

**BETTER EVERYDAY**



Integrated Report  
2022-23

# A FUTURE SHAPED BY STEEL



**GROWING**



**INNOVATIVE**



**SUSTAINABLE**



A true visionary,  
A legendary industrialist,  
A great philanthropist,  
A legacy that will always be cherished!

## Shri O.P. Jindal

7th August 1930 - 31st March 2005

Founder and Visionary, O. P. Jindal Group

His life was an inspirational journey leading millions to follow the enlightened path.

We will always carry on his values, an epitome of indomitable courage, endurance and integrity, his legacy will always remain with us. As we take leaps towards the future, we are fully committed to honour his vision and keep his legacy alive & carrying it forward to greater heights.



## WE ARE JSW STEEL

JSW Steel is one of India's leading integrated and most geographically diversified steel manufacturers. Our steel goes into building key infrastructure across the country, making us an enduring partner in India's growth story. We focus on adopting the best available technologies and processes to retain steel's position as the metal of choice while transitioning to a low-carbon future.

While pursuing our strategic objectives, we actively contribute towards reducing our environmental footprint and making a meaningful difference in the lives of our employees, partners and communities.

We are a reliable partner in nation-building.

### 27.7 MTPA

**Domestic crude steel capacity**

(including BPSL and JSW Ispat Special Products Ltd.)

### 37 MTPA

**Expected domestic capacity by FY 2024-25**

### ~13.5 MTPA

Domestic downstream steel capacity

\*Includes JSW Coated Products Ltd., Vijayanagar CRM Complex and BPSL

### 1.5 MNTPA

International presence (JSW Steel USA)

### 394

New branded stores added in FY 2022-23

### 100+

**countries**

Export footprint

### 13

Captive iron ore mines

### 13,800+

Direct employees



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ABOUT THE REPORT

# OUR APPROACH TO REPORTING

The sixth integrated report of JSW Steel is prepared in accordance with the International Integrated Reporting framework of the IFRS Foundation. This Report has been published to transparently communicate to stakeholders the Company's ability to create value in the short, medium and long term. The report focuses on JSW Steel's achievements, its model of value creation, holistic performance, strategy and risk management and mitigation. There are no restatements of information in this report, compared to our preceding report.

## Frameworks, guidelines and standards

Apart from abiding by the guiding principles and content elements of the International (IR) Framework, this Report has been prepared in accordance with the GRI Standards: Core option. It has also taken into account the applicable requirements and principles of the following:

- United Nations Sustainable Development Goals (UN SDGs)
- United Nations Global Compact (UNGC)
- Worldsteel guidelines
- GHG Protocol (as applicable)
- National Guidelines on Responsible Business Conduct (NGRBC)
- Companies Act, 2013 (and the rules made thereunder) + Indian Accounting Standards
- Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, including compliance to the Business Responsibility and Sustainability Report (BRSR) framework
- Secretarial Standards issued by the Institute of Company Secretaries of India

JSW Steel also discloses climate change and water security-related information to the CDP platform.

[BRSR | Page 252](#)

[GRI Index | Page 182](#)

### Reporting Cycle

01<sup>st</sup>

APRIL 2022

31<sup>st</sup>

MARCH 2023



## Responsibility statement

The integrity of the information presented in this Report has been assured by the Company's Board and Management, as Those Charged With Governance (TCWG).

[Board's Profile | Page 176](#)

## Assurance

The non-financial information is assured by Bureau Veritas India Pvt. Ltd as third-party assurance provider. The financial information is audited by S R B C & Co. LLP.



The operations/subsidiaries covered under non-financial disclosures in the IR contribute to >90% of the revenue generated.

### Forward looking statements

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 risks 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 the steel industry, including those factors that 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, unauthorised 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.

### Precautionary principle

We follow precautionary approach towards minimising our negative impact on environment. We constantly undertake efforts to reduce the Company's overall environmental footprint



FY 2022-23  
HIGHLIGHTSRESILIENT PERFORMANCE,  
CONTINUED EXCELLENCEFocused on  
growth₹1,66,990  13%

CRORE

Total income

₹4,139

CRORE

Net profit

₹1,59,147

CRORE

Economic value distributed

₹7,843

CRORE

Economic value retained

Robust  
operational  
performance24.16 MnT  24%

Crude steel production

90%

Average capacity utilisation  
(India operations)22.39 MnT  23%

Steel sales

Responsible  
business30% Actual reduction in CO<sub>2</sub>  
emission intensity from  
2005 base year

78.57%

Board committees chaired by  
Independent Directors

11.94%

Materials recycled

₹356 CRORE\*

CSR expenditure

\*₹59 crore transferred to separate unspent account

20,782 ('000) m<sup>3</sup>

Wastewater reused and recycled

## Achievements

Salem Works became the first integrated Steel Plant (ISP) globally to win the prestigious 'Sword of Honour' award from the British Safety Council

Dolvi Works was recognised with a 5-star safety rating from the British Safety Council

Achieved leadership level (A) in CDP Climate Programme

Recognised as 'Worldsteel Sustainability Champion for 2023', for the fifth consecutive time in a row

Joined 'Responsible Steel', the steel industry's first global multistakeholder standard and certification

Awarded with 'Excellence in Sustainability Innovation' by the World Sustainability for the Waste-to-Sand initiative at Vijayanagar





A FUTURE SHAPED  
BY STEEL

# A FUTURE SHAPED BY STEEL

## GROWING. INNOVATIVE. SUSTAINABLE.

At JSW Steel, we envision a future with steel as the driving force behind transformative changes in a prosperous, and sustainable world. With its versatility and infinite recyclability, the steel we make is not only strengthening India's infrastructure but is also playing a key role in its green transition and journey towards self-reliance.

With continued investments in innovation and technology, we focus on providing differentiated products and solutions that address the evolving needs of our customers. From construction to transportation, and manufacturing to renewable energy, we are bringing alive the universal impact of our steel and creating infinite possibilities for the future while empowering our customers to enhance their own sustainability.

Aligned with global efforts to mitigate climate change and move towards a low-carbon future, we have set ambitious targets to reduce our carbon emissions, improve resource efficiency and shift to green energy to power our growth. At the same time, we are creating a future-ready workforce, working with our partners to embed sustainability across our supply chain and building resilient communities through focused interventions across our chosen areas.

We invite you to be a part of this exhilarating journey of shaping the future with steel at the core and being Better Everyday by:

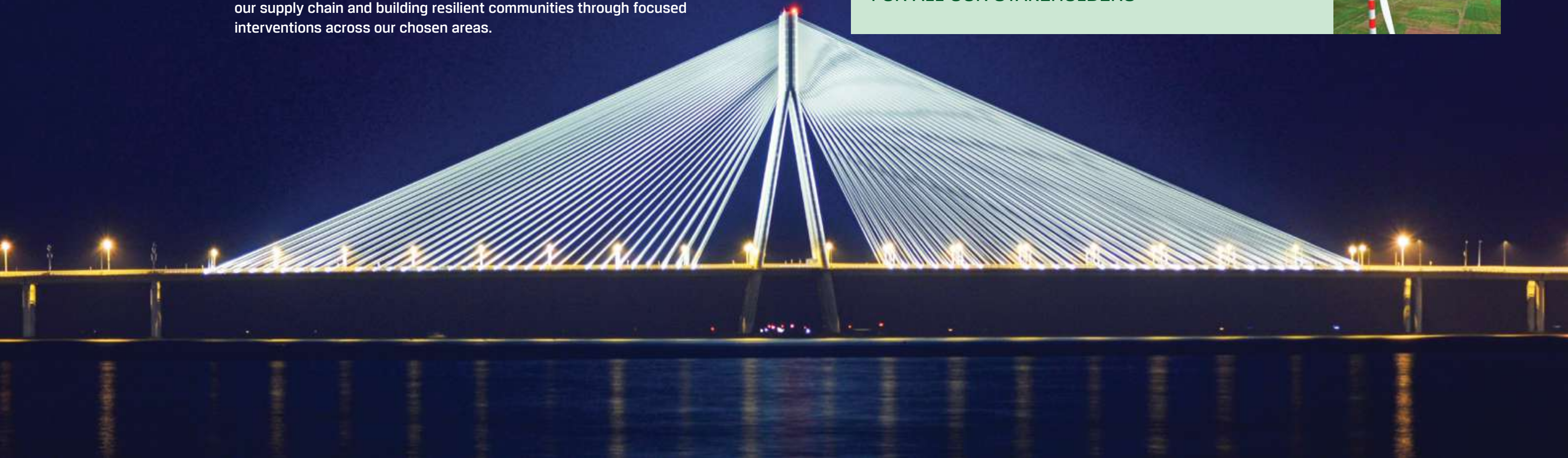
GROWING OUR CAPACITY AND CAPABILITY  
TO CATALYSE INDIA'S AMBITIONS



INNOVATING TO HARNESS THE VERSATILITY  
AND INFINITE RECYCLABILITY OF STEEL



BUILDING A SUSTAINABLE FUTURE  
FOR ALL OUR STAKEHOLDERS





# GROWING

## WITH INDIA, FOSTERING NATION-BUILDING

The steel we make goes into providing enduring strength and flexibility in building infrastructure projects that are key to India's aspirations for sustainable development and inclusive progress. With a proven track record in expanding capacities—upstream and downstream—through organic and inorganic initiatives, we have now embarked on an expansion path that will almost double our capacity in the next decade.

With a strong focus on building brands and increasing sales of Value-Added and Special Products (VASP), we are adding downstream capacities in the areas where India is growing.

### Partnering India's high-speed rail journey

The Mumbai-Ahmedabad High Speed Rail (MAHSR) Corridor is the first of the 12 lines planned by the government. It will cover more than 500km in 2 hours and 58 minutes with a maximum speed of 320km/hour. With an estimated steel consumption of 2.5 MnT, the MAHSR project, when completed, will become the highest steel-consuming infrastructure project in India. JSW Steel provides high-strength TMT Bars, HR Plates and LRPC for the MAHSR project and has become one of the preferred and leading suppliers with an over 50% contribution.



## Supplying steel to key infrastructure projects

### RAIL



**994 KM**

Of Railway Freight Corridors (Mumbai-Haryana WDFC and Ludhiana-West Bengal EDFC)

### METRO



**57 KM**

Of Metro line (Mumbai, Pune, Nagpur, Bengaluru, Ahmedabad, Chennai, Indore, Kochi and Delhi) Projects

### GREEN ENERGY



**2.3 GW**

Contribution to Solar Energy Projects

**1.4 GW**

Contribution to Wind Energy Projects

### WATER PIPELINE



**1,703 KM**

Of water pipelines projects across major projects

### OIL & GAS PIPELINE



**607 KM**

Of pipelines across major projects

### AIRPORT



**Navi Mumbai**

International airport

### NUCLEAR POWER PLANTS



**1.6 GW**

For Kudankulam, Tarapur, Kakrapar power projects

### EXPRESSWAYS AND HIGHWAYS



**1,001 KM**

Of roads

**169 KM**

Of bridges



# INNOVATING

## WITH STEEL

### 'ALWAYS AROUND'

Steel is the foundation of everything around us. We relentlessly innovate to elevate the versatility of steel, making it evolve into diverse applications - from bridges and buildings to packaging products, and consumer durables to automobiles. Recently, we launched a campaign to reinforce this versatility of steel and the ubiquitous presence of JSW Steel in everyday life. Steel is #AlwaysAround.



#### Enabling automakers to make mobility safer and efficient

We work closely with automakers to make cars safer, lighter and fuel efficient. Our advanced high-strength steel (AHSS) enables OEMs to achieve high safety ratings. Major crash and safety components are made with AHSS. We have also developed steel for suspension parts, which require optimum fatigue life in addition to high strength.



#### Making everyday electrical equipment energy efficient

Our electrical steel solutions help achieve higher energy efficiency in electrical equipment such as electrical motors, pumps, fans, domestic appliances, white goods, power generators and small transformers, among others. We have custom-made CRNO grades for the fast-growing segments of two-wheeler EVs and AC compressors.



#### Enabling sleeker, stronger structures

We recently launched the Low Relaxation Prestressed Concrete Steel Strands (LRPC), which is specifically designed for prestressing concrete in various construction applications. LRPC-based structures offer multiple benefits like reduction in concrete usage, labour, and time, while also providing longer spans, sleeker structures, higher structural safety, and increased usable space.



#### Catering to the growing need for sustainable packaging

Tinplate, a packaging medium, is one of the highest value-adding downstream products. We expect this category to grow steadily as the world increasingly adopts sustainable packaging, and have expanded capacities to capture more variants within the prime grades for BIS-certified tinplate.



#### Addressing the challenges of solar panel installations

We have developed the JSW Galvos brand to address the typical challenges that solar panel installations face, such as harsh outdoor conditions. Galvos is designed to withstand alkaline and corrosive environments, along with an epoxy/PU layer. To address the needs of solar trackers, we developed HSLA grades for making torque tubes for Indian and export markets, a first in the industry. We are collaborating with global developers to offer these solutions worldwide.



# SUSTAINABLE

## IN EVERY WAY

At JSW Steel, sustainability is a strategic business imperative. We are cognizant of our responsibility towards balancing growth and sustainability, as the world transitions to a low-carbon future. Our robust decarbonisation roadmap enables us to track our progress against well-defined targets for 2030. Further, we have undertaken various measures aligned with our vision of Zero Harm, and for augmenting product sustainability.

### Progressing well on our decarbonisation roadmap

[Read More | Page 16 >](#)

We are committed to reducing our CO<sub>2</sub> emission intensity by 42%, achieving 100% recycling of all the solid wastes generated, ensuring no net loss of biodiversity, and reducing freshwater consumption by over 39% by 2030 (from 2005 base year). These targets are anchored in our sustained and conscious efforts to transition towards renewable energy, drive efficiency improvements in energy consumption, process optimisation, increased use of available scraps and support circularity through better resource management, and adoption of Best Available Technologies (BAT's).

### SEED – Sustainable Energy Environment and Decarbonisation

[Read More | Page 100 >](#)

We launched SEED, a large-scale, plant-wide decarbonisation programme in Vijayanagar. The programme has generated 100+ improvement initiatives covering a wide range of themes such as enhancing renewable energy capacity, optimising energy consumption, exploring alternate fuels/raw materials and waste heat recovery, among others. These initiatives have a combined annualised CO<sub>2</sub> abatement potential of 9+ MnT by 2030. Given the success in Vijayanagar, we plan to extend the programme to our other integrated steel plants.

### Committed to our Vision of zero harm

[Read More | Page 44 >](#)

We strive to maintain a secure, safe and healthy environment for our workforce, partners, and the communities we serve. We have integrated world-class Occupational Health and Safety (OHS) management systems, which we constantly benchmark against global standards to achieve our ultimate goal of zero harm, zero major incidents and zero injuries. With effective leadership, robust systems and a competent workforce, we aspire to be recognised as one of the world's safest organisation by 2030, where the implementation of the 'highest standards of safety leads to greatest levels of productivity'.

### Empowering customers in their sustainability journey

[Read More | Page 134 >](#)

We have obtained a GreenPro certification for JSW Neosteel TMT bars and in 14 categories of roofing sheets. We also became the first manufacturer to receive the GreenPro ecolabel for its 'Automotive Steel' products. The GreenPro-certifications underscore our commitment to environmental stewardship and sustainability while enabling our customers make informed choices to enhance their supply chain sustainability. We have also obtained Environmental Product Declarations (EPDs)-Type III eco-labelling for all 14 finished products from our three ISPs, which enables us to provide reliable, standardised, and comprehensive insights about the product's life cycle to our customers.

# TRANSITIONING TO A LOW-CARBON FUTURE

As a responsible steelmaker with an unwavering focus on sustainability, we proactively contribute to the worldwide efforts to address climate change. We have developed a strong roadmap for decarbonisation, setting well-defined targets, and measuring our progress.

## ROADMAP FOR JSW STEEL'S TRANSITION TO A LOW-CARBON FUTURE

### 2030

#### Emissions reduction

- Improving on process and energy efficiency
- Energy transition to renewables
- Technology performance improvement with conventional routes
- Internal monitoring and planning by CAG
- Risk assessment and mitigation via TCFD alignment

#### Other enablers

- Use of Green Hydrogen in iron making (BF injection and DRI application)
- Adoption of BAT's
- Iron ore beneficiation for efficiency
- Reduction in coke rate
- Reducing coke utilisation and increasing PCI and NG in BF's
- Circular use of carbon in iron making
- Increased usage of renewable energy
- Exploring technologies such as CCUS
- Increased usage of scrap
- Creation of carbon sinks
- Efficient logistics through pipe conveyor

### 2050

#### Deep decarbonisation

- Scaled deployment of CCUS
- Carbon avoidance - use of green hydrogen for reduction of iron

BAT - Best Available Technologies  
BF - Blast Furnace  
CAG - Climate Action Group  
CCU - Carbon Capture and Utilisation

CCUS - Carbon Capture, Utilisation and Storage  
PCI - Pulverised Coal Injection  
NG - Natural Gas  
TCFD - Task Force on Climate related Financial Disclosures

## 2030 TARGETS



### Climate Change

Reducing CO<sub>2</sub> emission intensity to  
**<1.95 tCO<sub>2</sub>/tcs\***

Achieve  
**CARBON NEUTRALITY**  
at JSW Steel-Coated Products

\* From integrated operations of JSW Steel standalone



### Energy

Achieving specific energy consumption target of  
**5.65 Gcal/tcs**

Installation of  
**10 GW** renewable energy capacities to fully use in steelmaking



### Water Resources

Reducing specific water consumption to  
**2.21 m<sup>3</sup>/tcs\*\***

\*\*Considering the crude steel production process only



### Waste

Achieving  
**100% use** of all waste generated from our operations



### Wastewater

Maintaining  
**Zero Liquid Discharge**



### Air Emissions

Reduce specific dust emissions to  
**0.26 kg/tcs**

Reduce specific emissions of oxides of sulphur (SO<sub>x</sub>) to  
**0.82 kg/tcs**

Reduce specific emissions of oxides of nitrogen (NO<sub>x</sub>) to  
**0.91 kg/tcs**



### Biodiversity

Achieve  
**No net loss** of biodiversity at our operating sites

