

JSW Steel Limited
Corporate Presentation
July 2021



Better today. Stronger tomorrow.



Better Everyday

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

Overview

Key Investment Highlights

Appendix



Sustainability

Overview

Key Investment Highlights

Appendix

Highlights



1,200 MT
Oxygen provided
everyday across
9 states



>50,000 MT
Medical Oxygen
supplied in
Mar- May¹ 2021



20 Lakhs
Patients across
530 hospitals
supported



1,500+
Beds to be
provided across
JSW hospitals



Communities

- RT-PCR at community level in Vijayanagar & Dolvi
- Vaccination drive
- **1 lakh masks, 5,000 bottles of sanitizers** with stand distributed
- **200 volunteers** at Vijayanagar and **50 Volunteers** at Dolvi for community awareness
- Food facility provided at Vasind (16,460 Kg dry ration) and Salem
- Provided **4,000 Grocery kits** to direct impact zone, 2 Panchayats

Ongoing Initiatives



Hospitals with oxygenated beds: 1,000 beds Jumbo at Vijayanagar, 500 Beds at Dolvi, 250 beds at Jharsuguda, 120 beds at Ratnagiri, 10 beds at Paradip



Oxygen: 2,850 Oxygen concentrators



Other: 3,50,000 masks & 10,000 sanitizers and drugs in public health facilities in different locations.

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
- >40% reduction in specific CO₂ emissions by 2030 (vs. base year 2005)



Biodiversity: No Net Loss for Biodiversity



Waste Water: Zero Liquid Discharge



Water Resources: >25% 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



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

Independent Directors

Mr. Malay Mukherjee

Dr. (Mrs.) Punita Kumar Sinha

Mrs. Nirupama Rao

Executive Directors

Mr. Seshagiri Rao M. V. S.

Dr. Vinod Nowal

Mr. Jayant Acharya

Integrated Reporting Since FY 2018



Click on images for reading online.



Sustainability

Overview

Key Investment Highlights

Appendix



- India's leading integrated steel producer
- Installed crude steel capacity of 18 mtpa, growing to **30.5 mtpa**
- Market capitalisation of **\$22.1 bn^(a)**



- Power producer with installed capacity of 4.6 GW (Hydro, Renewable and Thermal)
- Growing to 10 GW in medium-term with **70% renewable portfolio**
- Market capitalisation of **\$3.5bn^(a)**



- 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**



- 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



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

**Presence across
the core sectors of India**



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)

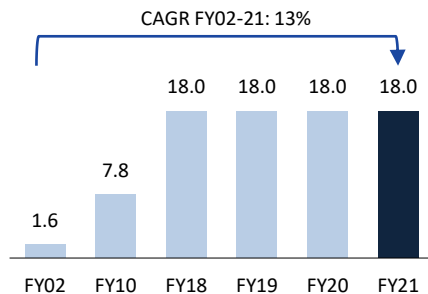


Strong distribution network and export presence

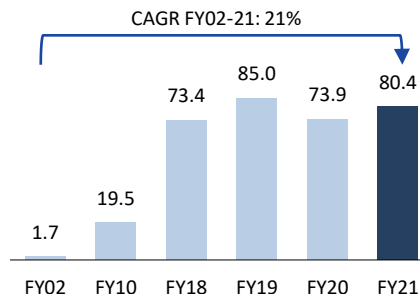
- Pan India marketing and distribution network, export footprint over **c.100 countries** across **5 continents**

Transformational Growth and Value Creation

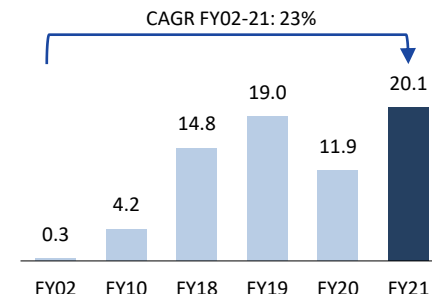
Capacity (mtpa)



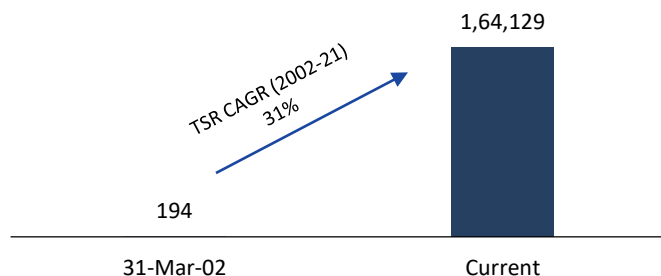
Total revenue (₹ 000's Cr)



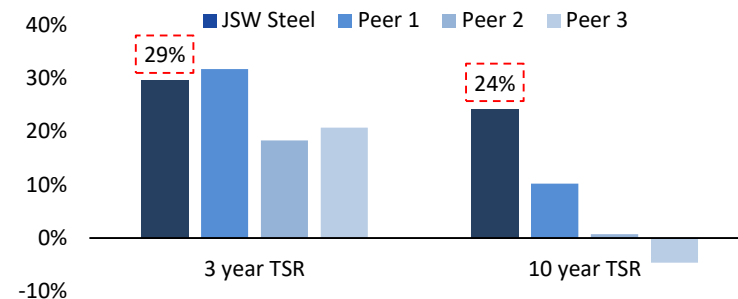
EBITDA (₹ 000's Cr)



Market cap (₹ Cr)



3 year and 10 year Total Shareholder Return





Sustainability

Overview

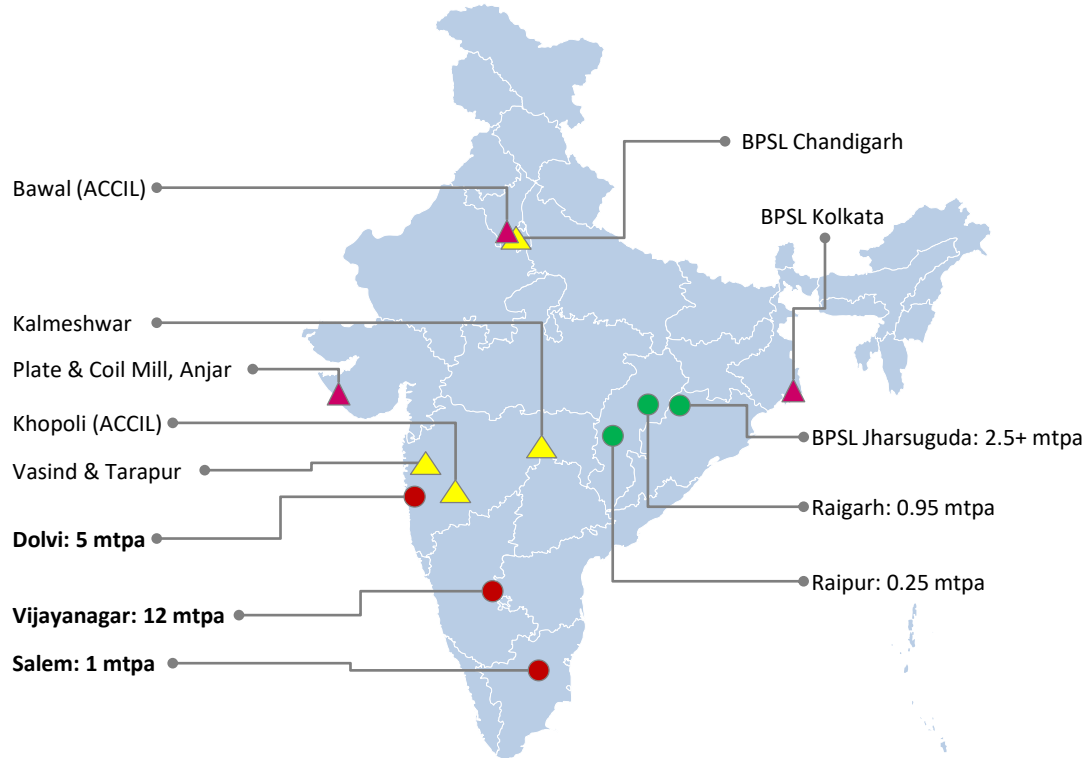
Key Investment Highlights

Appendix

Key Investment Highlights

- 1 Size, Scale & Growth** Leading steel producer in India with 70% near-term growth to take capacity to 30.5 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 13% since FY02
- 7 Shareholder Value** Prudent capital allocation: 10 year TSR CAGR of 24%, and uninterrupted dividends
- 8 Balance Sheet Strength** Strong balance sheet and access to diversified funding sources globally

India

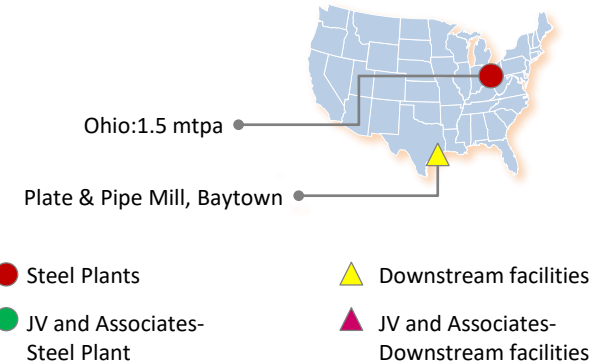


International Footprint

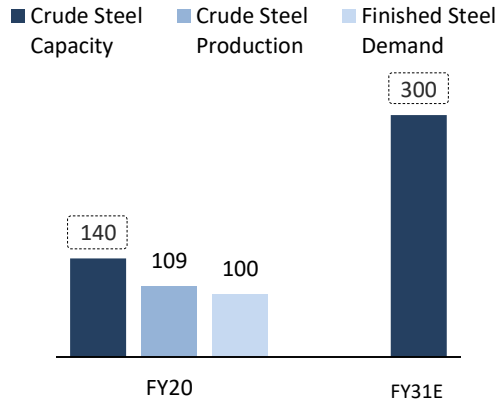
Europe



USA

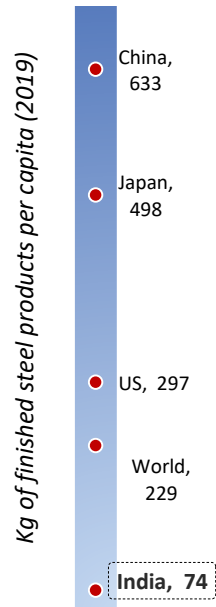


India Steel: Strong Fundamentals (mt)

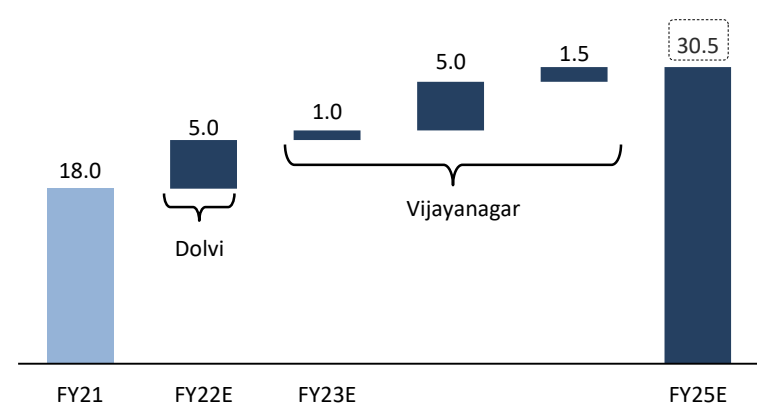


- Govt. thrust on infrastructure, housing, and increasing the share of manufacturing in GDP
- \$1.4tn National Infrastructure Pipeline over next 5 years
- Realignment of global supply chains and “China+1” sourcing approach of MNC’s
- Production-linked incentive scheme launched by govt. to promote manufacturing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

Significant room for growth in steel consumption in India



70% near-term growth in steel capacity (mtpa)



- 5 mtpa Dolvi expansion to commence operations in current year
- 5 mtpa brownfield expansion at Vijayanagar announced – 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+1.5) in phases
- Organic brownfield capacity expansion capex well below global benchmarks of replacement cost of c.\$1,000/ton for BF-based capacity

Best placed Indian producer to benefit from strong domestic demand growth

Parameter ^(a)							
Conversion costs; yields	10/10	8	10	10	8	7	10
Labor costs	10/10	7	7	8	9	9	5
Cost cutting efforts	09/10	7	9	7	8	8	10
Expanding Capacity	10/10	8	8	9	6	7	7
Location in high growth markets	10/10	8	7	6	6	6	5
Aggregate rank	9	12	1	2	3	4	5

Source: World Steel Dynamics (World-Class Steelmaker Rankings as of October 2020)

Resilient business model based on continued focus on cost leadership

- Leading position on global conversion cost curve
 - Conversion cost of c.\$110/ton in FY21
- 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^(b)



1 ranked in India



3 ranked in Asia



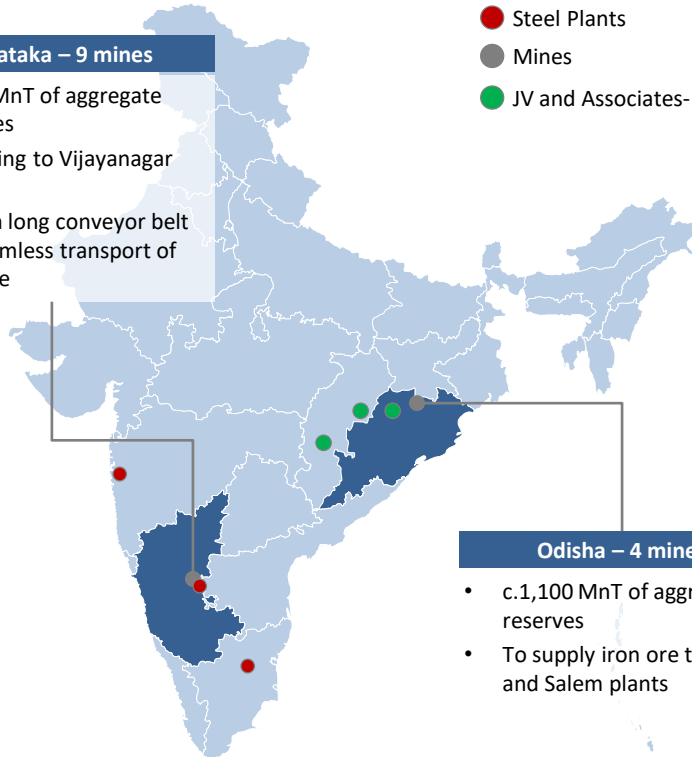
9 ranked in Globally

13 Captive iron ore mines ensuring adequate raw material supply

Karnataka – 9 mines

- c.216 MnT of aggregate reserves
- Supplying to Vijayanagar plant
- c.24km long conveyor belt for seamless transport of iron ore

- Steel Plants
- Mines
- JV and Associates- Steel Plant



Odisha – 4 mines

- c.1,100 MnT of aggregate reserves
- To supply iron ore to Dolvi and Salem plants

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

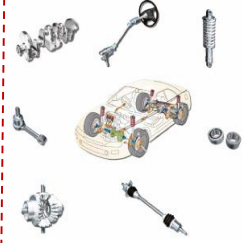
Colour Coated Products

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.

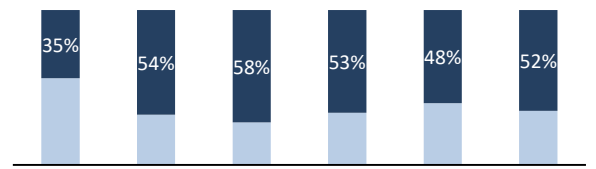
Auto, General Engg.

Automotive

Our Brands



Share of Value added products



FY16 FY17 FY18 FY19 FY20 FY21
 ■ Other Products ■ Value Added and Special Products



All finished products under
life-cycle analysis

Environment Product
Declaration in place for
HRC, CRCA



JSW Platina
Superior Quality Tinplate Coils & Sheets

- 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
HRC, CRCA



JSW Galvos
Premium GALVALUME®
Coil & Sheets

- **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	5.91	15%	<ul style="list-style-type: none"> Technologies and strategies to reduce material and energy usage Increased usage of renewable energy, scrap, PCI and NG for deep decarbonization Energy efficiency and process efficiency improvements through BAT Innovative processes including CCUS, green hydrogen in DRI and direct electrolysis Strategic collaboration with World technology providers
Water Security <ul style="list-style-type: none"> Specific water consumption (steel production) (m³/tcs) 	3.60	2.41	33%	<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	0.28	70%	<ul style="list-style-type: none"> Adoption of best available technologies like Meros in sintering, Supreco technology and Coke Dry Quenching in Coke Plants, TRT's in BF
Biodiversity <ul style="list-style-type: none"> Biodiversity at our operating sites 	-	<i>Achieve 'no net loss' of biodiversity</i>		<ul style="list-style-type: none"> Continue to enhance Biodiversity at all our locations and operations to achieve 'no net loss' Increase green cover across operations

Key highlights



Climate Change

- Environment Product Declaration for HRC, CRCA; all other finished products under life-cycle analysis. GreenPro Eco-labelling for TMT Rebars
- Rated at Leadership Level (A-) by CDP
- Participation in World Steel's Step Up to increase operational efficiency
- Climate Action Group for low carbon strategy



Water Security

- Installation of membrane filtration technology in townships for sewage-water reusage
- Commissioning of Ultra Filter system - Salem



Waste

- Single-use plastic (SUP) banned for use across locations
- Slag sand as replacement to river sand pioneered by Vijayanagar
- Manufacturing of Paver Blocks from slag in Salem



Air Emissions

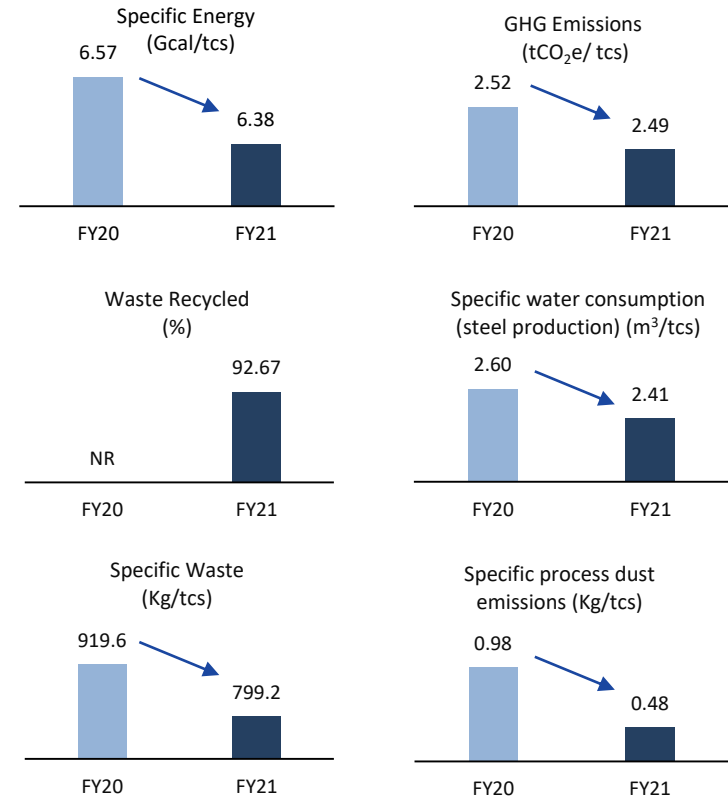
- Modification of Gas Cleaning Plants at SMS at Dolvi
- Adopting best in class de-dusting Meros technology in Sinter plants



Biodiversity

- Continuation of Mangrove Project in Dolvi
- Indian Business & Biodiversity Initiative Reporting founding member

Performance





“ CCUS is an important technological option for reducing CO₂ emissions in the energy sector and will be essential to achieving the goal of net-zero emissions. ”

- IEA

What is CCUS?

- Carbon capture, utilisation and storage (CCUS), is an important emissions reduction technology that can be applied across the energy system.
- CCUS technologies involve the capture of carbon dioxide (CO₂) from fuel combustion or industrial processes, the transport of this CO₂ via ship or pipeline, and either its use as a resource to create valuable products or services, or its permanent storage deep underground in geological formations.
- CCUS technologies are coming of age and are expected to mature in 2030. JSW is one of the early adopters of CCUS in India.

CCU Process at DRI Plant at Salav, Maharashtra

99.5% purity of CO₂

Production Capacity of 100 TPD

1 Directly Reduced Iron Reduction Process



CO and H₂ are passed through Iron Ore Pellets & Lump Ore to facilitate the Reduction process

Carbon Capture & Storage



CCUS

CO₂ is then captured, stored and transported for its usage in the food & beverages industry.



Carbon-rich waste gas is recovered and sent to Absorber which treats it counter current with G.V. Solution forming Rich Solution.

2 Waste Gas Recovery



Rich Solution is treated in the Regenerators separating G.V. Solution and Carbon Dioxide which is then passed on for further processing.

HP & LP Regenerators

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

Our vision is to achieve 'Zero Harm'

Building a Culture of Health & Safety

Health and Safety Standards

- 20 Health and Safety standards & 10 Safety critical rules
- 25 Health and Safety performance indicators across all sites
- Digital project "SHARK" implemented at Salem for better safety compliances
- High-risk safety Audit at Salem & Dolvi by British Safety Council
- Process Safety CoE at Dolvi with DuPont Sustainable Solutions (DSS)

Contractor Safety

- Pre-Qualification Criteria for Contractors
- JSW CARES –Contractor Assessment & Rating for Excellence in Safety
- Contractor H&S Training Program
- Inspection and Audits
- Carried out 500,000+ Safety Observations in FY21

Competency Development

- 15 E-Learning Modules
- Mandatory 5 High Risk E-Learning modules for every employee
- 28,800+ E-learning Training Modules completed in FY 21
- 35 Animated Safety Videos-Learning from Past Incidents
- Certification Program for Line Managers as Safety Champion with British Safety Council

JSW's roadmap to vision 000

01

Zero major incidents

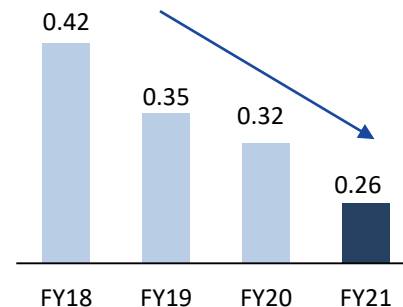
02

Zero injury

03

Zero harm

LTIFR



Empowering communities with sustainable livelihoods
₹ 165 crore CSR spend in FY21

Health & Nutrition

- 57,100 community reached out through healthcare screening services
- Support to 1 mn families during Covid-19

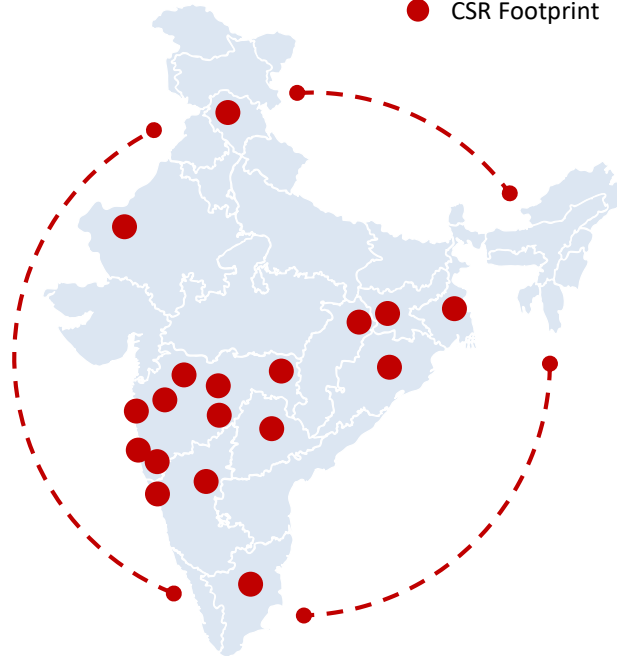
Agri-initiatives

- 7,100 farmers supported so far
- 1,800 tons worth commodities linked with markets
- 1,731 tonne waste prevented from being ending up at landfill

Water Management

- 7.95 lakh cu. m. of additional water storage capacity created
- 18,700 Ha of land covered through integrated watershed management

● CSR Footprint



Over a million lives impacted so far



Engagement in over 1,000 villages spread across 11 states



Investment in innovative solutions across all sectors



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



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

Executive Directors



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



Dr. Vinod Nowal
Dy. Managing Director



Jayant Acharya
Director
(Commercial and Marketing)

Independent Directors



Malay Mukherjee
40 years of rich experience in
mining and steel industry



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



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

Nominee Directors

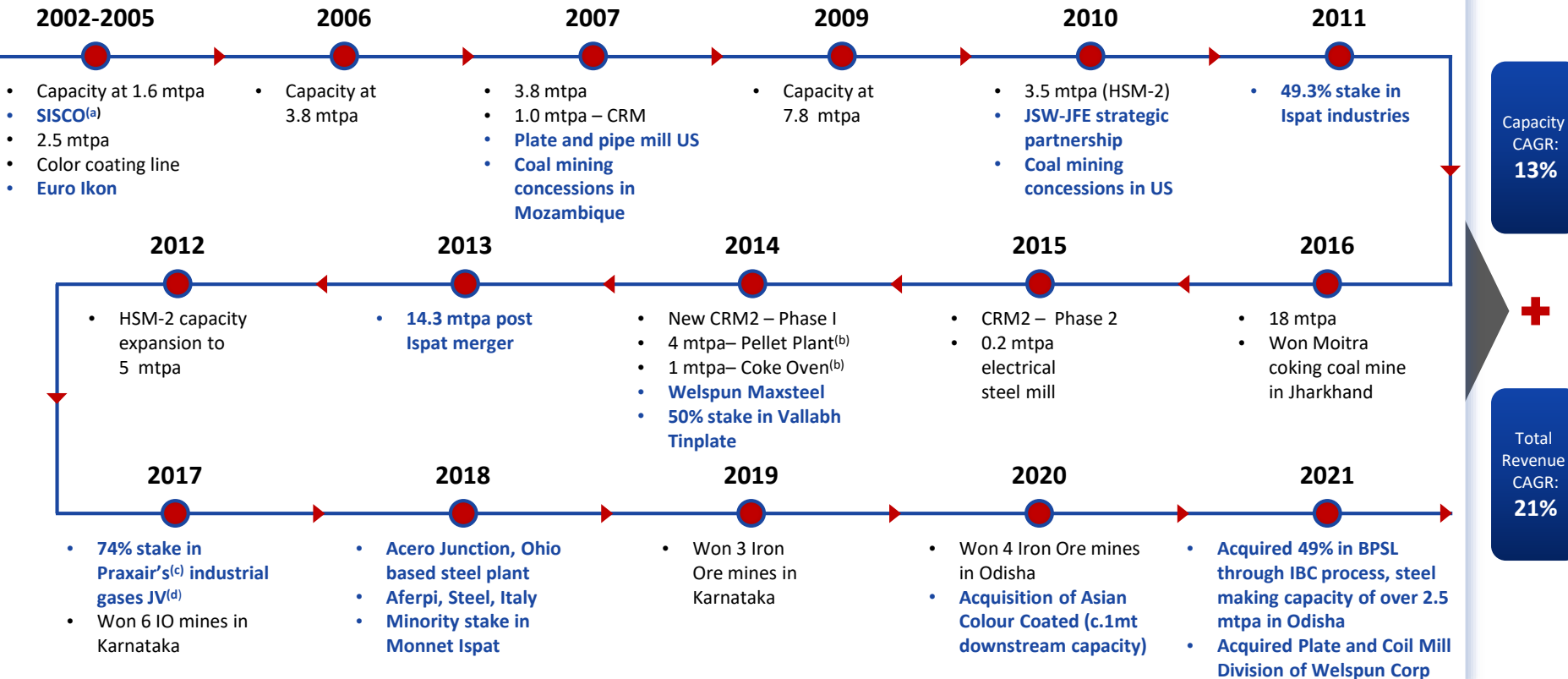


Dr. V. Ram Prasath Manohar, IAS
Nominee Director of KSIIDC

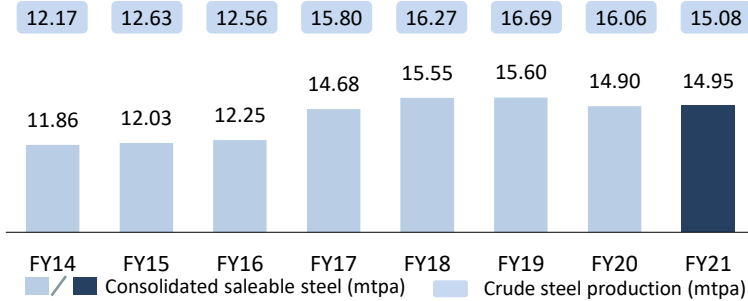


Hiroyuki Ogawa
Nominee Director of JFE Steel
Corporation

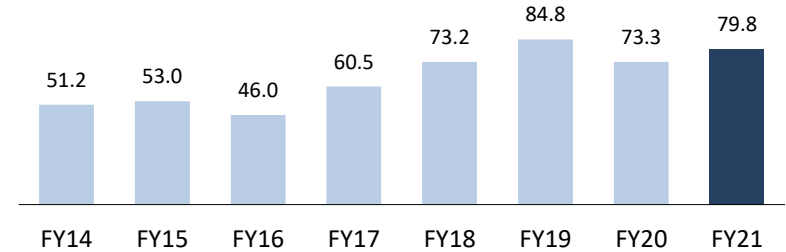
Combination of organic and inorganic growth



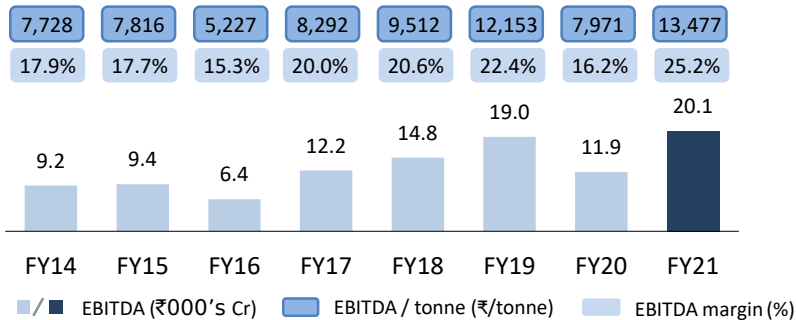
Strong track record of volume growth



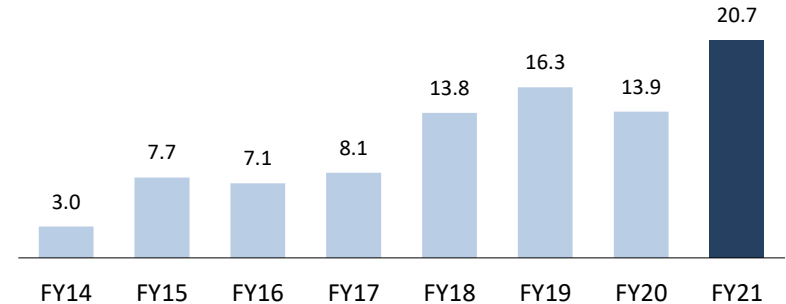
Track record of Operating Revenues (₹ 000's Cr)



Robust EBITDA Margin through the cycle

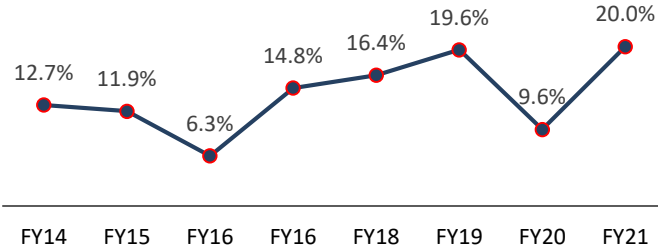


Cashflow from Operations (₹ 000's Cr)

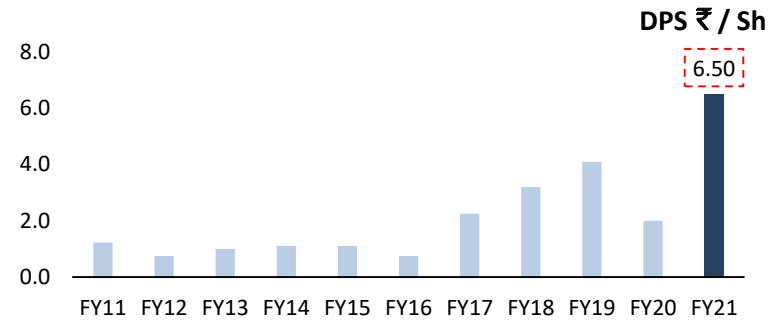


Prudent Capital Allocation: 10 Year TSR CAGR of 24%, and Uninterrupted Dividends

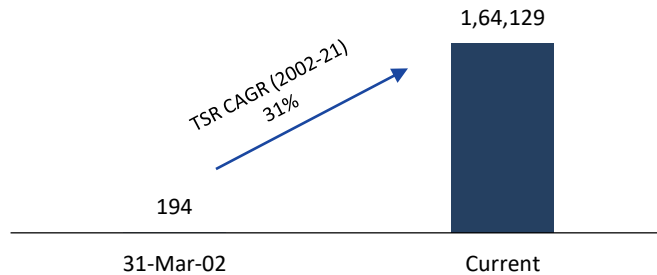
ROCE



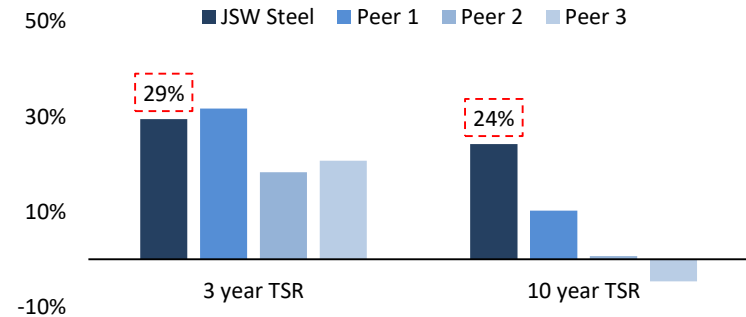
Uninterrupted Dividends



Market cap (₹ Cr)

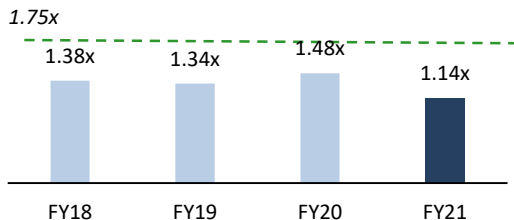


3 year and 10 year Total Shareholder Return

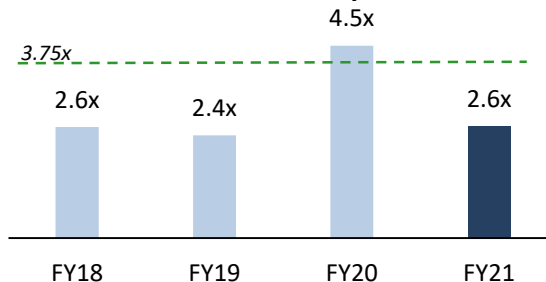


Value accretive growth through economic cycles

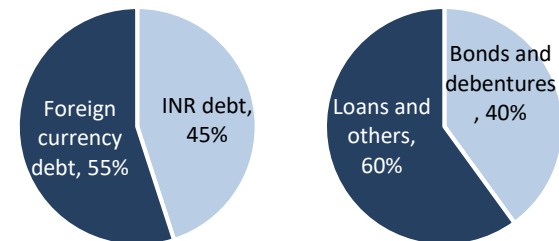
Net Gearing (ND/Equity) well under the stated cap of 1.75x



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



Diversified funding sources



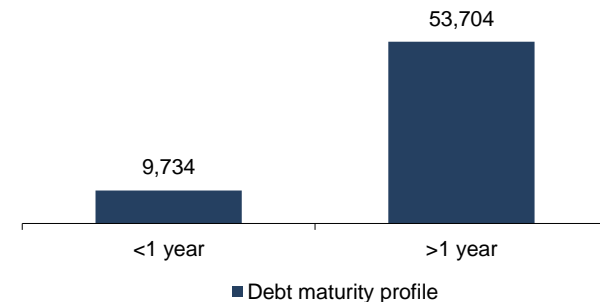
Strong Liquidity and Credit Ratings

- Cash and Cash equivalents of ₹12,821 crore
- Credit Ratings:
 - Intl: Fitch: BB- (Positive outlook) and Moodys: Ba2 (Stable outlook)
 - Domestic: IndRA: AA (Stable outlook); ICRA: AA- (Positive outlook), CARE: 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 \$2.65bn through global bond markets since 2014

Debt maturity profile (₹ Cr)





Sustainability

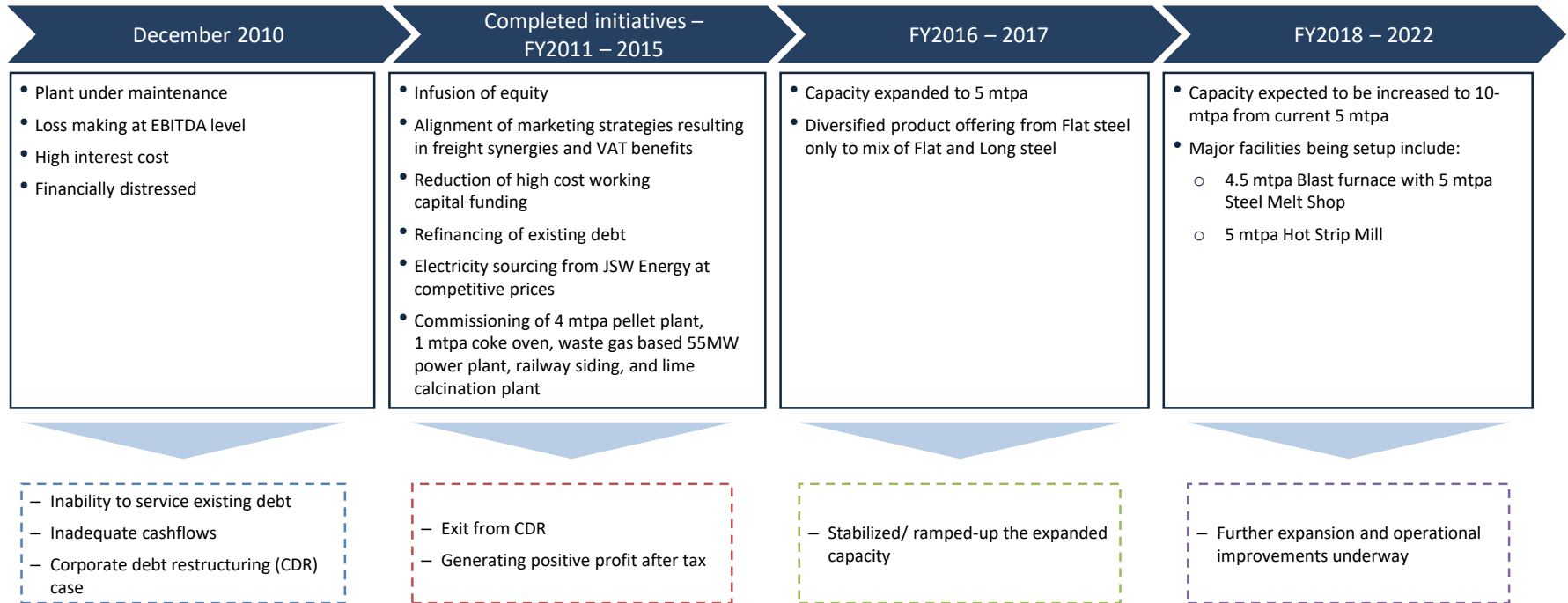
Overview

Key highlights

Appendix

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



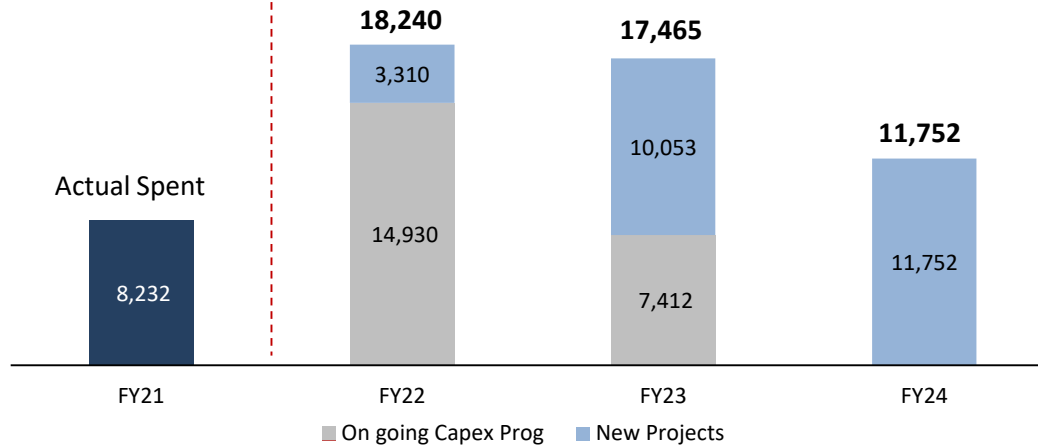
Able to leverage an acquisition to maximum value accretion through application of knowledge and experience

All fig. in million metric tonnes

Particulars	Crude Steel Production	Sales
Existing Operations	17.00	16.00
Dolvi Phase 2 Expansion	1.50	1.40
JSW Steel Standalone	18.50	17.40
JSW steel USA Ohio	1.00	1.00
JSW Steel Ltd	19.50	18.40
Joint Control and Associates:		
Bhushan Power & Steel Ltd.	2.80	2.60
JSW Ispat Special Products Ltd.	0.64	0.63
Total Combined Volumes	<u>22.94</u>	<u>21.63</u>

Annual Capex Update

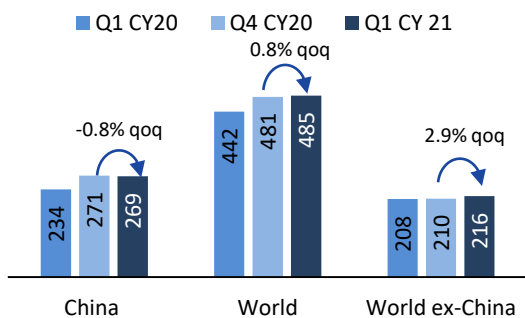
₹ crore



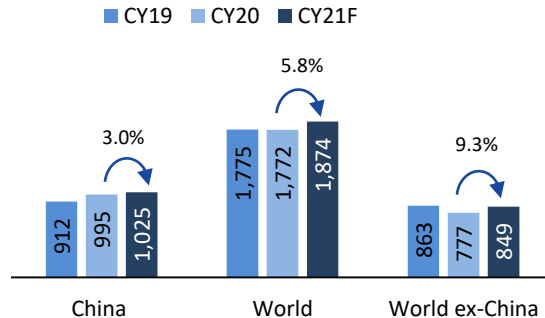
Ongoing Capex Program	
Particulars	₹ crore
Unspent Capex including creditors and acceptances	21,162
1.5 mtpa Coke Oven at Vijayanagar to support 5 mtpa brownfield steel capacity	805
Augmenting 1mtpa Crude Steel Capacity at Vijayanagar	380
Total	22,342

New Projects	
Particulars	₹ crore
5 mtpa brown field expansion at Vijayanagar	15,000
120ktpa Colour Coated Line in J&K	100
Odisha Mining (own mining infrastructure, beneficiation and digitization)	3,450
Sustenance Capex	6,565
Total	25,115

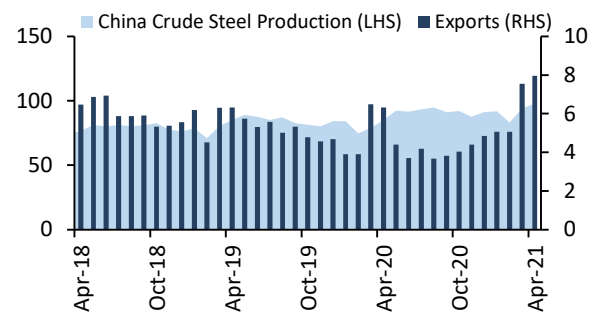
Crude Steel Production - Quarterly (mt)



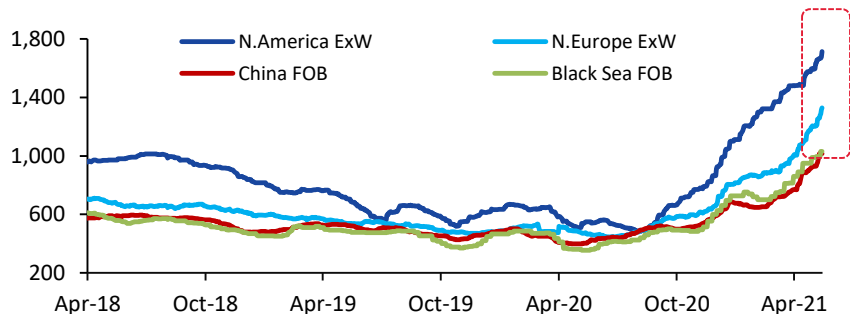
Steel Demand- Annual (mt)



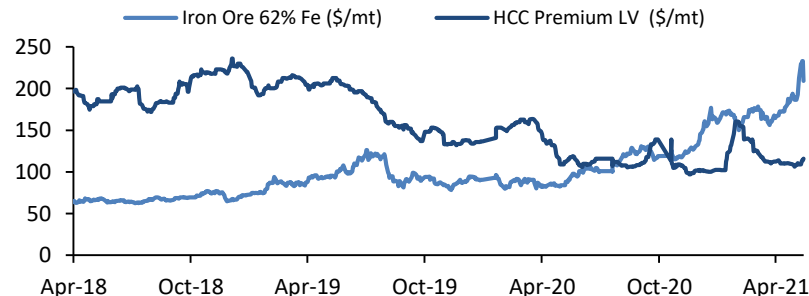
China Steel Production and Export* (mt)



HRC prices \$/t

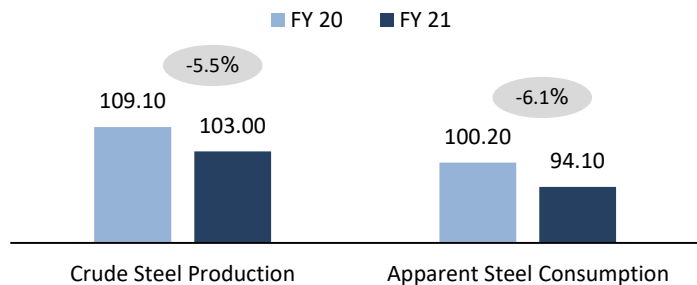


Raw Material Price Trend

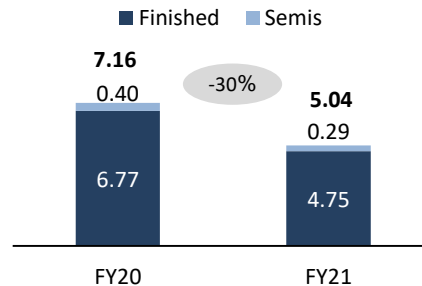


Strong demand recovery and iron ore price have led to robust steel prices

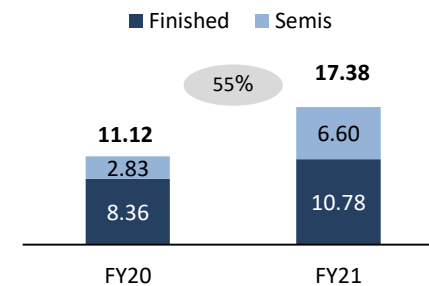
Production and Consumption (mt)



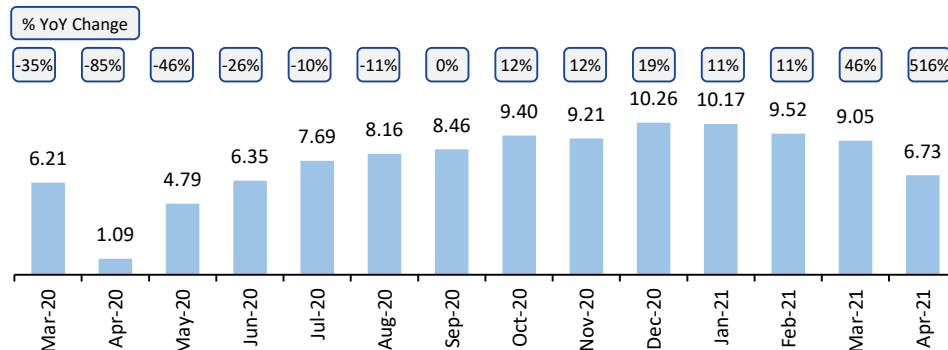
Steel Imports (mt)



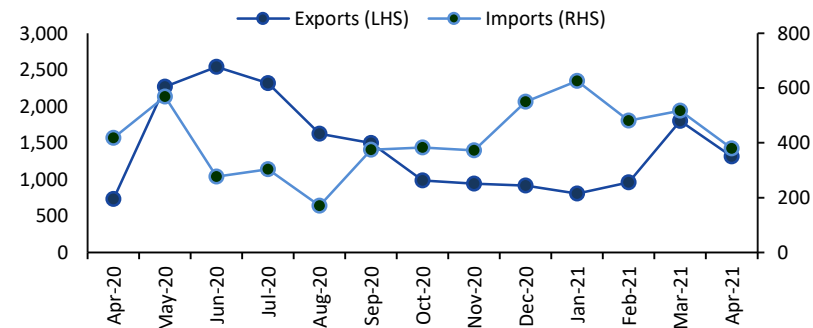
Steel Exports (mt)



Apparent Steel Consumption (mt) and YoY Growth



Monthly Steel Imports (kt) and Exports (kt)



Sharp rebound in production and demand post the 2020 lockdown; 2nd Covid wave is currently a risk

Pellet plant

- 8 mtpa Pellet plant. Part of cost savings project
- Commissioned in March 2021, pellet production underway

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

- PLTCM project completed
- One of the two CGL lines of 0.45 mtpa commissioned
- Commissioning of 2nd line by Q2 FY22

Colour Coating line (0.3 mtpa)

- Commissioning by Q2 FY22

Coke Oven plant

- 1.5 mtpa Coke Oven battery: Commissioning in phases from Q3 FY22
- Capacity enhancement of further 1.5 mtpa to support the 5 mtpa Steel making expansion. Phased commissioning from Q3 FY23



Expansion from 5 to 10 mtpa

Doubling steel making capacity from 5 mtpa to 10 mtpa

- Coke Oven: commenced production in February 2021
- Pellet plant: commissioned in March 2021
- HSM: Successfully rolled 1st slab in March 2021

Completion work pertaining to Blast Furnace and SMS has been impacted by the ongoing Covid disruption; full integrated operations are now expected in Sep 2021



Kalmeshwar: Capacity enhancement of PPGL by 0.22 mtpa

- Commenced production with first Coil in March 2021

Vasind and Tarapur: Downstream projects

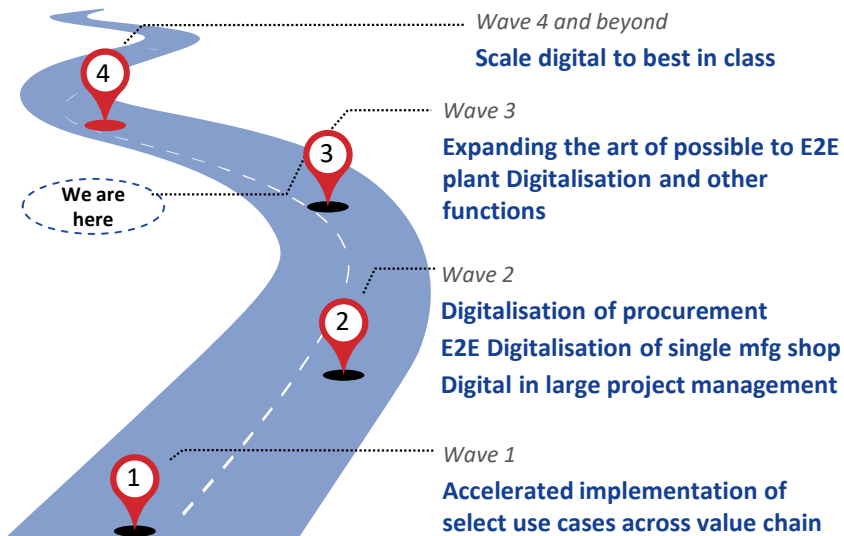
- **Modernisation-cum-capacity enhancement projects**
 - All expansions (except 0.45 mtpa GI/GL at Vasind) are completed
 - 0.45 mtpa GI/GL at Vasind to be commissioned in Q2 FY22
- **0.5 mtpa Continuous Annealing Line at Vasind**
 - To be commissioned by March 2022
- **Second Tinline of 0.25 mtpa at Tarapur**
 - To be commissioned by June 2022



Dolvi

Others

Non-sequential waves with continuous introduction of digital lighthouses



100+

Digital Assets
Created



6,000+

Employees engaged
in the digital journey



200+

Digital lighthouses
and projects

Guiding principles behind Digitalisation



Agile

- Fail-fast approach
- Continues improvement
- Discreet problems



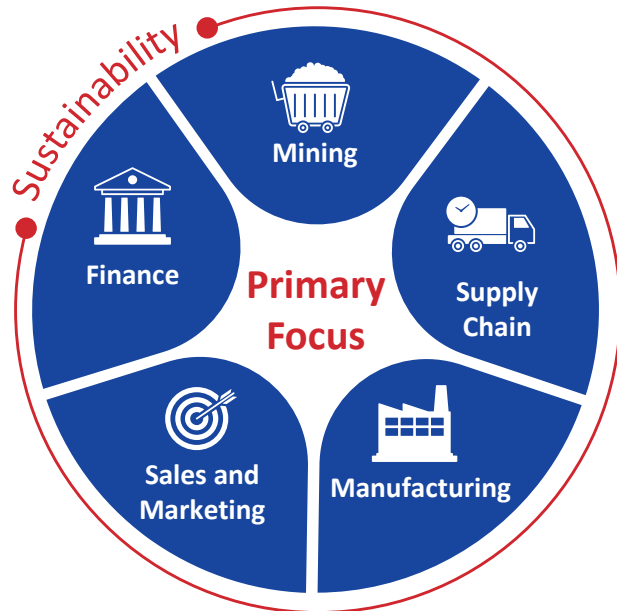
Value lens

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



Sustenance

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



Additional Focus

Safety and Security

Procurement

Cultural Transformation

Integrated Control Tower



Anticipated Impact

Increased Sales

Asset Availability

Improve Safety

Cost Optimization

Defects Reduction

WOW Experience



Technologies Used

IoT, Artificial Intelligence, Analytics, Cloud/Fog/Edge Computing, RPA leveraging JSW Digital team as well as Startup ecosystem & Experts



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

FY'22 Plan

200+

new opportunities identified

30+

horizontally deployable projects

Select initiatives



Improve efficiency and boost safety through **Yard Management Automation**

Eliminating human dependency for cranes operations at coil yards using digital footprint & man less cranes – preventing operational delays and safety incidents



Project **SAMPARK - Paperless technology powered logistics**

Real-time visibility to the plant management, supply chain team as well as external stakeholders and identification of operational improvement opportunities



Digitally enabled **Finance** function

Use cases such as cash management dashboard, cost forecasting, inventory optimization, etc., prioritized based on value and implementation velocity



Analytics to optimize **Vijayanagar SMS process time and energy burden**

IoT enabled, system integrated, and machine learning driven optimization models reduce arcing time, thereby improving production efficiency and reducing power consumption



Holistic **digital cultural transformation agenda**

10+ interventions tailored to organization levels and employee competencies including in-house developed batch of 50+ data scientists

Awards & Recognitions



- Rated at **Leadership Level (A-)** by CDP
- **WSA Steel Sustainability Champions 2019 and 2020**
- **Corporate Governance & Sustainability Vision Awards 2020**

**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

FY21



Water Pipelines: c.450 km of water pipelines across major projects



Oil & Gas Pipelines: c.300 km of pipelines across major projects



Expressways and Highways: Over 1,400km of roads. Over 172km of expressways (Dwarka, Purvanchal & Samruddhi (Mumbai-Nagpur))



Sealinks and Bridges: Over 185 km of major projects (Trans-Harbour Nhava Seva Link- Mumbai, Mandovi Bridge- Goa & Nadia Bridge- West Bengal)



Railway Freight Corridors: c.100km of railway corridors (Mumbai-Haryana WDFC & Ludhiana-West Bengal EDFC)



Solar Project: Contributed 1.75GW power (c.78%) by supplying to world's largest Solar Park - Bhadla Solar Park (RJ)



Metro Projects: c.50km of metro project lines (Mumbai, Navi Mumbai, Pune, Nagpur, Bengaluru, Ahmedabad, Kochi & Delhi)



High Speed Rail (Mum-Ahd)



Nuclear Power Plants: Tapi (GJ), Tarapur (MH), Rawatbhata (RJ) and Kumbakonam, Kalpakkam & Tirunelveli (TN).



Port/Airport & ISRO, Sriharikota projects





Investor Relations Contact:

ir.jswsteel@jsw.in

BETTER EVERYDAY