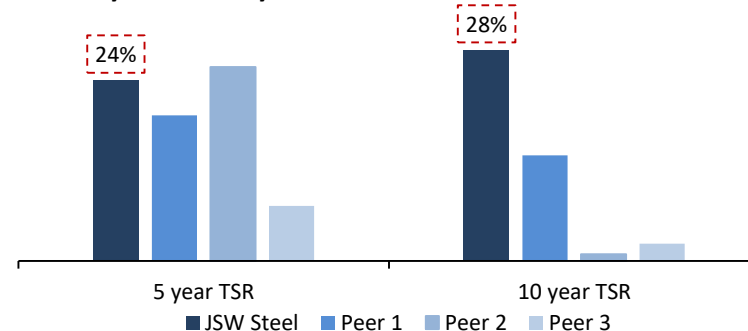
Uninterrupted Dividends



Market cap (₹ Cr)

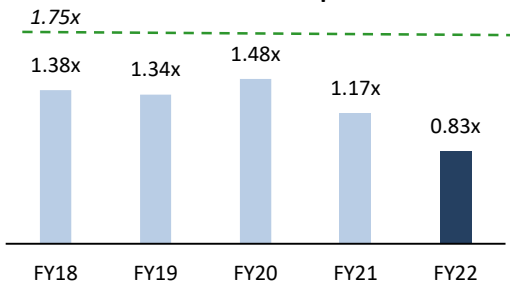


5 year and 10 year Total Shareholder Return

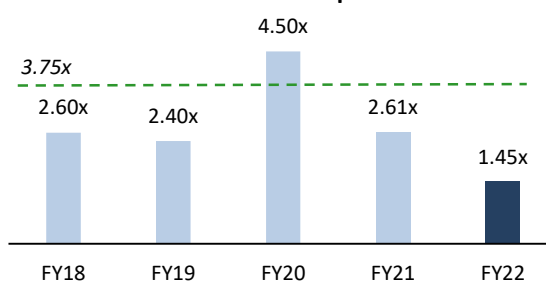


Value-accretive growth through economic cycles

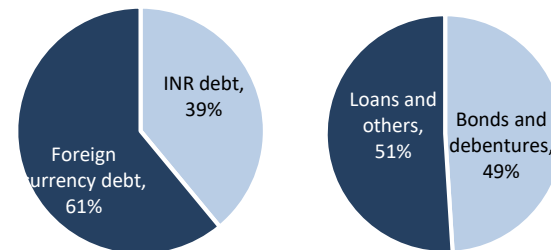
Net Gearing (ND/Equity) well under the stated cap of 1.75x



Leverage (ND/EBITDA) well under the stated cap of 3.75x



Diversified Funding Sources



Strong Liquidity and Credit Ratings

- Cash and Cash equivalents of ₹17,390 crore
- Credit Ratings:
 - International: Fitch: BB (Stable outlook) and Moodys: Ba2 (Positive 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 well under 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



Sustainability

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Overview

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Key Investment Highlights

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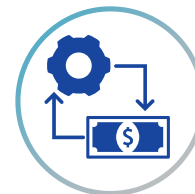
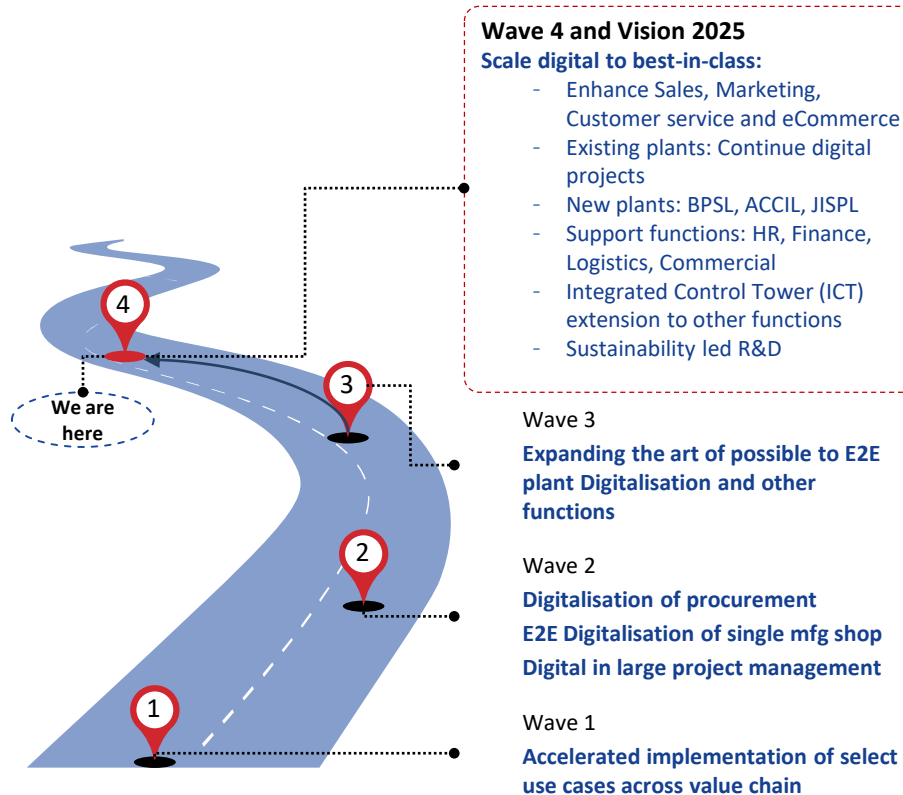
Digitalisation at JSW Steel

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Digitalisation: 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
- Discreet problems



Value lens

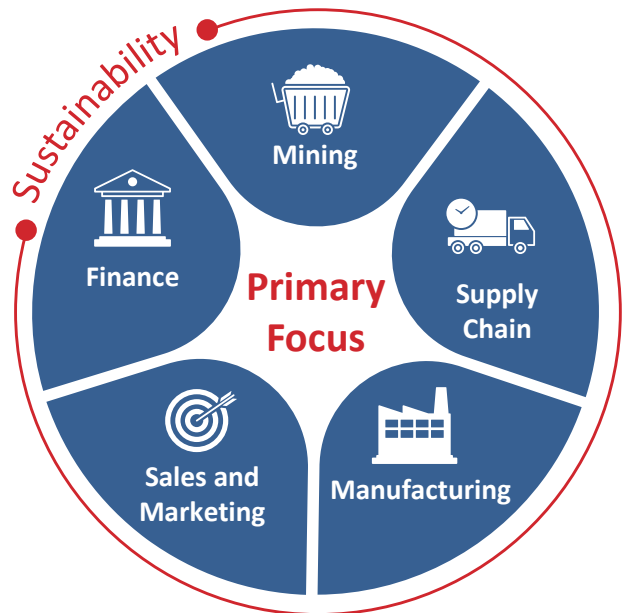
- ROI key to investment
- Safety added focus
- Customer, Supplier & Employees Experience



Sustenance

- Nurture inhouse talent
- Promote Horizontal deployment
- PMO & Governance

JSW's Digital Focus Areas



Additional Focus



Anticipated Impact



Cost Optimization



Emission Reduction



Great Place To Work (GPTW)



Technologies Used

Core Systems (SAP, SF, GCP, Azure, Darwin Box), IoT, AI/ML, Analytics, Cloud/Edge Computing, RPA-leveraging JSW Digital team as well as Startup ecosystem



Process Excellence focus

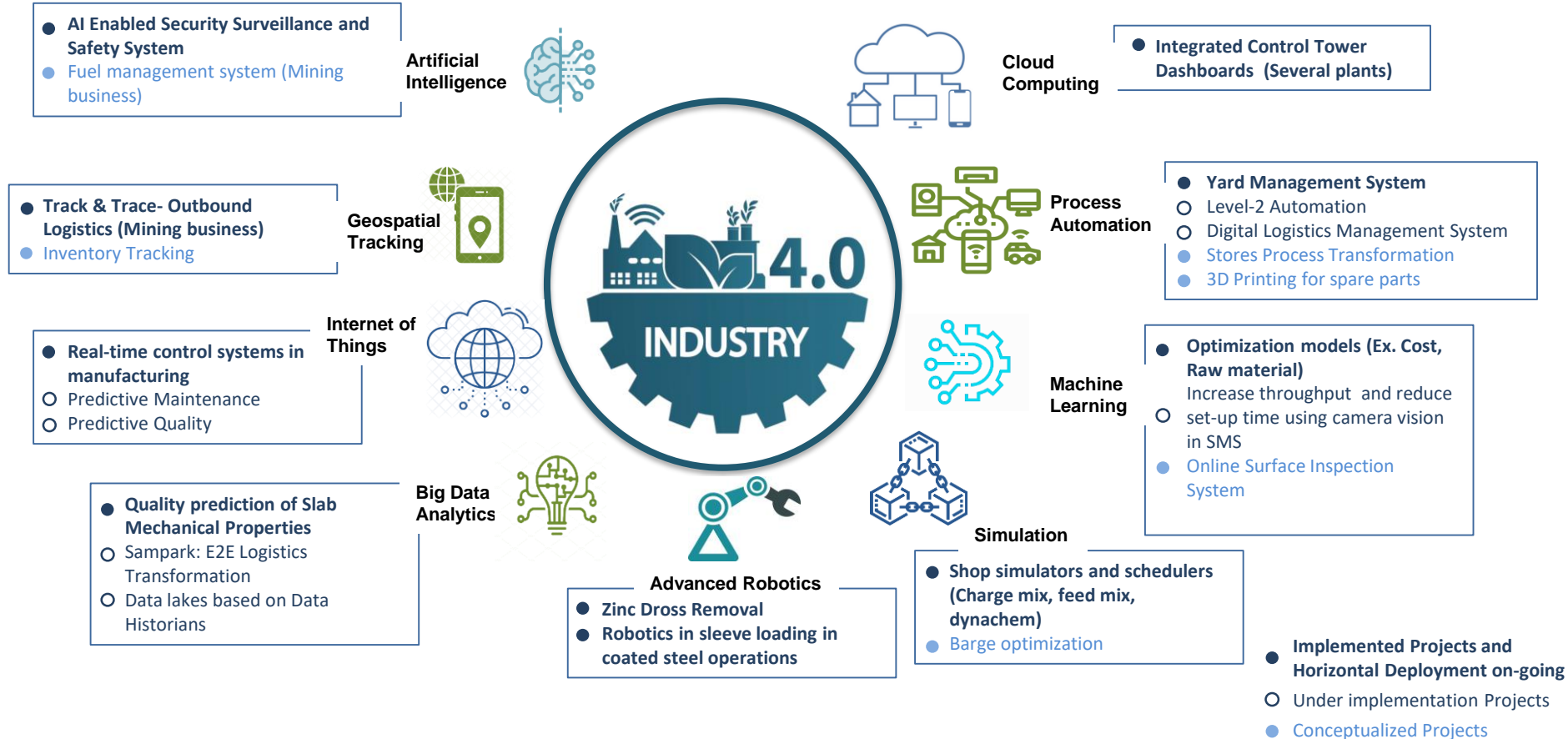
Lean, Fail-fast, Hackathon, Six Sigma, Agile, Design Thinking supported by Process Excellence & Transformation (PET) Team



People Upskilling

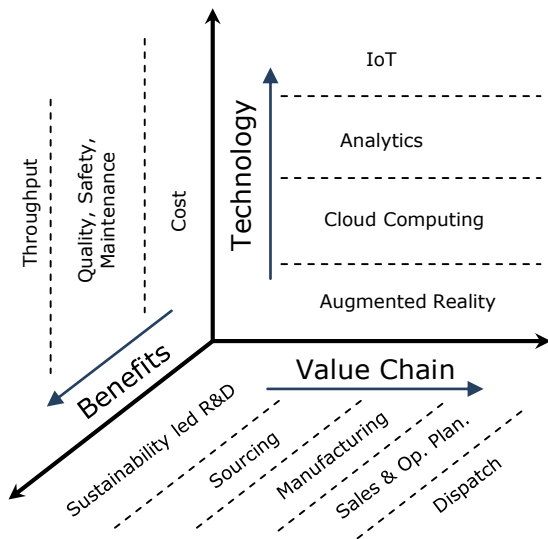
Data Science & IoT Skilling, Tech sessions, Online courses, Symposiums enabled through Cultural Transformation efforts

Industry 4.0 for Digital Steel Plants and Mining



Initiatives Beyond Industry 4.0 Leading to Significant Value Generation

JSW's Digital transformation along 3 dimensions



- Samarth- E2E Finance Transformation
- ...
- ...

Advanced spend cube analytics – category rooms (procurement)

End to End Raw Material Inbound Supply Chain Optimization

Mobile sales force automation

Travel & reimbursement automation

B2B sales direct connect and eCommerce (JSW One for MSME)

Micro-market based sales (JSW One for Retailers)

Outbound Logistics and network optimizer (mines)

Continuous improvement in distributor management

Power & Utilities – cost minimizers

Robotic Process Automation (RPA) in Shared Services for HR and Finance



- SKU level OTIF measurement (Sales)
- ...
- ...



- Predictive Power Util.
- ...
- ...

Successful Digital Initiatives for Safety and Sustainability



CRM-2: Cross Cleaning Robot for Productivity and Employee Safety

- Zinc cross in coated steel plants is valuable from financial and safety perspective
- Robots enhance the efficiency and precision in cross pick-and-place operation

Logistics: Multi-control Remote Operation from Loco at JSW Vijayanagar

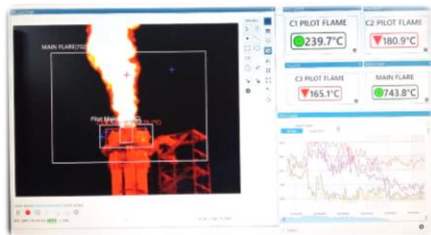
5 in 1 Unique Remote: First time in the world

- Loco movement
- Route setting
- Auto signal/ siren
- Boom Barrier operations
- Coupling/ Decoupling with Torpedo



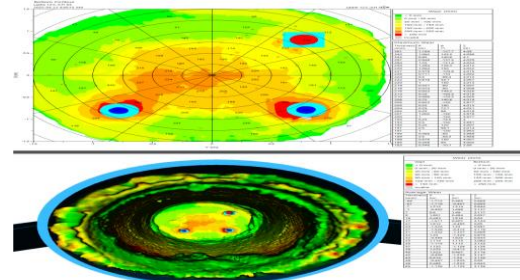
SMS: Flare Stack Thermal Imaging

Thermal cameras to remotely monitor the temperature of flare from safety and reuse of energy perspective



Laser Scanner for LF Ladle

Laser scanning in ladles improves safety and extends Steel ladle life



Other Key Initiatives

Steel Ladle Tracking System

Prediction modelling based tracking system in SMS Ladle furnace area to track and optimize casting speed through maintaining super heat temperature

PPE Violation Detection System

PPE Violation detection system helps to find out the PPE violators and improves safety by PPE adherence

Digital Logistic Management System (DLMS) - Odisha Mines

Non-DLMS

Stockyard

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

- 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 weighing
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





Sustainability

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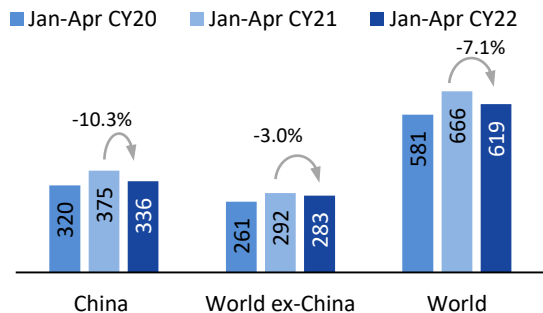
Digitalisation at JSW Steel

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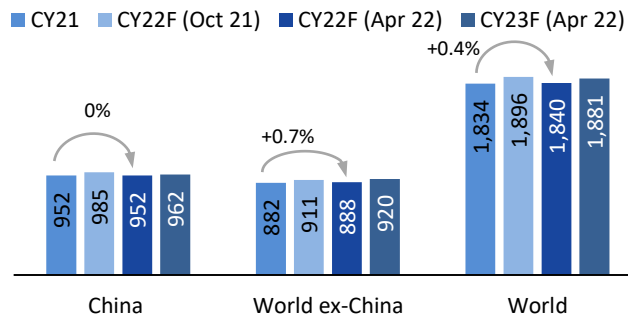
Appendix

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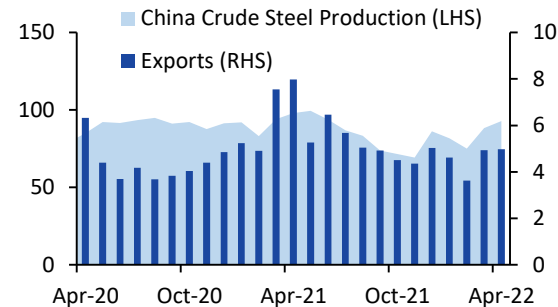
Crude Steel Production – Jan-Apr (mt)



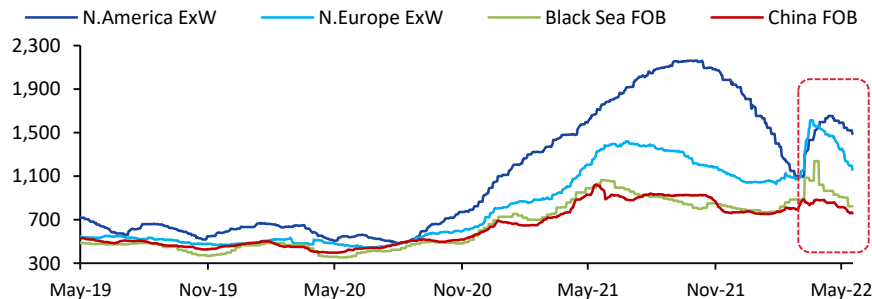
Steel Demand (mt)



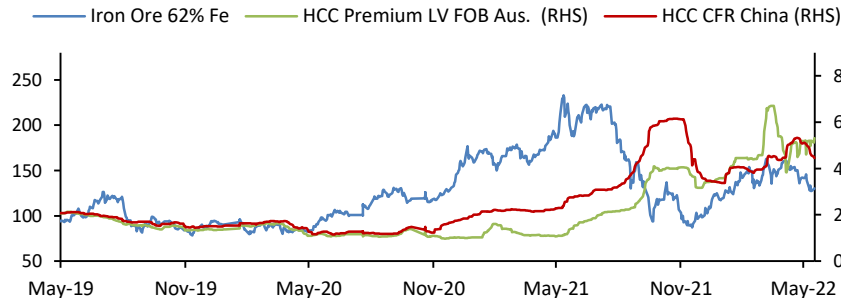
China Steel Production and Export (mt)



HRC Prices US\$/t

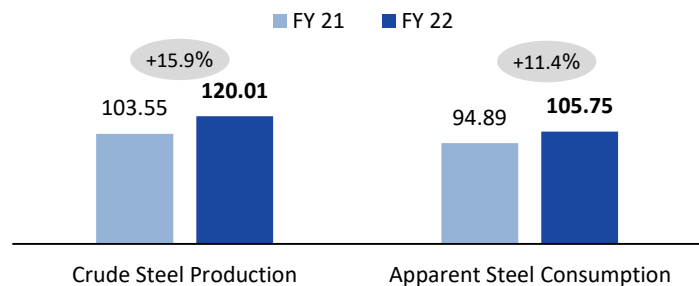


Raw Material Prices (US\$/t)

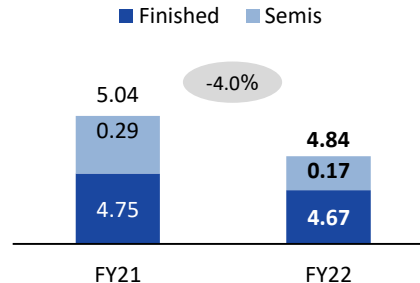


Indian Steel – Annual Trend

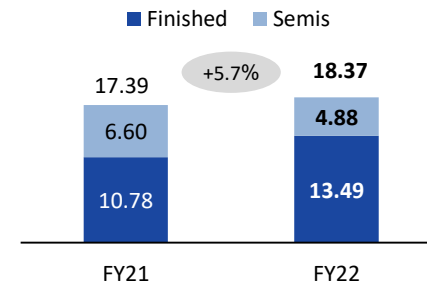
Production and Consumption (mt)



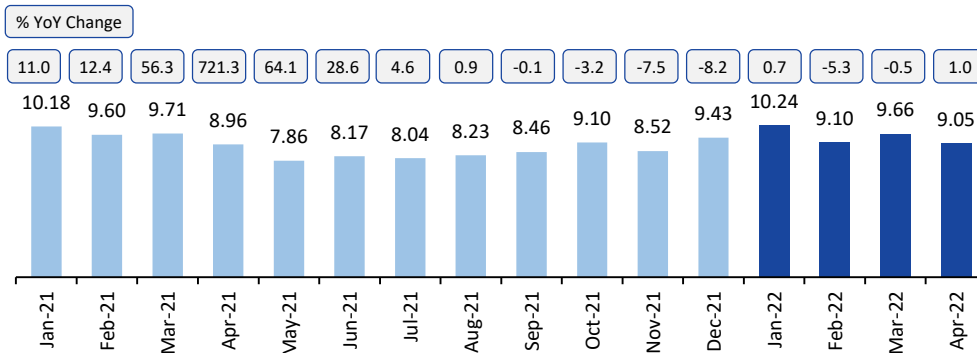
Steel Imports (mt)



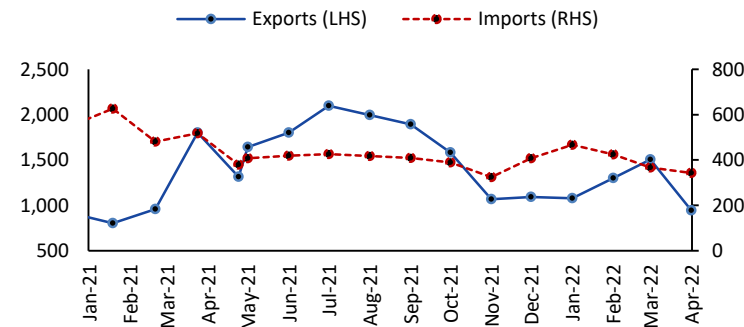
Steel Exports (mt)



Apparent Steel Consumption (mt) and YoY Growth



Monthly Steel Imports (kt) and Exports (kt)

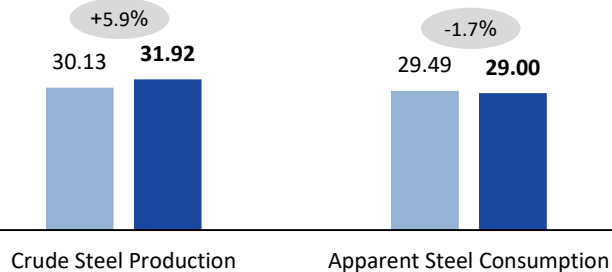


Indian Steel – Quarterly Trend

Production and Consumption (mt)

■ Q4 FY21 ■ Q4 FY22

YoY Trend

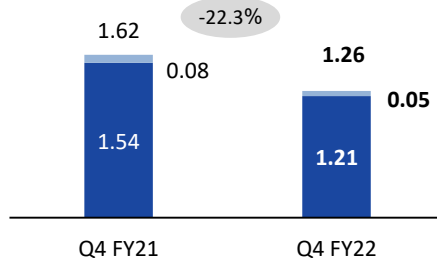


Steel Imports (mt)

■ Finished ■ Semis

Q4 FY21

Q4 FY22

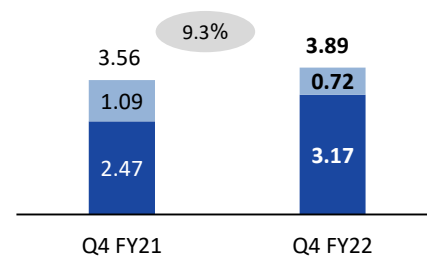


Steel Exports (mt)

■ Finished ■ Semis

Q4 FY21

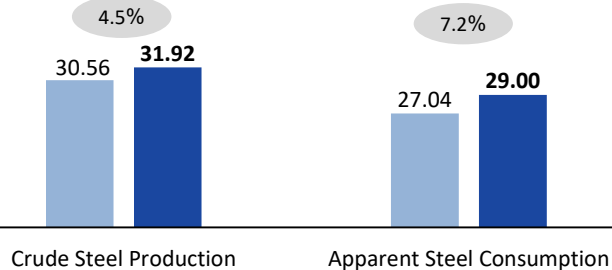
Q4 FY22



Production and Consumption (mt)

■ Q3 FY22 ■ Q4 FY22

QoQ Trend

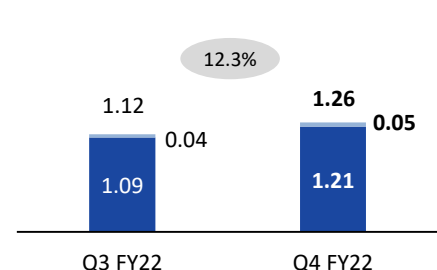


Steel Imports (mt)

■ Finished ■ Semis

Q3 FY22

Q4 FY22

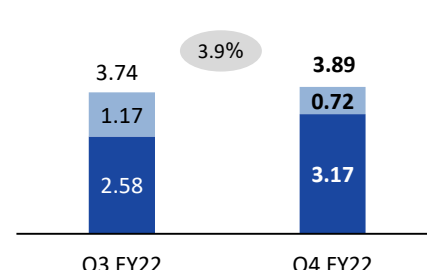


Steel Exports (mt)

■ Finished ■ Semis

Q3 FY22

Q4 FY22



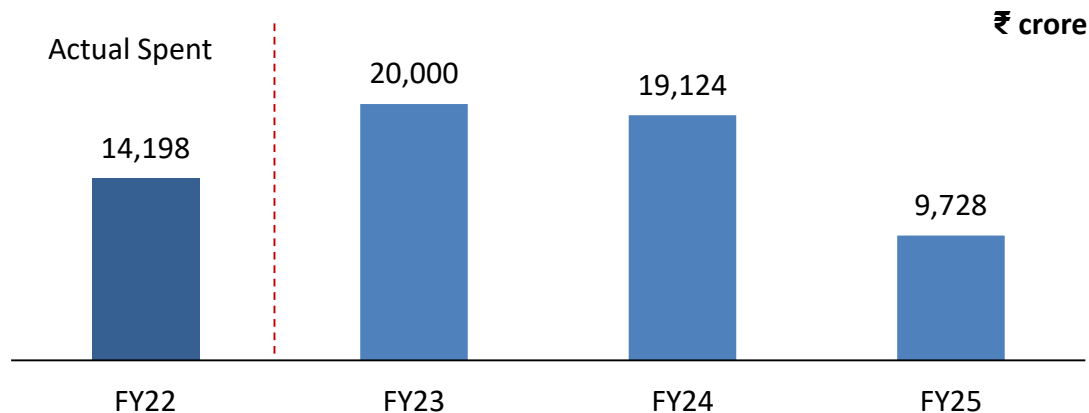
- Committed to Sustainability targets with focus on 5 key areas: Climate Change, Water Security, Waste, Air Emissions, Biodiversity
- Maintain healthy margins despite challenging external environment:
 - Leverage low conversion cost advantage
 - Optimise raw material costs by increased usage of Odisha 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
Consolidated Indian Operations	23.60	22.60
Joint Control Entity:		
JSW Ispat Special Products Ltd.	0.70	0.70
Indian Operations incl. Joint Control	24.30	23.30
JSW Steel USA Ohio	0.70	0.70
Total Combined Volumes	25.00	24.00

Annual Capex Update



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

5mtpa brownfield project

- Long lead-time items ordered, Letters of Credit established
- Construction activities for all packages underway
- Project to be completed by FY24

CRM-1 complex capacity expansion (0.85 mtpa to 1.80 mtpa)

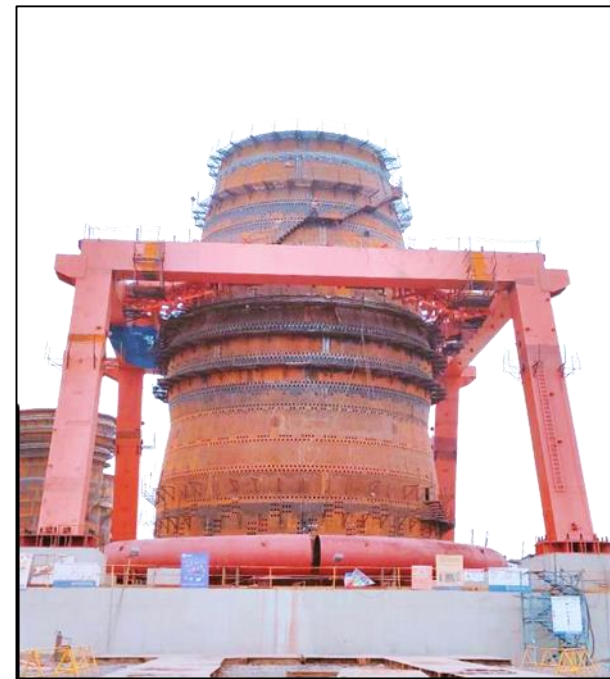
- 2nd CGL line of 0.45mtpa commissioned in April 2022
- All lines now commissioned and operational

Colour Coating Line (0.3 mtpa)

- Commissioned in March 2022

Coke Oven Plant

- 1.5 mtpa Coke Oven battery: Commissioning in phases from Q2 FY23
- Capacity enhancement of further 1.5 mtpa to support the 5 mtpa steel-making expansion. Phased commissioning in FY24



5mtpa expansion: Blast Furnace under construction

Phase-I expansion to 3.5 MTPA (By Q2 FY23)

- EAF Modification: Completed in Q4 FY22
- SMS1 Caster Modification: Caster 1&2 Project commissioned in Q1 FY23
- Completion of Sinter Plant-2: Furnace light up done, to be completed by Q2 FY23

Phase-II expansion to 5 MTPA (By FY24)

- Long lead-time items ordered (New wire rod mill-2 and SMS-2 , BF-1 & 2 PCI upgradation). Project to be completed by FY24



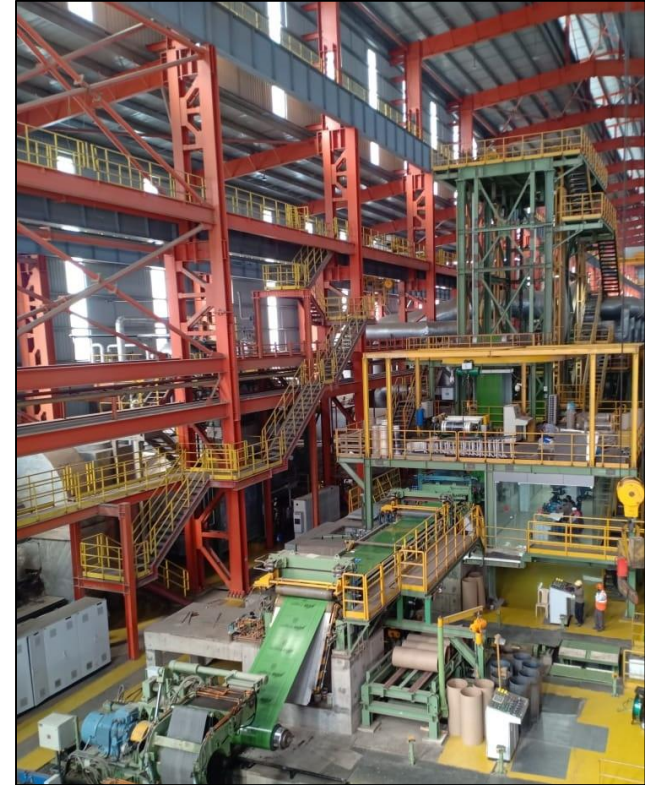
JSW BPSL Sambalpur Works

Vasind and Tarapur: Downstream projects

- **0.5mtpa Continuous Annealing Line at Vasind**
 - To be commissioned by June 2022
- **Second Tinplate line of 0.25 mtpa at Tarapur**
 - All major equipment installation completed. To be commissioned by June 2022

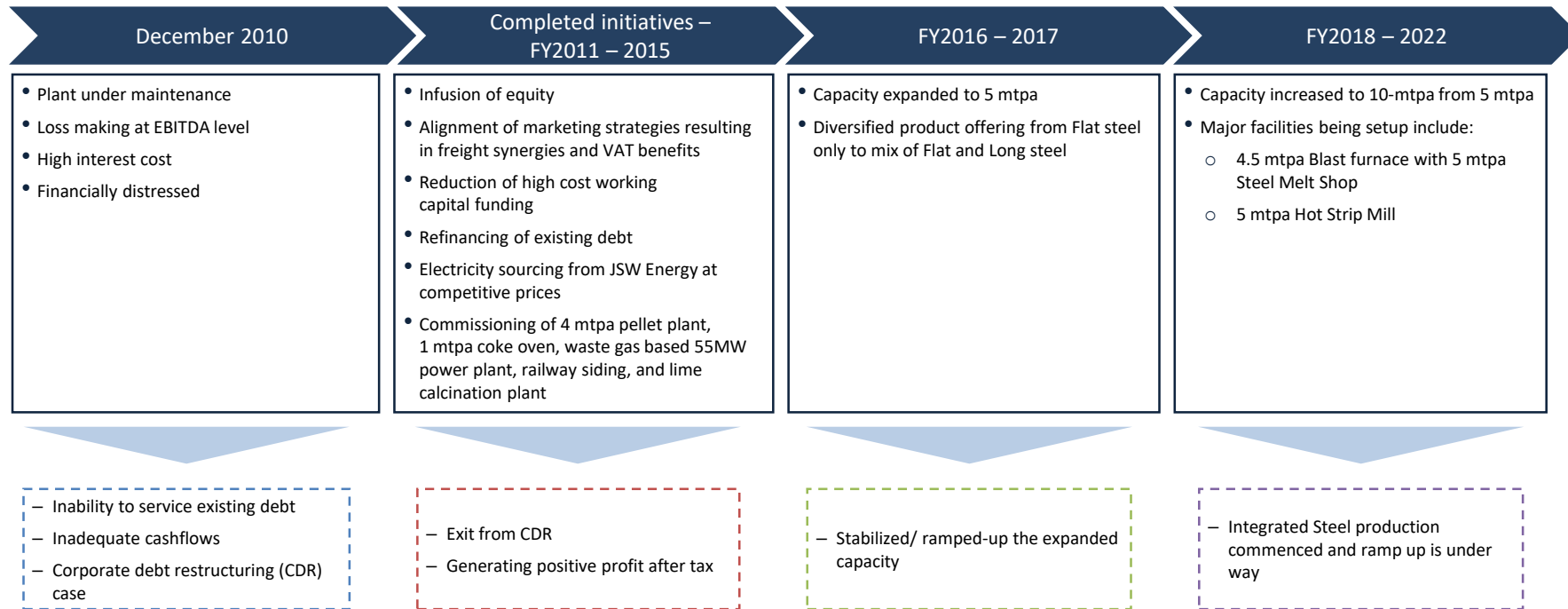
Other Downstream projects

- **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 Q1 FY24



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

JISPL Merger with JSW Steel: Transaction Overview (1/3)



Transaction Structure

- JSW Ispat Special Products Ltd (“JISPL”) and its holding company Creixent Special Steels Limited (“Creixent”) are proposed to be merged into JSW Steel Ltd
- Subsidiaries/ associates of JISPL will become subsidiaries/ associates of JSW Steel

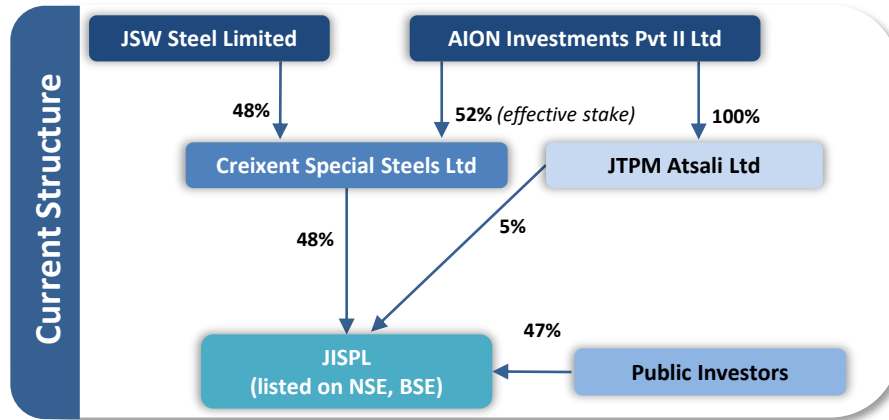
Proposed Swap Ratio

- JISPL shareholders to receive 1 share of JSW Steel for every 21 shares of JISPL
- Shareholders of Creixent to receive 3 shares of JSW Steel for every 2 shares of Creixent
- JSW Steel’s shareholding in Creixent will be extinguished upon the Scheme becoming effective

Approvals and Timeline

- Transaction is subject to shareholders, creditors and regulatory approvals including from SEBI and Stock Exchanges
- Closing expected within c.12 months, subject to approvals and other customary closing conditions

JISPL Merger with JSW Steel: Transaction Overview (2/3)



JISPL Effective Shareholding		
	Current	Post CCPS Conversion
JSW Steel	23%	27%
AION Inv. Pvt. II Ltd.	30%	51%
Public & Others	47%	22%

Post Transaction Shareholding of JSW Steel		
	Pre-Merger 31 st Mar 22	Proforma Post-Merger
Promoters	45.0%	44.5%
JFE Steel, Japan	15.0%	14.8%
JSW Steel Public & other shareholders	40.0%	39.5%
JISPL Public shareholders	N/A	0.4%
AION Inv. Pvt. II Ltd.	N/A	0.7%

JISPL Merger with JSW Steel: Successful Turnaround (3/3)

2018

A consortium of JSW Steel & AION completed the acquisition of the distressed Monnet Ispat & Energy Ltd (Now JISPL).

2019

Restarted TMT operations, introduced JSW Neosteel brand under licensing arrangement, Implemented an expansion project of pellet plant to 2.2 MTPA, Refurbished blast furnace, SMS and oxygen plant to bolster operations.

2020

Successfully navigated through the COVID-19 crisis

2021

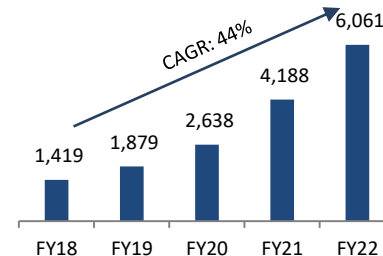
Achieved highest quarterly EBITDA in Q4 FY2021 post takeover by the Consortium through operational excellence
Commenced operations at the slab caster

2022

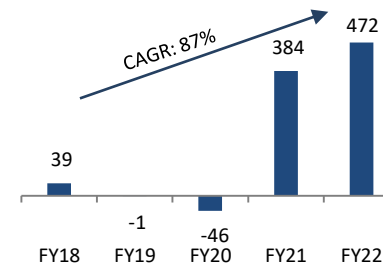
FY22: Achieved profitability on an annual basis for the first time post acquisition.

Key Metrics

Operating Revenue (₹ Cr)



Operating EBITDA (₹ Cr)



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 4th 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)



Investor Relations Contact:

ir.jswsteel@jsw.in

BETTER EVERYDAY