

FERROUS METAL-IRON AND STEEL SECTOR IN INDIA

FORGING THE FUTURE

BRICKWORK RESEARCH

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Ferrous Metals-Iron & Steel Sector in India

Coverage

- Executive Summary
- Market Overview
 - ❖ Introduction
 - ❖ Composition
 - ❖ India's Crude Steel Production Capacity
 - ❖ India's Per Capita Steel Consumption
 - ❖ Production, Demand and Supply
 - ❖ Exports and Imports
 - ❖ Crude Steel Producing Countries
 - ❖ Global Crude Steel Production
 - ❖ Policy Reforms and Government Initiatives
 - ❖ PLI Scheme Stimulates Growth in India's Steel Sector
- India's Edge in the Iron and Steel Sector
- Factors Driving the Growth
- Risks in the Sector
- Mergers, Acquisitions, and Joint Ventures
- Steel Sector's contribution to India's GDP
- Growth Opportunities
- Comparison of Indian and Global Steel Prices
- Market Share of Steel Companies
- Performance of Steel CPSEs
- Financial Performance of Industry Players
- Key Financial Ratios - Industry
- Outlook



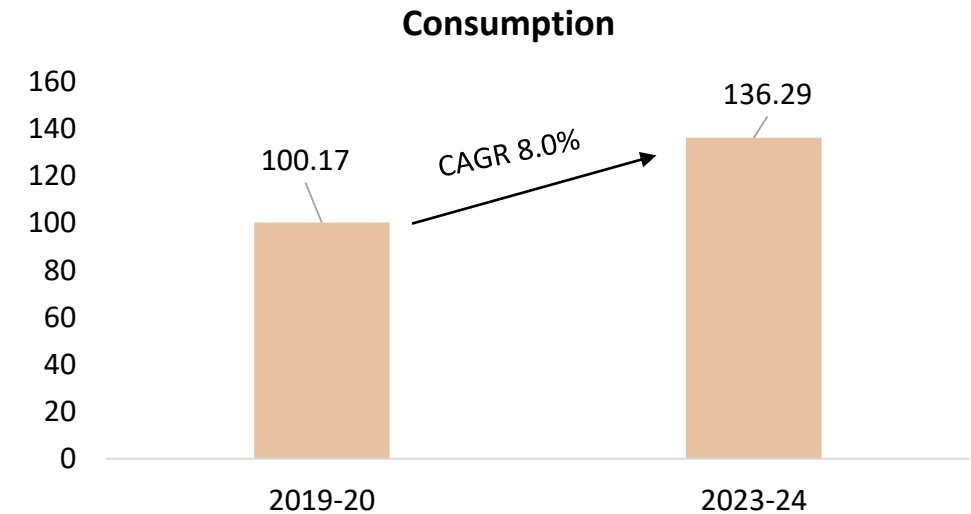
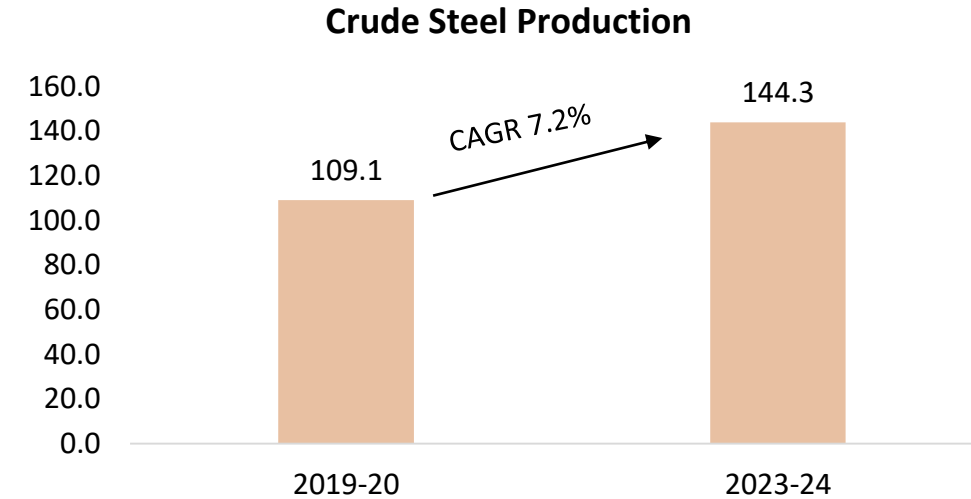
Executive Summary

- India was the 2nd largest producer of crude steel with an output of over 144 million tonnes (MT) in 2023, showing a y-o-y growth of 11.8%, and accounted for 7.6% of world crude steel production
- **Production and Demand:** India's crude steel production increased by 14.2% y-o-y in 2023-24 to 144 MT, while finished steel production reached 102.2 MT, up 14.1% y-o-y, a significant increase from the previous year
- **Consumption:** For the fiscal year 2023-24, steel consumption reached 136.25 million tonnes, marking a 13.6% increase from the previous year
- **Investment Trends:** The production-linked Incentive scheme is expected to drive \$1.2 billion (bn) in specialty steel-making investments in the coming year, with total investments projected to reach \$1.9 bn by the end of FY24
- **Government Support:** The Indian government has allocated \$8.6 million (mn) to the Ministry of Steel in the Union Budget for 2023-24, to boost the steel industry's competitiveness and sustainability
- **Reduce Carbon Emissions:** The Indian steel industry faces a significant carbon emissions challenge. Transitioning to low-carbon steel production is crucial, as projections suggest emissions could exceed 1 billion tonnes annually by 2050

Future Outlook:

- **Growth Projections:** The Indian steel industry is projected to experience a 8-10% growth in steel demand in FY25, driven by infrastructure expansion and manufacturing growth in construction and automotive sectors
- **Technological Advancements:** The steel industry is set to meet rising demand and sustainability goals by implementing innovations in production processes, including increased scrap steel use, which will align with global standards and enhance competitiveness
- **Production Capacity:** India's steel industry is expanding capacity to meet domestic demand driven by economic and infrastructure growth, while reducing emissions through technological advancements. India aims to increase crude steel production capacity to 255 million tonnes by 2030-31, achieving 230 million tonnes of finished steel at 85% utilization
- In 2023, exports made up only 6.5% of annual production, down from a share of 10-15% a few years ago

India Steel Market Size (MT)



Source: Ministry of Steel

Executive Summary

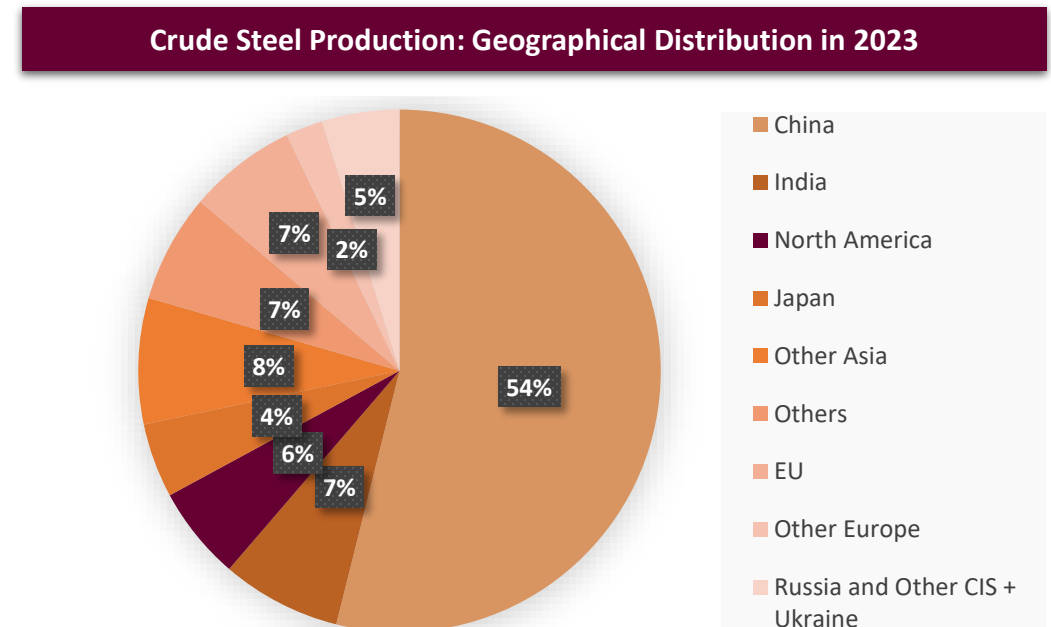
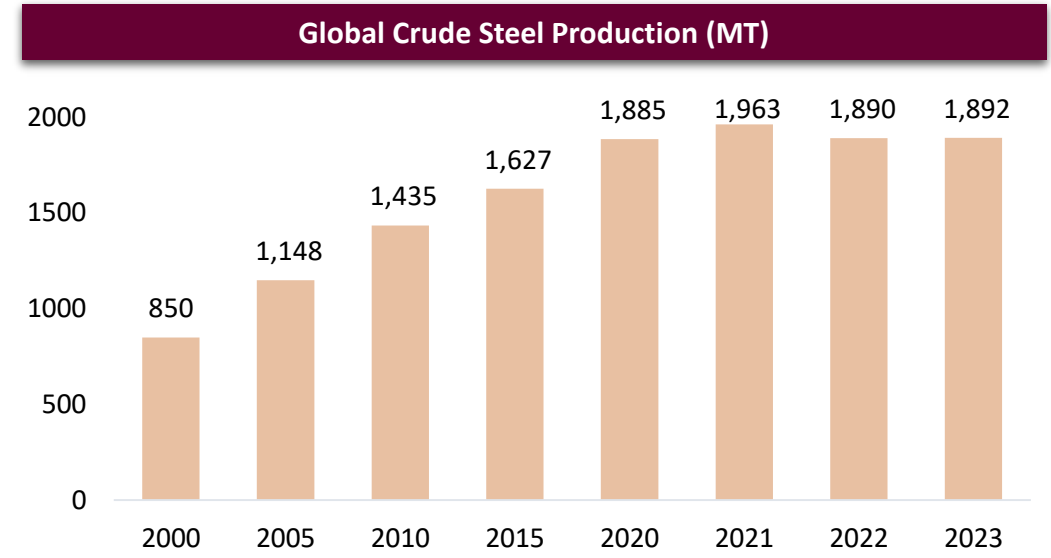
- India's crude steel production has more than doubled, reaching 126.3 MT in FY23, a 100% increase from 58 MT in 2008. The private sector accounts for 82% of India's total crude steel production, producing 102.7 MT in 2022-23, up 7.7% y-o-y
- India became the world's second-largest steel producer in 2018, surpassing Japan, with a compounded annual growth rate of 5.54% from 2017 to 2023
- The Indian government has set ambitious steel industry targets, aiming for a total crude steel capacity of 300 MTPA and a production of 255 MTPA by 2030-31
- In 2022-23, India was a net exporter of steel**, with 6.72 MT of finished steel exported compared to 6.02 MT imported. This marks a significant shift from 2014-15, when India was a net importer of steel, importing 9.32 MT while exporting 5.59 MT
- India's crude steel capacity increased by 46% in 2022-23, reaching 160.3 MTPA, and crude steel production rose from 88.98 MT in 2014-15 to 126.26 MT in 2022-23
- The government has taken various measures to promote the steel industry, including the National Steel Policy 2017 which projects 300 MT of crude steel capacity by 2030-31. Moreover, the Production Linked Incentive (PLI) scheme is predicted to attract Rs. 16,000 crore (US\$ 1.9 billion) in investments by the end of FY24
- The growth of the Indian steel sector has been driven by the domestic availability of raw materials like iron ore and cost-effective labor despite facing challenges like high capital costs, cyclical demand, low consumption, and environmental concerns
- The sector plays a critical role in supporting India's industrial and economic growth, as well as its focus on innovation, reliability, and building a sustainable future
- India saw a 11.8% YoY growth and accounted for 7.6% of global production. The Indian Steel Association predicts a robust increase in steel demand due to the recovery of the automotive sector and infrastructure investment
- The growth trajectory began after 2010, with India emerging as the second-largest producer of crude steel globally. The country has benefited from robust demand, with India's steel product finished steel consumption recorded at 138.5 MT in FY24, up from 119.9 MT in FY23
- India's steel production is estimated to grow by 4-7% to 123-127 MT in FY24, driven by abundant iron ore reserves and low-cost labor. India's steel demand is projected to grow at 10% in the coming years, bolstered by the government's emphasis on infrastructure development
- The Steel CPSEs (Central Public Sector Enterprises) achieved the highest CAPEX of Rs. 10,525.84 crores in FY 2022-23, marking their highest performance in the past five years.
- The steel industry is experiencing consolidation and investment from other sectors, presenting opportunities for global players to enter the Indian market. The companies under the Production Linked Incentive (PLI) scheme are projected to invest over \$1.2 billion (bn) in specialty steel production by FY25

Parameters	FY 2014-15	FY 2022-23	% increase
Crude steel Capacity (MT)	109.85	160.3	46%
Crude steel Production (MT)	88.98	126.26	42%
Total Finished Steel Production (MT)	81.86	122.28	49%
Consumption (MT)	76.99	119.86	57%
Per capita steel consumption (in Kg)	60.8	86.7	43%

Source: Ministry of Steel

Market Overview - Introduction

- The Indian steel industry is a significant contributor to global steel production, with production measured in Million Tonnes (MT). The infrastructure sector is a major contributor to India's overall steel demand.
- India ranks second in crude steel production, with China occupying the top spot. In 2023 China was ranked as the world's largest crude steel producer with production of 1,019.1 MT, followed by India (140.8MT), Japan (87.0MT), and the USA (80.7MT)
- In 2022, the world's per capita finished steel consumption was 221.8 kg, with China at 645.8 kg, and India at 86.7 kg in 2022-23
- The World Steel Association predicts a 1.7% growth in steel demand in 2024, reaching 1,793.1 MT after contracting by 1.1% in 2023. In 2025, demand is expected to increase by 1.2% to 1,815.2 MT scrap, enhancing domestically generated steel scrap availability
- India's provisional crude steel capacity for 2023-24 was 179.5 MT. The states with the highest steel-producing capacity are Odisha, Chhattisgarh, Jharkhand, and Karnataka
- India, the world's second-largest producer of crude steel, produced 125.32 MT of crude steel and 121.29 MT of finished steel in FY23. In FY24, crude steel production reached 118 MT and finished steel production reached 114 MT until January 2024
- The consumption of finished steel increased from 105.75 MT in FY22 to 119.17 MT in FY23, and reached 112 MT in FY24 up until January 2024
- In FY23, finished steel exports and imports were 6.7 MT and 6.02 MT, respectively, while in FY22, they were 13.49 MT and 4.67 MT. In FY24 until January 2024, the exports and imports of finished steel were at 5.52 MT and 6.75 MT, respectively
- The Russia-Ukraine war in February 2022 significantly impacted global steel demand, leading to higher energy demands and lower raw material supply, affecting India's economy. The ongoing war necessitates a focus on rerouting trade flows and fostering self-reliance to recover the steel sector



Source: Worldsteel.org

Composition of India's Iron and Steel Sector

India's iron and steel industry comprises large integrated plants, medium and small mini plants, and other major producers, with the private sector dominating overall production

- **Integrated Steel Plants (ISPs):** India has over 30 integrated steel plants, including major players like SAIL, Tata Steel, JSW Steel, JSPL, and RINL, which produce steel from iron ore and coal
- **Mini Steel Plants (MSPs):** India's steel is primarily produced by medium and small enterprises through mini steel plants, which use steel scrap and sponge iron as raw materials
- **Other Major Producers:** India's major steel producers include Integrated Steel Plants (ISPs) and Mini Steel Plants (MSPs), ESSAR, ISPAT, and other companies, in addition to ISPs and MSPs
- **Public Sector vs Private Sector:** India's crude steel production is primarily managed by the private sector, which accounts for 83% of the industry, with major public sector companies like SAIL, RINL, Tata Steel, and NMDC
- India's steel industry has grown significantly since 1947 due to the strategic government investments and private sector growth. Initially a private sector operation, it now ranks as the world's second-largest crude steel producer and largest sponge iron producer
- From the mid-50s to the early 1970s, the Indian government invested in expanding steel production capacity and established large integrated steel plants in the public sector
- India's large-scale capacity creation in the public sector has made it the 10th largest steel producer globally, increasing crude steel production from 1 MT in 1947 to around 15 MT
- However, economic slowdowns in the late 1970s hindered growth. The New Economic Policy in 1991-92 reversed this trend, promoting liberalization and deregulation, impacting the industry

Crude Steel Production Capacity-2022-23 (Private Sector)

State	Units	Capacity ('000t)	Production ('000t)
Arunachal Pradesh	3	130	40
Assam	6	147	66
Bihar	11	794	576
Jharkhand	26	16684	14047
Meghalaya	7	236	73
Odisha	53	20877	19359
Tripura	1	30	12
West Bengal	43	6673	5258
Eastern Region Total	150	45571	39431
Chhattisgarh	95	15771	10694
Dadra and Nagar Haveli and Daman and Diu	17	338	318
Goa	10	538	407
Gujarat	73	14008	8628
Madhya Pradesh	12	877	644
Maharashtra	60	18134	13810
Western Region Total	267	49666	34501
Delhi	1	7	6
Haryana	21	1097	833
Himachal Pradesh	27	2485	1286
Jammu and Kashmir	8	213	162
Punjab	122	5960	4063
Rajasthan	30	1074	681
Uttar Pradesh	43	2086	1442
Uttarakhand	40	1709	911
Northern Region Total	292	14631	9385
Andhra Pradesh	25	2426	2151
Karnataka	25	14131	13393
Kerala	28	490	379
Puducherry	10	451	378
Tamil Nadu	102	3753	3341
Telangana	31	2248	1810
Southern Region Total	221	23498	21451
Total: Private Sector	930	133367	104768

Source: Ministry of Steel

India's Crude Steel Production Capacity

- India's crude steel production capacity increased from 142.236 million tonnes per annum (MTPA) in 2018 to 157.585 MT per annum in FY'23

The top steel-producing states in India are:

Odisha: Odisha, a significant steel production hub in India, houses numerous plants and contributes significantly to the country's total steel output.

- Crude steel production capacity of 20,877,000 tonnes in FY'23
- Produced 19,359,000 tonnes of crude steel in FY'23

Jharkhand: Jharkhand, renowned for its major steel-producing centers, is a key player in the private steel sector, with companies like Tata Steel and JSW Steel operating there.

- Crude steel production capacity of 16,684,000 tonnes in FY'23
- Produced 14,047,000 tonnes of crude steel in FY'23

Chhattisgarh: Chhattisgarh is home to numerous private steel manufacturers, which significantly enhance the country's overall production capacity.

- Crude steel production capacity of 15,771,000 tonnes in FY'23
- Produced 10,694,000 tonnes of crude steel in FY'23

Maharashtra

- Crude steel production capacity of 18,134,000 tonnes in FY'23
- Produced 13,810,000 tonnes of crude steel in FY'23

Karnataka

- Produced 13,393,000 tonnes of crude steel in FY'23

The public sector steel plants under SAIL and RINL had a total crude steel production capacity of 27.932 MTPA in FY'23. The private sector accounted for the remaining capacity of 133.367 MTPA

Steel Production Capacity-2022-23 (Public Sector)			
State	Unit	Capacity ('000t)	Production ('000t)
Chhattisgarh	Bhilai Steel Plant	7000	5181
West Bengal	Durgapur Steel Plant	2200	2295
Odisha	Rourkela Steel Plant	3800	4039
Jharkhand	Bokaro Steel Plant	4600	4117
West Bengal	IISCO Steel Plant	2500	2423
West Bengal	Alloy Steels Plant	234	97
Tamil Nadu	Salem Steel Plant	180	140
Karnataka	Visveswaraya Iron and Steel Ltd.	118	0
TOTAL: Steel Authority of India Ltd.(SAIL)		20632	18292
Andhra Pradesh	Rashtriya Ispat Nigam Ltd.(RINL)	7300	4137
Total Public Sector		27932	22429
Total: Private Sector	930	133367	104768
Total: Public Sector	9	27932	22429
All Region Total	939	161299	127197

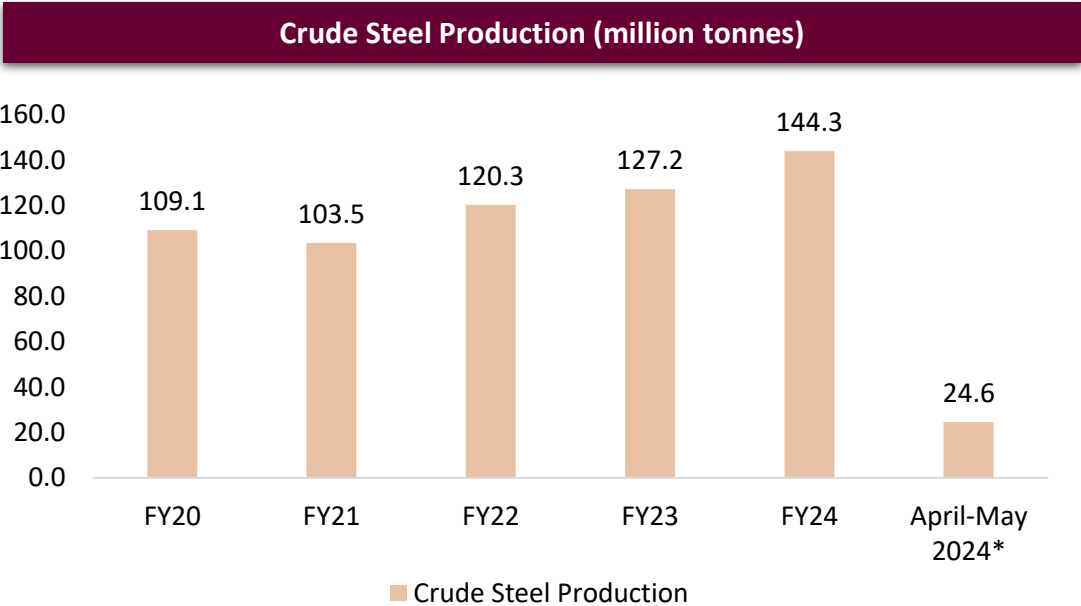
Source: Joint Plant Committee(JPC), Ministry of Steel

India's Per Capita Steel Consumption Stands Lower

- India's per capita steel consumption is significantly lower compared to other major economies
- India's per capita steel consumption reached 77.2 kg in 2023, a 50% increase from the global average of 233 kg, indicating a significant shift in the country's steel consumption patterns.
- However, India's annual per capita steel consumption reached 97.7 kg per annum in FY24 and is one-third of the global average.
- In 2022, the world's per capita finished steel consumption was 221.8 kg, with China at 645.8 kg, and India at 86.7 kg in 2022-23
- India's lower per capita steel consumption, compared to China suggests higher growth potential for steel consumption and reflects economic disparities
- The Indian government aims to increase per capita steel consumption to 160 kg by 2030-31 through infrastructure projects and manufacturing initiatives like the Gati-Shakti Master Plan and Make-in-India campaign, aiming to boost demand across sectors like housing and construction
- India's steel consumption is low compared to developed economies, and increasing steel usage in construction, where traditional methods are still prevalent, is crucial for boosting consumption
- India is the second largest global steel consumer, with a 13% increase in consumption in 2023-24, driven by rising demand from automotive and infrastructure sectors

National Steel Policy 2017 Projections	
Parameter	Projections (2030-31) (Million Tonnes)
Total Crude Steel Capacity	300 MT
Total Crude Steel demand/Production	255 MT
Per Capita Finished Steel Consumption in kgs	158

Source: Ministry of Steel



Indian Steel Industry: Production, Demand and Consumption

- India's crude steel production increased to 126.25 MT in 2023, driven by the Blast Furnace-Basic Oxygen Furnace route, which is expected to contribute 66% of new steel production capacity by 2030
- The Blast Furnace-Basic Oxygen Furnace (BF-BOF) route is a major steel production method, involving blast furnace production and basic oxygen furnace conversion of molten iron. The BF-BOF route is playing a crucial role in meeting domestic and international steel demands in the coming years
- India's steel demand is projected to reach 190 MT by 2030, driven by population growth, urbanization, government infrastructure initiatives, and growth in auto and engineering sectors. India's consolidated industry and supportive government policies may help
- The government aims to increase steel making capacity to 300 MT by 2030, adding 80 MT of new steel production capacity, with 66% of this coming from the Blast Furnace-Basic Oxygen Furnace route
- In a whole, India's steel production capacity is expected to reach 210-300 MT by 2030, with the government aiming for a higher end of 300 MT
- India is a leading sponge iron producer, with coal-based units in mineral-rich states accounting for 81% of total production in 2022. Since 2003, India has been the world's largest sponge iron producer, with a breakdown of coal and gas-based routes over the last five years, with production expected to reach 48 MT by FY25 due to rising crude steel production, steel demand, and exports
- India is the undisputed global leader in sponge iron production, with its output expected to continue growing in the coming years to meet rising domestic steel demand
- India's eastern states like Odisha, Chhattisgarh, and West Bengal are the predominant sponge iron producing regions
- Odisha is India's largest sponge iron producer, accounting for 24% of the country's total production, followed by Chhattisgarh, with other significant states including West Bengal, Jharkhand, Bihar, Assam, Meghalaya, Madhya Pradesh, Uttarakhand, Rajasthan, Maharashtra

Production and Consumption (Million Tonnes)

Category	2019-20	2020-21	2021-22	2022-23	2023-24*	April-May 2024*
Crude Steel production	109.137	103.545	120.29	127.20	144.30	24.59
Crude Steel Capacity	142.299	143.914	154.062	161.299	179.515	-
Finished Steel production	102.62	96.20	113.60	123.20	139.15	23.79
Consumption	100.17	94.89	105.75	119.89	136.29	23.04

Source: Joint Plant Committee; *Provisional

Production (Million Tonnes)

Category	2019-20	2020-21	2021-22	2022-23	2023-24*	April-May 2024*
Pig Iron	5.42	4.88	6.26	5.86	7.36	1.28
Sponge Iron	37.1	34.38	39.2	43.62	51.6	4.41**
Total Finished Steel	102.62	96.2	113.6	123.2	139.15	23.79

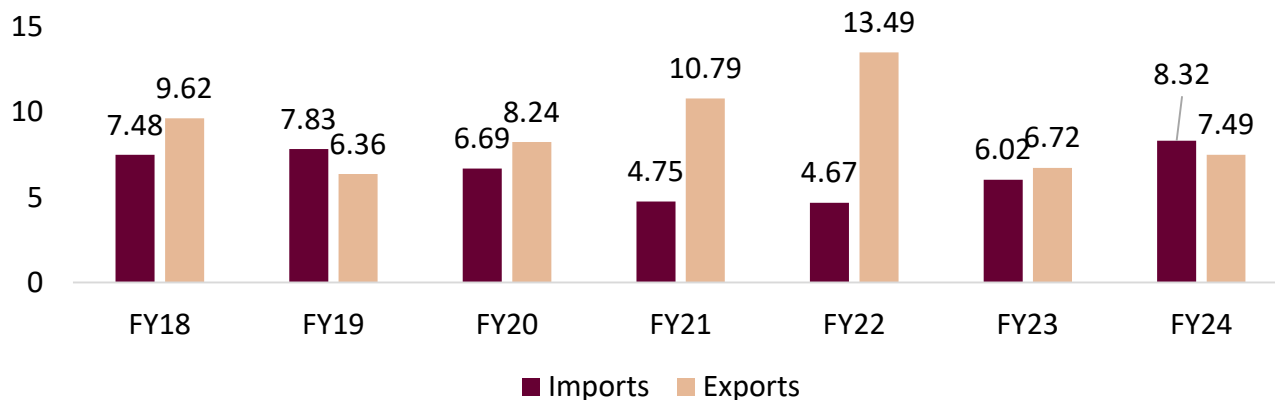
Source: Joint Plant Committee; *Provisional

**Figure is for April 2024 only

India's Steel Export and Import Status

- India has consistently been a net exporter of total finished steel over the past five years, except for 2023-24 and April-May 2024, when it became a net importer. In FY23, India exported 6.7 MT of finished steel, while in FY22, it exported 11.14 MT
- In FY24, the exports and imports of finished steel were 5.52 MT and 6.75 MT, respectively, until January 2024
- India's steel sector significantly contributes to its exports, benefiting from its competitive advantages in steel production and government support to enhance export capabilities
- India's net importer status in 2023-24 fluctuated between October to January 2024, and then became a net exporter in February and March 2024, and a net importer in April and May 2024
- India turned a net importer of finished steel in 2023-24, with imports rising 38% to 8.32 million metric tons, while exports increased by 11.5% to 7.48 million metric tons
- India aims to become a net steel exporter, leveraging reduced global preference for Chinese steel, thereby enhancing export capabilities for its steel producers
- India's National Steel Policy aims to increase annual steel production capacity to 300 million tonnes by 2030, and reduce per capita steel consumption to 160 kg

Finished Steel export and import (in million tonnes)



India's Exports and Imports (Thousand Tonnes)

Category	2019-20	2020-21	2021-22	2022-23	2023-24*	April-May 2024*
Export	8,355	10,784	13,494	6,716	7,487	935
Imports	6,768	4,752	4,669	6,022	8,320	1,307
Net Exports/Imports	1,588	6,031	8,824	695	833	372

Source: JPC, *provisional

Month-wise Imports & Exports of Finished Steel (Thousand Tonnes)

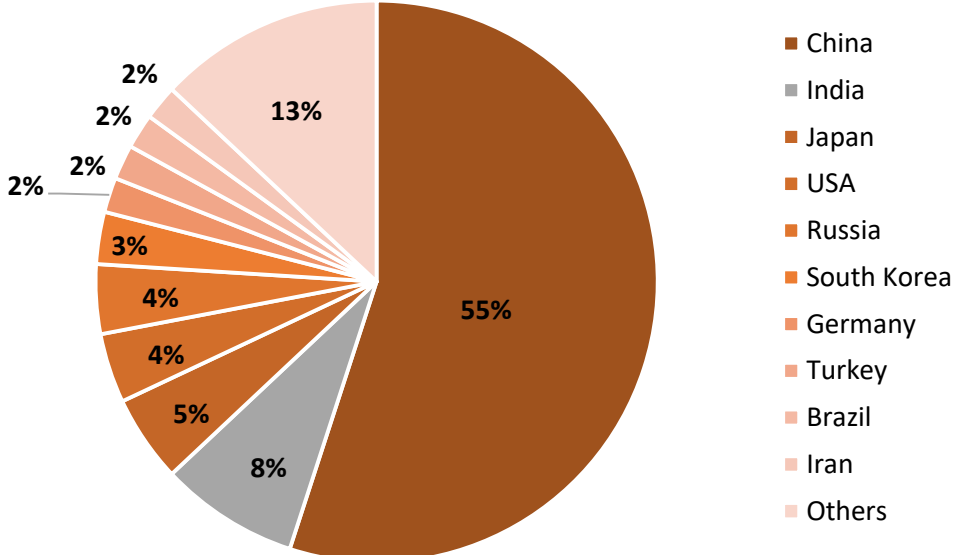
Item	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24
Imports	1088	903	847	854	571	585	554
Exports	234	644	846	1026	842	505	430
Net Imports/Exports	853	259	1	172	271	80	124

Source: Ministry of Steel and Joint Plant Committee (Provisional)

Major Crude Steel Producing Countries

- The Indian government is addressing the growing steel demand due to infrastructure development and energy transition, promoting domestic production to counter net imports
- Steel production globally is increasing, with China, India, Japan, and USMCA region being major producers. Balancing supply and demand is challenging due to raw material costs, trade dynamics, and government regulations
- Global steel demand is expected to surge, reaching over 2 billion metric tons by 2026, driven by emerging markets and renewable energy projects, but faces volatility and decarbonization challenges
- India's domestic finished steel consumption surged by 13.4% to 136 million metric tons, driven by strong demand in the fastest-growing economy. Crude steel output increased by 12.9% to 143.6 million metric tons. The data indicates a 12.4% increase in the finished steel output during 2023-24, reaching 138.5 million metric tons

Major Crude Steel Producing Countries during January-April 2024 (Provisional)



Global Crude Steel Production

Country	2022		2021		2023	
	Rank	Tonnage	Rank	Tonnage	Rank	Tonnage
China	1	1,018	1	1,035.2	1	1,019.1
India	2	125.3	2	118.2	2	140.8
Japan	3	89.2	3	96.3	3	87.0
United States	4	80.5	4	85.8	4	81.4
Russia	5	71.5	5	77.0	5	76.0
South Korea	6	65.8	6	70.4	6	66.7
Germany	7	36.8	8	40.2	7	35.4
Turkey	8	35.1	7	40.4	8	33.7
Brazil	9	34.1	9	36.1	9	31.8
Iran	10	30.6	10	28.3	10	31.0
Italy	11	21.6	11	24.4	11	21.1
Taiwan	12	20.8	12	23.2	13	19.1
Vietnam	13	20.0	13	23.0	12	19.2
Mexico	14	18.1	15	18.5	15	16.2
Indonesia	15	15.6	16	14.8	14	16.8

Source: Worldsteel.org

Major Steel-Producing Countries

- World crude steel production for 71 countries decreased by 4.3% In March 2024, compared to March 2023, reaching 161.2 MT in Mar 2024
- **China's Steel Industry Dominance:**
 - China remains the world's largest steel producer, accounting for 54% of global output, produced 1,019 MT of steel, indicating a stable production level compared to the previous year
 - India, the second-largest producer, experienced a significant increase in production, reaching 140.8 MT, marking an 11.8% increase from the previous year
 - Japan, the United States, and Russia rounded out the top five
 - Japan, the third-largest producer, experienced a 2.5% decrease in output to around 87 million tons in 2022
 - The United States produced 81.4 MT, a 1.1% increase from the previous year
 - Russia's production reached 76.0 MT, indicating a modest 6% increase
 - Overall, global crude steel production in 2023 was approximately 1.92 billion tonnes, reflecting a slight decrease of 0.1% compared to the previous year
- **2024 Performance**
- **Top 10 Crude Steel Production in for the first quarter of 2024 (January to May)**
 - May 2024's figures suggest a potential recovery in China's steel production due to stabilizing market conditions, despite initial decline in 2024 due to high inventories and low domestic demand. China continues to dominate global steel production with 438.6 MT during January-May 2024, a 1.4% decrease from January-May 2023
 - India saw a 7.7% increase in production, producing 61.9 MT
 - Japan produced 35.7 MT, followed by the USA and Russia with 33.4 MT and 30.9 MT respectively
 - Other notable producers include South Korea, Turkey, Germany, Brazil, and Iran

Source: The World Steel Association (worldsteel)

World Crude Steel Production	
Year	Crude Steel Production Volume (MT)
2010	1,435
2011	1,540
2012	1,563
2013	1,654
2014	1,676
2015	1,626
2016	1,635
2017	1,739
2018	1,831
2019	1,880
2020	1,885
2021	1,963
2022	1,890
2023	1,892

Top 10 Steel-Producing Countries in 2024				
Countries	May-2024 (MT)	% change Mar 24/23	Jan-May 2024 (MT)	% change Jan-Mar 24/23
China	92.9	2.7	438.6	-1.4
India	12.2	3.5	61.9	7.7
Japan	7.2	-6.3	35.7	-2.3
United States	6.9	-1.5	33.4	-2.4
Russia	6.3	-0.9	30.9	-2.5
South Korea	5.2	-10.9	26.4	-6.3
Germany	3.2	-1.9	16.2	3.7
Turkey	3.2	11.6	15.5	19.8
Iran	3.3	2.1	14	9.1
Brazil	2.6	-7.4	13.6	0.6

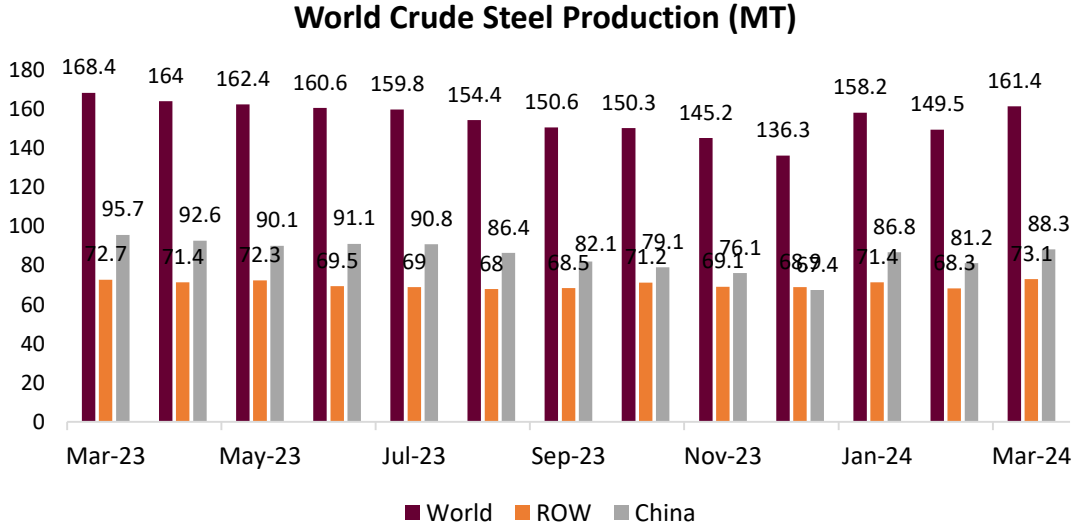
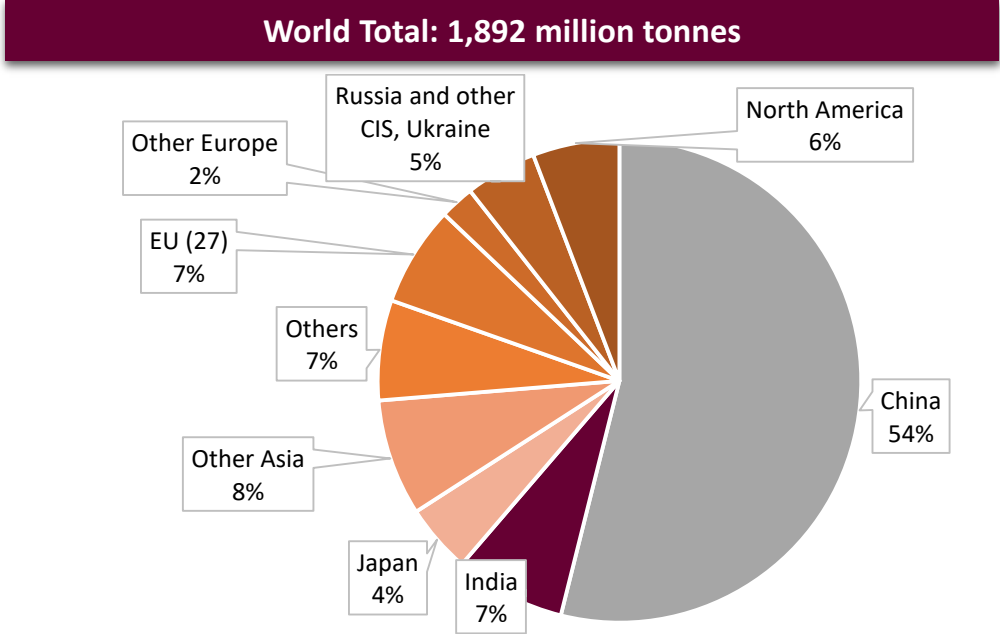
Global Crude Steel Production: Geographical Distribution 2023

Global crude steel production is highly concentrated, with China being the dominant producer, followed by the European Union, Japan, the US, and India

The remaining regions collectively contribute a smaller portion of global production. In March 2024, South America, Africa, and the Middle East collectively contributed 3.5 MT

The global production of crude steel is primarily concentrated in a few key regions and countries

- **China:** China, the world's largest producer of crude steel, accounted for approximately 57% of global production in 2021 and 2022. In March 2024, China produced 88.3 MT of crude steel, accounting for over 55% of global production
- **European Union (27 countries):** The European Union, is the second-largest producer of crude steel globally, accounting for approximately 10% of the total production in 2021 and 2022. In March 2024, the European Union produced 11.6 MT
- **Japan:** Japan, the third largest producer of crude steel, has been responsible for 5-6% of global production in recent years. Japan produced 7.2 MT
- **United States:** The United States is responsible for producing approximately 4-5% of global crude steel. It produced 6.9 MT
- **India:** India is responsible for approximately 6-7% of global crude steel production
- **Russia and the other CIS (Commonwealth of Independent States) countries,** including Ukraine, collectively produce 6-7% of global crude steel
- **Other Regions:** The remaining 10-15% of global crude steel production is sourced from countries like South Korea, Brazil, and Turkey
- The World Steel Association reported that in 2023, 71 countries contributed approximately 98% of global crude steel production



Source: The World Steel Association (worldsteel)

Government Policies and Initiatives Driving India's Steel Sector Growth

India's steel sector has grown significantly through government policies, economic liberalization, and de-regulation, with reforms aiming for self-sufficiency and net steel exportation, boosting per capita steel consumption and expanding steel-making capacity.

National Steel Policy 2017

The Indian government's National Steel Policy 2017 aims to develop a technologically advanced, globally competitive steel industry by 2030-31, focusing on demand, capacity, raw material security, infrastructure, R&D, and energy efficiency.

Production Linked Incentive (PLI) Scheme

Approved by the Union Cabinet in 2021 with a financial outlay of Rs. 6,322 crore, the Production Linked Incentive Scheme for Specialty Steel aims to attract capital investment, create jobs, and advance technology in the sector. Of 79 applications received, 67 were recommended, leading to the Ministry of Steel signing Memorandums of Understanding with 27 companies, securing a total investment commitment of Rs. 29,530 crore.

Green Steel Initiatives

The Ministry of Steel is fostering sustainable practices by establishing task forces for decarbonization strategies and supporting green hydrogen production through the National Green Mission

Steel Quality Control Order (QCO)

The Ministry of Steel has introduced a Steel Quality Control Order (QCO) to prevent sub-standard or defective steel products from domestic and import producers. The order ensures only quality steel conforming to BIS standards is available to end users

Research & Development (R&D)

The Ministry of Steel is seeking proposals for Research & Development projects to address technological challenges in the Iron & Steel sector. The initiative, part of the R&D Scheme for the 2023-24 financial year, aims to develop new processes and technologies to tackle climate change, waste utilization, and resource efficiency

The Domestically Manufactured Iron & Steel Products Policy

This aims to encourage the procurement of Made in India Steel by both government and public sector projects

Steel Scrap Recycling Policy

Notification of Steel Scrap Recycling Policy aims to improve the availability of domestically generated scrap through notification.

PM GatiShakti Masterplan

The Ministry of Steel has integrated itself into PM GatiShakti Masterplan, uploading geo locations of over 2100 steel units to address logistics issues in the steel sector

PLI Scheme to Stimulate Growth in India's Steel Sector

The Production Linked Incentive (PLI) scheme is reportedly driving growth in India's steel sector

The PLI scheme aims to boost India's specialty steel production from 18 MT to 42 MT by 2026-27, reducing its reliance on imports

The scheme aims to enhance the steel sector's adoption of Industry 4.0 technologies, enhancing manufacturing processes, enhancing energy efficiency, and reducing carbon emissions

The PLI scheme incentivizes domestic production of specialty steel, reducing imports and strengthening India's steel manufacturing ecosystem

The PLI scheme aims to boost India's manufacturing capabilities in 10 key sectors, including automotive and steel, thereby strengthening its industrial base and global competitiveness

The scheme aims to boost India's specialty steel exports from 1.7 MT to 5.5 MT, generating ₹33,000 crore in foreign exchange and enhancing its global competitiveness

The PLI schemes are projected to create 1.48 lakh new jobs, with 28,515 jobs already created as of December 2023, thereby promoting employment growth and economic development

The PLI scheme has attracted ₹67,690 crore in proposed investments, with ₹13,037 crore invested as of December 2023, supporting manufacturing sector capacity expansion and technological upgrading. Further, the PLI scheme is anticipated to attract ₹40,000 crore in steel sector investments, thereby boosting India's steel production capabilities by creating 25 MT of specialty steel capacity

The PLI scheme aims to transform India into a global hub for high-value steel production, reduce import dependence, and enhance domestic steel industry competitiveness. The PLI scheme is expected to play a significant role in helping India achieve its goal of becoming the third-largest economy

The PLI Scheme for Specialty Steel offers monetary incentives to eligible stakeholders in the industry over a five-year period from 2023-24 to 2027-28. The scheme aims to promote value-added steel production and support domestic players in meeting local demand. The scheme has an outlay of Rs 6,322 crores, with higher incentives proposed for imported steel grades.

India's Edge in the Iron and Steel Sector

India has several key advantages that position it as a global leader in the iron and steel industry. India's strong domestic demand, abundant raw materials, competitive costs, supportive policies, and growing production capacity make it a crucial player in the global iron and steel industry



Robust Domestic Demand

- India's steel consumption is predicted to rise by 4-7% in FY24, fueled by economic growth, infrastructure development, and government initiatives like affordable housing and railway network expansion
- India's Iron and Steel Sector Growth
 - Supported by favorable economic conditions and government policies
 - Growing domestic market
 - Potential to outpace other markets, especially amidst China's economic struggles



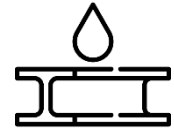
Policy Support

- The government has implemented the National Steel Policy 2017, aiming to foster self-reliance and expand capacity in the steel industry
- Indian Government's Steel Consumption Initiatives:
 - Increased infrastructure spending.
 - Domestic manufacturing incentives.
 - Significant housing project allocations under Pradhan Mantri Awas Yojana are crucial in boosting steel consumption.



Consolidation and Investment

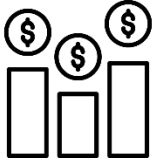
- The industry is witnessing consolidation, leading to increased investment by both domestic and global players
- Indian Steel-Making Sector Consolidation
 - Current players consolidate, attracting investments from various sectors
 - Global players entering Indian market
 - Production-Linked Incentive (PLI) scheme companies expected to invest around US\$ 1.2 billion in specialty steel-making
 - Total investments projected to reach US\$ 1.9 billion by FY24



Abundant Raw Materials

- India's abundant high-grade iron ore reserves enable higher vertical integration and better profit margins compared to Chinese steel producers
- Abundant iron ore reserves enhance vertical integration and profit margins.
- Self-sufficiency in raw materials maintains higher margins and lower leverage.
- Rising raw material costs, especially for imported coking coal, pose challenges.

India's Edge in the Iron and Steel sector



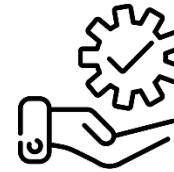
Competitive Costs

- India's iron and steel sector is poised for competitive growth due to resource advantages, cost-effective labor, and supportive government policies, despite challenges in production costs and material dependencies.
- India's high iron ore reserves, ranking fifth globally, enable higher vertical integration among steelmakers, boosting profit margins compared to countries reliant on imported raw materials.
- Low-Cost Labor in India's Steel Industry
 - Contributes to lower operational costs
 - Maintains competitiveness against international players



Growing Production Capacity

- India, the world's second-largest crude steel producer, is anticipated to increase its production capacity in the coming years
- India plans to double its crude steel capacity to 300 MT by 2030, aiming to meet rising domestic demand despite trailing China's production
- India's steel industry is aggressively expanding capacity capitalizing on domestic demand and utilizing economic and infrastructure growth



Consolidation and Efficiency

- India's less fragmented steel industry allows for better pricing discipline and operational efficiency, enabling top players to manage production levels effectively, avoiding oversupply issues in China's market
- Steel Sector Efficiency Enhancement
 - Modernization and adoption of advanced technologies
 - Liberalization of industrial policies encouraging private sector participation
 - Establishment of new steel plants with advanced production techniques
 - Ministry of Steel providing guidance and support
 - Focus on enhancing productivity and reducing costs



Competitive Advantage

- Steel production is expected to surpass 300 MT by 2030-31, reaching 255 MT at 85% capacity utilization
- Steel Consumption is expected to reach 206 MT by 2030-2031, with per-person steel consumption growing to 160 kg
- India's projected 7% GDP growth for fiscal 2025 surpasses China's, bolstering steel demand and solidifying its competitive edge in the sector

Factors Driving the Growth in India's Steel Sector



Domestic Demand

- India's steel consumption grew 13.6% in FY24, reaching 136 MT, due to government's focus on infrastructure, affordable housing, railway expansion, and automobile sector growth, indicating robust economic activities and government-led infrastructure projects driving steel consumption



Government Initiatives

- The government initiatives like "Smart Cities" and "Affordable Housing" are boosting steel demand in India, with industrial corridors enhancing connectivity and transforming the country into a global manufacturing hub



Investments and Capacity Expansion

- The government aims for 210-300 MT of production capacity by 2030 to boost domestic production and reduce carbon emissions. Global players entering Indian market are attracting consolidation and investment from other sectors, with PLI scheme companies expected to invest Rs. 10,000 crore by FY25



Availability of Raw Materials

- India's abundant iron ore reserves and low-cost manpower provide a competitive advantage in steel production

- The government has allocated Rs. 70.15 crore to the Ministry of Steel under the Union Budget 2023-24, aiming to foster a technologically advanced and globally competitive steel industry

Policy Support



- India's steel industry is embracing technology by constructing modern mills and enhancing the functionality of older plants.

Technological advancements



- The PLI Scheme, funded by Rs. 6,322 crore, aims to boost India's specialty steel production from 18 MT to 42 MT by 2026-27, reducing import reliance and enhancing the steel value chain. The scheme aims to enhance specialty steel production, achieve self-sufficiency, and elevate the steel value chain by focusing on high-value steel products and specialty rails

Government Schemes



Factors Driving the Growth



Global Players Attracting Indian Market Consolidation

- Global players entering Indian market are attracting consolidation and investment from other sectors, with PLI scheme companies expected to invest Rs. 10,000 crore by FY25



Increasing Urbanization and Increased Spending on Construction and Infrastructure Projects

- India's growing urbanization and increased investment in construction and infrastructure projects will drive growth in India's steel sector
- India's increasing urbanization rate, causing millions of people to migrate from rural to urban areas, leading to significant housing demand.
- Further, road projects and urban infrastructure along with significant demand for housing and growth in real estate in urban and semi-urban areas to boost steel demand substantially.
- Further, dedicated freight corridors, and high-speed rail corridors, metro projects across cities and development of industrial corridors are anticipated to significantly increase steel demand



National Mineral Exploration Trust Funding Enhances India's Steel Production

- Increased funding for the National Mineral Exploration Trust will boost domestic iron ore availability, boosting steel production from 226 MT to 318 MT by 2047

- India's strategic location and coastline have made it a significant player in the global steel market, facilitating exports and imports, and strengthening its role in global steel consumption.
- India, the world's second-largest steel producer, is leveraging its growing capacity, low costs, and strategic location to significantly contribute to its economy and global economic influence.

Global Market Position



India's growing manufacturing sectors, including automotive, machinery, and consumer goods, heavily rely on steel as a primary input, with the automotive industry being a major consumer.

Industrialization and Manufacturing Sector



India's rapid economic growth and urbanization have increased the demand for steel in infrastructure development, construction, and manufacturing sectors, particularly in roads, bridges, urban housing, and commercial buildings.

Economic Growth and Urbanization



Key Risks Associated with India's Steel Sector

1. India's steel exports are facing challenges due to rising imports, slowing global demand, and environmental trade barriers, despite government policies like PLI schemes
2. **Commodity risks:** The sector's profitability can be significantly impacted by fluctuations in raw material prices, particularly for coking coal, which heavily relies on imports
3. **Regulatory risks:** Trade policy changes, environmental regulations, and renewal difficulties can increase competition and negatively impact profitability in the industry
4. **Macroeconomic and steel market risks:** Global growth slowdowns, particularly in China, could negatively impact steel demand, while increasing international competition in India's asset acquisition poses a risk. Also, rising inflation and interest rate would dampen consumer sentiments and may impact demand
5. **Operational risks:** Production can be negatively impacted by operational disruptions caused by equipment failures, logistics constraints, and waste disposal issues
6. **Safety risks:** Non-compliance with safety regulations can result in operational stoppages, asset damage, and reputational harm
7. **Technological Lag:** The Indian steel industry's lack of advanced technologies, compared to global counterparts, hinders the production of high-grade steel, potentially affecting its international competitive edge
8. **Fluctuating demand:** Steel demand is susceptible to economic downturns due to its dependence on cyclical sectors like real estate and automobiles
9. **Skilled labour shortage:** Lack of a specialized workforce can significantly hinder productivity and growth

10. Insufficient equipment health assessment, limited waste disposal due to storage space, and logistics constraints due to inadequate infrastructure can cause unplanned operational disruptions
11. Global growth slowdown, particularly in China, affects steel demand
12. **Competitiveness:** Rise in production costs could make it less competitive globally, leading to increased imports and reduced exports. Government policies like minimum import prices and domestic procurement support have helped, but further policies are needed. Further, the competitiveness increases, particularly following the acquisition of steel assets by international steel producers
13. The impact of technology disruptions and changing customer preferences towards alternative materials is negatively affecting earnings
14. **High cost of Capital:** The high cost of capital is a major challenge faced by the Indian steel industry, significantly impacting steel production costs. India's steel industry heavily relies on borrowed capital for expansion and capacity addition, but the financing cost is significantly higher than other countries
15. **Logistics and Transportation Costs:** The Red Sea crisis has exacerbated logistics costs for Indian steel exporters, with inland plants experiencing higher freight costs due to inadequate transportation infrastructure. India faces high freight costs for raw materials and steel products, exacerbated by inadequate infrastructure and capacity constraints, leading to shortages of railway rakes
16. To mitigate risks, the industry should invest in customer relationships, distribution networks, digitization, automation, alternative supply chains, logistics infrastructure, safety management, and government policy support

Mergers, Acquisitions, Joint Ventures, Collaborations, and Agreements

The Indian steel sector has witnessed significant consolidation through mergers, acquisitions, joint ventures, and collaborations in recent years. Some key developments include:

MERGERS AND ACQUISITIONS

- Tata Steel and JSW Steel have strengthened their market leadership positions by acquiring Bhushan Steel Ltd and Monnet Ispat and Energy Ltd
- ArcelorMittal has partnered with Nippon Steel to acquire Essar Steel through a joint venture agreement
- Vedanta has acquired Electrosteel Steels as an example of forward integration, which will enhance its existing iron ore business
- Tata Steel's acquisition of Corus in 2007, made the company the fifth-largest global steel producer with a combined capacity of 25 million tons

India's steel sector is undergoing strategic mergers, acquisitions, and joint ventures to promote growth and competitiveness in a challenging market environment.

The Indian steel sector is predicted to see a surge in M&A activity as companies seek to expand their portfolios, reduce costs, and enhance their market positions.

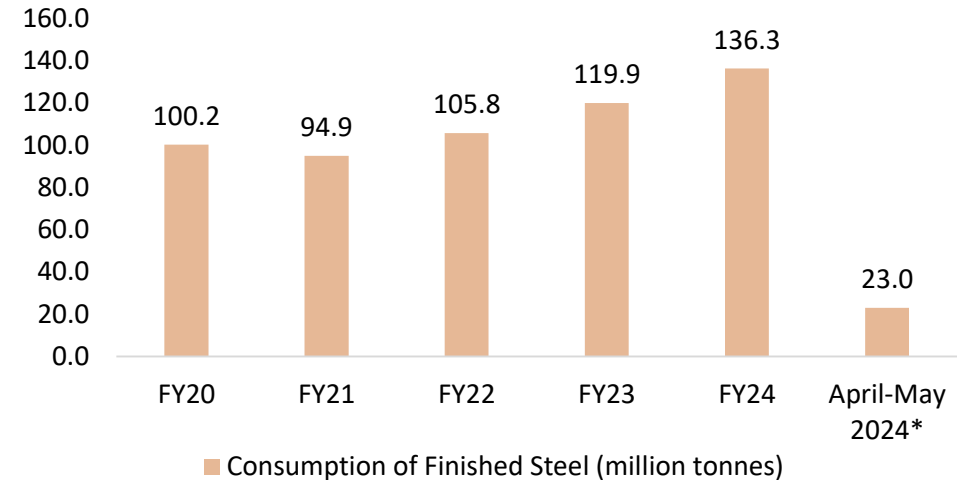
JOINT VENTURES

- India's steel sector is forming strategic partnerships to innovate, improve production, and meet domestic demands, enhancing its global steel market position
- India's steel sector is witnessing a surge in joint ventures, as companies leverage their combined expertise and resources to meet rising domestic demand and improve production capabilities
- Tata Steel and Thyssenkrupp have merged their European steel operations, forming the second-largest steel company in Europe
- JSW Steel Ltd has partnered with Japan's Marubeni-Itochu Steel Inc. to establish steel processing centres in India, aiming to improve construction material quality and enhance the steel processing ecosystem
- The sector also witnessed another major collaboration between JSW Steel and JFE Steel Corporation who have formed JSW JFE Electrical Steel Private Limited, investing Rs. 5,500 crore to establish a manufacturing facility in Bellary, Karnataka, to produce grain-oriented electrical steel for energy-efficient transformers
- Tata Steel and Australian BlueScope Steel entered into a 50:50 joint venture in 2005 and formed Tata BlueScope Steel, leveraging Tata's local presence and BlueScope's metal coating expertise and focuses on manufacturing and supplying steel products for India and South Asia's construction sectors

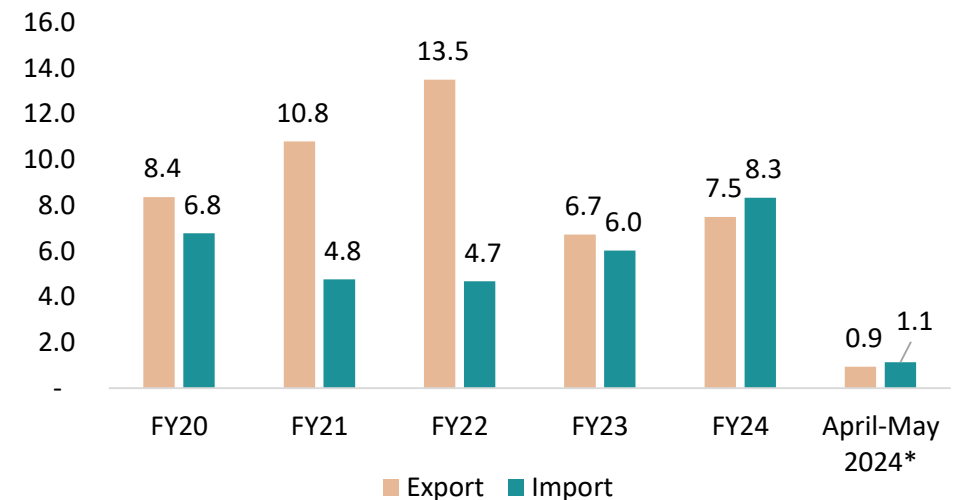
The steel sector's contribution to India's GDP

- The steel sector's contribution to India's GDP has evolved significantly over the years, with a steady growth trajectory
- The iron and steel sector is a vital component of India's manufacturing industry, significantly contributing to the country's GDP, employment, and economic growth. The steel sector has significantly contributed to India's economic growth and development over the years
- India ranks second globally in both production and consumption of crude and finished steel
- The steel sector, contributing approximately 2% to India's GDP, is anticipated to boost the country's overall economic growth rate
- India's steel production has significantly increased from 1.1 MT in 1951 to 29.27 MT in 2000-01, making it the second-largest global producer and consumer of crude and finished steel. Further, India's crude steel production surged by 47.76% from 75.28 MT in 2010-11 to 111.24 MT in 2020-21
- India's domestic steel consumption increased by 48.60% from 67.95 MT in 2010-11 to 101.03 MT in 2020-21, marking a significant growth
- India has experienced a 152.66% growth in steel exports from 4.27 MT in 2010-11 to 10.79 MT in 2020-21, making it a net steel exporter
- The steel industry in India provides employment approximately 2.5 million individuals directly and Indirectly
- The output multiplier effect of steel on the Indian economy is around 1.4x, with an employment multiplier of 6.8x
- Steel significantly impacts the economy by increasing GDP output by 1.4x and employment by 6.8x, indicating its significant influence on the broader economy
- The steel sector's contribution to India's GDP is increasing steadily due to government initiatives, technological advancements, and increasing demand from various sectors

Total Consumption of Finished Steel (MT)



Finished Steel Export and Import (MT)



Growth Opportunities

India's steel sector is expected to grow significantly due to investments, capacity additions, and government initiatives, but must also reduce its carbon footprint for climate goals

India, the second-largest global steel producer, is expected to experience substantial growth due to low per capita steel consumption compared to the global average, government initiatives, and infrastructure expansion

India's strategic location and raw material availability make it a key player in the global steel market, with the government's National Steel Policy enhancing production capacity and infrastructure development

The Indian steel industry is expected to experience sustained growth due to increased domestic demand, capacity expansion, government support, and export opportunities

The steel industry is crucial for India's infrastructure development, economic growth, job creation, and technological advancement, shaping the country's future through its integral role across various sectors

The Indian government's deregulation, supportive policies, infrastructure development, and fiscal incentives have significantly boosted the steel sector's growth and global competitiveness

The Indian steel industry faces significant challenges due to high capital costs, affecting production, competitiveness, and growth plans, necessitating urgent financial and infrastructure improvements for long-term sustainability

The Indian iron and steel industry is expected to experience sustained growth due to robust domestic demand, government support, and increased investments in capacity expansion and consolidation.

According to the government, the domestic steel demand increased by 13-14% in the 2023-24 financial year. India's steel demand is expected to grow 10% annually in the coming years, driven by government initiatives and increased infrastructure spending.

The Indian government's initiatives, including the National Steel Policy 2017 and Production Linked Incentive program, are expected to boost steel sector growth, with demand expected to triple by 2030-31

The global steel market is expected to reach over 2.2 billion metric tons by 2026, driven by increased demand, particularly in regions outside China. This growth is expected to be driven by emerging markets and the increasing demand for steel in renewable energy projects

Worldsteel predicts global steel demand to rebound by 1.7% in 2024, reaching 1,793 Mt, and 1.2% to 1,815 Mt in 2025, with China's demand expected to remain flat and decline in 2025. The EU and UK face significant challenges in steel demand, with a technical rebound expected in 2024 and a 5.3% growth in 2025. In contrast, the US is anticipated to recover in 2024

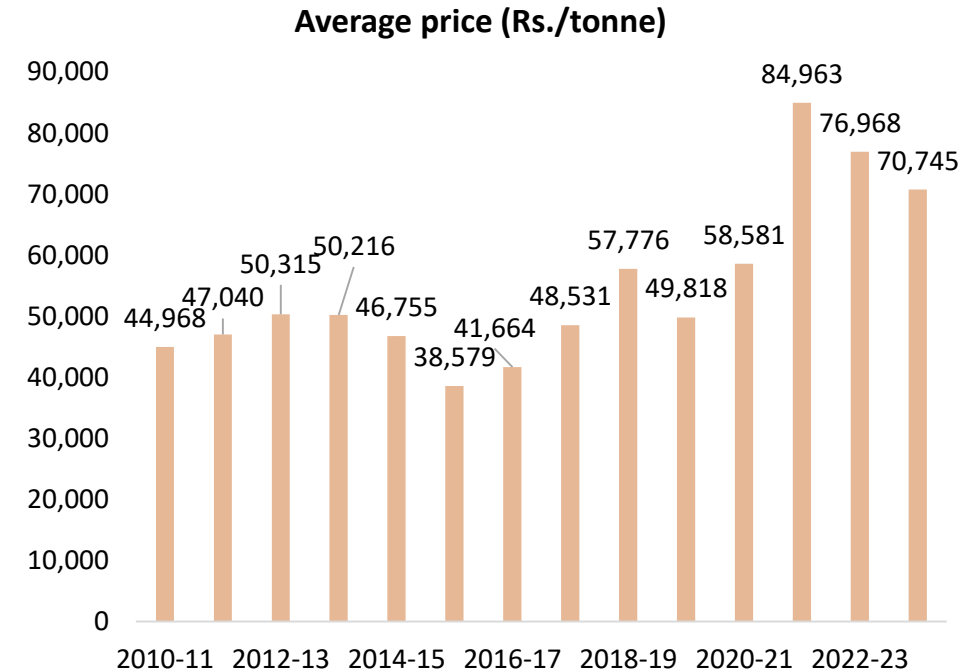
Comparison of Indian Steel Prices to Global Markets

- In 2024, Indian steel prices experienced significant fluctuations, especially in the hot-rolled coil (HRC) segment. Steel prices have risen globally in line with global trends
- Indian steel prices, particularly rebar, have significantly increased in April 2024, indicating that local supply-demand factors are influencing Indian prices more than global trends
- In May 2024, India's hot rolled coil (HRC) prices were approximately Rs 53,900 per tonne. In June 2024, major Indian steel producers increased HRC list prices by Rs 500 to Rs 1,100 per tonne, responding to market conditions and demand dynamics
- The average price for HRC in Mumbai as of mid-August 2024 was Rs 50,300 per tonne, a slight decrease of Rs 100 from previous levels

Current Steel Prices in India vs Other Countries

- India's steel prices remain competitive despite recent increases due to market dynamics and rising input costs
- In June 2024, steel prices decreased monthly in major steel markets such as India, China, the USA, and the European Union. However, on a year-on-year basis, prices decreased in China and the USA, but increased in India and slightly in the European Union
 - **India:** In June 2024, Indian domestic rebar prices decreased due to lukewarm downstream demand, while Indian HRC prices remained range-bound due to subdued demand
 - **China:** Chinese steel prices fell in June 2024, primarily due to a pessimistic outlook for domestic steel demand, compared to June 2023
 - **USA:** US domestic rebar prices fell in June 2024 due to falling scrap prices and lower spot offers from domestic mills, indicating a weakening scrap pricing environment
 - **European Union:** In June 2024, the European HRC market experienced a slight increase in prices compared to June 2023, attributed to the early summer slowdown
- Indian steel exports are facing competition from cheaper Chinese imports, priced around \$520 per tonne, compared to their higher cost of \$650-\$660 per tonne
- India's strong domestic demand is expected to push global steel prices upward, positioning the country favourably in the global steel market
- India's robust economic growth and industrialization could lead to a favourable domestic pricing trend, potentially driving global steel demand despite declining consumption in China

Average Finished Steel Prices in Domestic Market



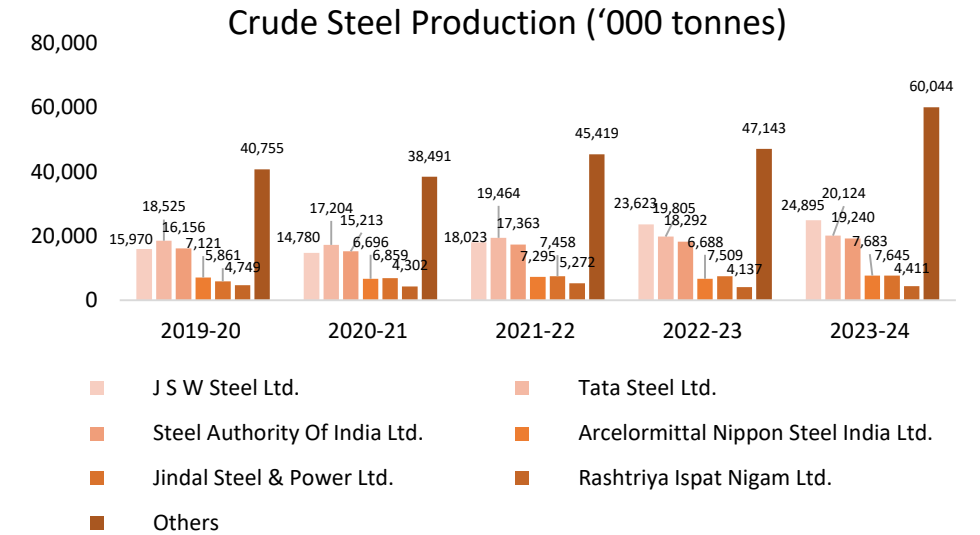
Source: B2K Analytics

Market Share of Companies : Steel (in %)

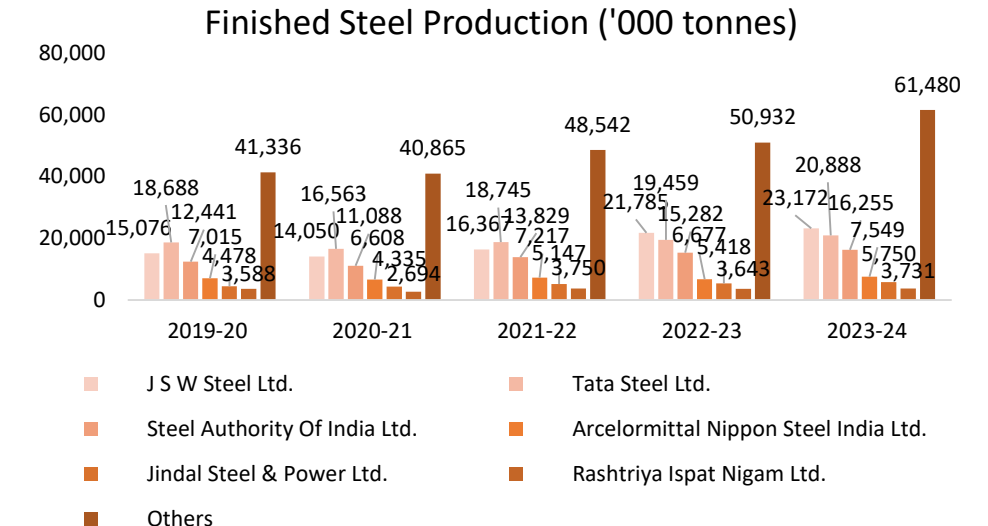
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Tata Steel Ltd.	10.1	9.8	9.5	12.6	12.6	12.5
J S W Steel Ltd.	11.9	11.2	10.6	10.4	11.1	11.5
Steel Authority Of India Ltd.	11.0	10.3	10.8	10.9	10.4	9.6
Arcelormittal Nippon Steel India Ltd.	4.3	4.9	4.9	5.0	5.6	4.9
Jindal Steel & Power Ltd.	3.3	4.3	4.6	5.2	5.0	4.8
Jindal Stainless Ltd.	1.9	1.8	2.0	1.8	3.2	3.2
J S W Steel Coated Products Ltd.	1.9	1.8	1.8	2.1	2.5	2.3
Rashtriya Ispat Nigam Ltd.	2.6	3.0	2.6	2.9	2.9	2.1
Bhushan Power & Steel Ltd.	1.2			1.5	1.8	1.4
Jindal Stainless (Hisar) Ltd. [Merged]	1.7	1.4	1.4	1.3	1.3	1.2
Posco Maharashtra Steel Pvt. Ltd.	1.6	1.5	1.4	0.9	1.1	1.0
Viraj Profiles Pvt. Ltd.	0.9	0.9	0.9	0.9	0.8	0.8
Tata Steel Downstream Products Ltd.	0.6	0.7	0.5	0.6	0.7	0.7
Tata Steel Long Products Ltd. [Merged]			0.6	0.7	0.6	0.6
Asian Colour Coated Ispat Ltd. [Merged]	0.6	0.5	0.6	0.6	0.6	0.5
Mukand Ltd.	0.5	0.5	0.5	0.4	0.5	0.5
Shri Bajrang Power & Ispat Ltd.	0.3	0.4	0.4	0.4	0.4	0.4
Jayaswal Neco Inds. Ltd.	0.4	0.4	0.3	0.3	0.4	0.4
Gallantt Ispat Ltd.	0.2	0.2	0.2	0.3	0.3	0.4
Shyam Steel Inds. Ltd.	0.3	0.3	0.4	0.3	0.3	0.4

Source: B2K Analytics

Company-wise Production of Crude Steel



Production of Finished Steel



Global Steel Prices and India's Demand

- In 2024, India's steel prices are influenced by a complex interplay of demand and supply dynamics, shaped by various economic factors, global market dynamics and policy changes
- Global steel prices remain subdued so far in 2024 due to reduced demand in major markets like China, potentially impacting Indian steel prices as the country navigates international market competition. The Chinese steel market's weakness, characterized by high inventory and reduced demand, weighed on global steel prices
- A recovery in global steel prices are expected in 2025, influenced by market demand and China's production levels. India's steel demand is projected to grow between 8%-10% annually in 2025, however the domestic steel prices are expected to remain sluggish in FY25 due to global price softening and high input costs
- **The World Bank predicts that India's steel market growth, despite global steel price pressure, may be offset by its ongoing manufacturing and construction investments. The World Bank predicts a 9% year-over-year decrease in steel prices in 2024 and a further 5% decrease in 2025**
- **The World Steel Association predicts a 1.7% rise in global steel demand in 2024, reaching 1,793 MT, and a 1.2% growth in 2025, reaching 1,815 Mt. potentially boosting India's steel pricing if domestic demand remains strong**
- **Europe faces significant challenges due to geopolitical changes, high inflation, monetary tightening, and high energy and commodity prices. Steel demand in the region dropped to its lowest level since 2000 in 2023, with recovery expected in 2025. The EU steel demand is predicted to recover by 5.3% in 2025, following a slight increase in 2024**
- **Steel demand growth in developing countries, MENA and ASEAN, is expected to accelerate in 2024 and 2025, while in developed countries, it is expected to grow by 1.3% and 2.7%, respectively**
- **The US steel demand, unlike the EU, is expected to recover in 2024 after a significant drop in 2023 due to increased housing project investment, while China's demand is expected to remain flat in 2024 due to declining real estate investments**
- The government's steel output control measures and potential China stimulus may stabilize prices by the end of 2024 and India's strong demand is expected to drive global steel consumption in 2025
- In April 2024, steel product prices, including Hot Rolled Coil (HRC), have decreased due to local demand issues and global market conditions, despite being lower than in April 2023
- In April 2024, domestic rebar prices increased due to secondary producers raising offer levels, despite global steel price decline, indicating a divergence between domestic and international trends
- In March 2024, the steel industries experienced a decrease in input costs due to a decrease in the prices of iron ore and coking coal. The iron ore lump prices decreased to Rs. 5,800/tonne in March 2024 from Rs. 6,000/tonne in February 2024
- The international coking coal prices have increased from \$242/tonne in May 2023 to \$245/tonne by March 2024, with a range of \$245/tonne – \$332/tonne in the last five months
- On 30th March'24, retail prices in Mumbai of TMT, HRC, and CRC increased by 3.7%, 2.1%, and 0.3% compared to 29th February '24, while on 30th June '24, they decreased by 5.8%, 1.4%, and 0.7%

Performance of Steel CPSE's (In lakh metric tonnes (LMT))

CPSE	Item	April-March 2022-23	April-March 2023-24	% Change	April-June 2023-24	April-June 2024-25	% Change
SAIL	Hot Metal	194.09	204.96	5.6	50.37	50.40	0.1
	Crude Steel	182.91	192.39	5.2	46.68	46.82	0.3
	Saleable Steel	172.46	184.37	6.9	44.06	41.80	-5.1
	Iron Ore	337.76	344.90	2.1	84.61	81.59	-3.6
	Sales of Saleable Steel	161.97	171.04	5.6	39.40	40.52	2.8
NMDC	Iron Ore Production	408.17	450.99	10.5	107.03	91.90	-14.1
	Iron Ore Sales	382.23	444.77	16.4	111.55	100.69	-9.7
KIOCL	Pellets Production	15.10	19.05	26.2	4.88	1.06	-78.3
	Pellets Sales	14.60	17.90	22.6	5.26	1.49	-71.7
MOIL	Manganese Ore Production	13.02	17.56	34.9	4.36	4.70	7.8
	Manganese Ore Sales	11.78	15.36	30.4	3.96	4.53	14.4
RINL	Liquid Steel	43.19	46.04	6.6	10.36	8.55	-17.5
	Hot Metal	44.07	47.01	6.7	10.68	8.97	-16.0
	Crude Steel	41.37	44.11	6.6	9.95	8.19	-17.7
	Saleable Steel	39.59	42.13	6.4	9.39	8.12	-13.5
NMDC Steel Limited (NSL)	Hot Metal	-	9.66	-	-	4.46	-
	Liquid Steel	-	5.18	-	-	3.66	-
	Crude Steel	-	5.02	-	-	3.53	-
	Hot Rolled Coil	-	4.93	-	-	3.45	-

Financial Performance of Industry Players

The ferrous metals industry has experienced positive revenue growth in recent years, largely due to increased production and strong demand from both domestic and international markets. The profit margin in the ferrous metals industry of India has been mixed in recent times while the sector has experienced substantial growth due to increased production and strong demand. The current ratio of major ferrous metals companies in India ranges between 1.0-1.5, indicating sufficient liquidity to meet short-term obligations. Most major ferrous metals companies have a moderate level of financial leverage, as indicated by their debt-to-equity ratio ranging from 0.5-1.0. Most companies have an interest coverage ratio above 2.0, indicating they have sufficient operating profits to cover their debt obligations. The earnings growth has been more volatile, with some companies experiencing significant growth while others face challenges.

Sl. No	Company Name	Net Sales (Rs. Crore) (FY24)	Operating Profit/EBITDA (Rs. Crore)* (FY24)	Net Profit (Rs. Crore) (FY24)	EPS (Rs.)	Debt Equity Ratio (D/E)	Current Ratio (times)	Return on Equity (%)	Debt service coverage ratio (times)
1	Tata Steel	2,29,171	23,402	(4,909.61)	(3.62)	0.78	0.87	-4.97	0.68
2	SAIL	1,05,375	11,439	2,733	6.62	0.67	0.9	5.37	2.08
3	JSW Steel	1,75,006	28,236	8,973	36.17	0.93	0.98	12.2	1.83
4	Jindal Steel & Power	50,027	10,231	5,943	59.1	0.25	1.1	13.08	4.5
5	Visa Steel	669.90	6.6	(71.9)	(6.21)	-1.62	0.03	-	-
6	Rashtriya Ispat Nigam (RINL) / Vizag Steel (FY2023)	22,912.16	(601)	(2,900.45)	(5.92)	48.97	0.39	-1.62	0.02
7	NMDC	21,293.81	8,350.35	5,631.89	19.22	0.13	2.56	21.71	-
8	Jindal Stainless	38,562.47	4704.29	2,693.48	32.95	0.28	1.38	20.12	6.90
9	NMDC Steel	3,048.99	-1,317.63	-1,560.32	-5.32	0.43	0.99	-10.07	
10	Shyam Metalics and Energy	13,195.22	1,570.02	1,029	39.54	0.06	1.38	20	11.56 (Standalone)
11	Kalyani Steel	1,959.5	417.8	2,48.8	56.99	0.35	1.76	15.88	3.07
12	Usha Martin	3,225.2	638.8	424.1	13.92	0.05	2.67	26.85	3.47

Note: All numbers mentioned are consolidated numbers of FY24 unless otherwise mentioned

Source: BSE India and Annual Reports

Key Financial Ratios: Ferrous Metals Industry

The profitability and efficiency ratios of Indian ferrous metals industry is expected to improve going forward, driven by government initiatives and strong demand from the infrastructure and manufacturing sectors

Sl. No	Ratios	Unit	2018-19	2019-20	2020-21	2021-22	2022-23
1	Debt to equity ratio	Times	1.90	1.80	1.29	0.78	0.73
2	Interest Coverage ratio	Times	1.64	1.23	2.78	6.73	2.72
3	Debt service coverage ratio (DSCR)	Times	0.39	0.41	0.86	1.46	0.68
4	Net Working Capital	Rs. million	-1,151,927.10	-372,993.70	-279,187.40	129,802.80	-160,577.20
5	Current Ratio	Times	0.61	0.84	0.88	1.05	0.95
6	PBDITA as % of total income	%	14.69	15.11	19.28	20.57	11.58
7	PAT as a % of total income	%	2.42	4.20	7.59	11.13	3.97
8	Debtors turnover	Times	11.52	10.45	11.50	16.13	16.23
9	Creditors turnover	Times	5.52	4.89	4.93	6.39	6.08
10	PAT as a % of capital employed	%	2.91	4.11	7.50	15.70	5.52
11	PAT as % of total assets	%	1.94	2.86	5.39	11.05	3.86

Source: B2K Analytics Data as on 2 September 2024

Outlook

Growth Potential

India, the second-largest global steel producer, is expected to experience substantial growth due to low per capita steel consumption compared to the global average, government initiatives, infrastructure expansion, investments and capacity additions, while also striving to reduce its carbon footprint. India's steel production is projected to increase by 4-7% in FY24, driven by infrastructure development and urbanization, thereby increasing demand for housing and construction materials.

Strategic Importance

India's strategic location and raw material availability make it a key player in the global steel market, with the government's National Steel Policy enhancing production capacity and infrastructure development.

Sustained Growth Expected

The Indian steel industry is expected to experience sustained growth due to increased domestic demand, and increased investments in capacity expansion and consolidation, government support, and export opportunities.

Shapes future through diverse sectors

The steel industry is crucial for India's infrastructure development, economic growth, job creation, and technological advancement, shaping the country's future through its integral role across various sectors.

Enhanced global competitiveness

The Indian government's deregulation, supportive policies, infrastructure development, and fiscal incentives have significantly boosted the steel sector's growth and global competitiveness.

Require financial and infrastructure improvements

The Indian steel industry faces significant challenges due to high capital costs, affecting production, competitiveness, and growth plans, necessitating urgent financial and infrastructure improvements for long-term sustainability.

Outlook

Steel Production Policies

The Indian government's policies, including anti-dumping duties and a national steel policy, aim to boost domestic steel production to 300 million tons per annum by 2030-31, making it an attractive investment destination.

Indian Government's Initiatives

The Indian government's initiatives, including the National Steel Policy 2017 and Production Linked Incentive program, are expected to boost steel sector growth, with demand expected to triple by 2030-31.

India's Steel Demand Growth

According to the World Steel Association (worldsteel), India is expected to drive 8% growth in steel demand over 2024 and 2025, driven by continued growth in all steel-using sectors and infrastructure investments, with steel demand projected to reach nearly 70 million tonnes in 2025.

Global Steel Market Growth

The global steel market is expected to reach over 2.2 billion metric tons by 2026, driven by increased demand, particularly in regions outside China. This growth is expected to be driven by emerging markets and the increasing demand for steel in renewable energy projects.

Worldsteel Steel Demand Predictions

The World Steel Association (worldsteel) predicts global steel demand to rebound by 1.7% in 2024, reaching 1,793 MT, and 1.2% to 1,815 MT in 2025, with China's demand expected to remain flat and decline in 2025. The EU and UK face significant challenges in steel demand, with a technical rebound expected in 2024 and a 5.3% growth in 2025. In contrast, the US is anticipated to swiftly recover in 2024 from a significant decline in steel demand in 2023.

Vertical integration and strategic alliances

The steel industry in India is expected to strengthen through vertical integration and strategic alliances leveraging operational synergies and financial health improvements to enhance supply chain control and cost reduction.

Ferrous Metal-Iron and Steel Sector- Ratings

Industry Risk	Scoring	Scoring implication	Reasons for Scoring
Cyclical nature of the industry	1	Industry cyclical in nature	The Indian ferrous metal sector, particularly the iron and steel industry, is cyclical, driven by economic factors like construction, infrastructure, and automobiles, affecting the overall industry. India's iron and steel sector is characterized by its cyclical nature, sensitivity to economic fluctuations, long investment cycles, and ongoing global competition challenges.
Capital Intensive	4	High	India's iron and steel industry is a capital-intensive sector, requiring substantial investments in infrastructure, technology, and production capacity.
Competition & Industry Growth			
Industry Growth	2	Steady demand growth	India's iron and steel sector is experiencing robust growth, fueled by government initiatives, rising construction and infrastructure demand, and a strategic focus on modernization and exports.
Skilled labour	2	Heavily dependent on skilled labor	The iron and steel sector in India is significantly dependent on skilled labor. The Indian steel industry employs around 25 lakh people, primarily skilled labor, including engineers and metallurgists, through direct and indirect employment.
Availability of raw material/substitutes	2	Partially difficult to availability of raw material or substitutes	India's ferrous metal industry, particularly iron and steel, relies on consistent supply of raw materials like iron ore, coal, fluxes, and scrap metal for effective functioning. The sector relies on the import of raw materials, particularly coking coal and other essential minerals
Technology Challenges	2	Periodic technological change	India's ferrous metal, iron, and steel sector is facing significant technological challenges that are affecting its growth and competitiveness. Addressing technological hurdles is crucial for future competitiveness. India's ferrous metal industry faces a challenge due to a lack of expertise in supporting process metallurgy advancements. To achieve ambitious production targets like 300 million tons of crude steel by 2030, process metallurgy advancements like automation, control systems, and simulation technologies are crucial.
Impact of Government Policy			
Impact of Government Policy, Import/Export duty	1	Government policy changes largely affecting company's operations	Government policies and import/export duties significantly influence India's ferrous metal, iron, and steel sector, driving growth and influencing raw material availability and market competitiveness, crucial for steel production success.
Government intervention regarding pricing of raw material, import and export duties set as well as market allowed to the players	1	Change in above will largely affect company's productivity	The government's tax, duty, and price controls can significantly impact the steel sector's productivity and competitiveness, while also promoting efficient resource utilization. The Indian government's intervention to auction iron ore mining leases has had significant implications for the country's steel industry.
Government Policy regarding finished goods price	2	Finished goods price is slightly depending on change in government policy	Government policies in India's ferrous metal sector significantly impact finished goods prices, influencing production, competitiveness, and market dynamics, shaping the steel industry's long-term landscape.

Ferrous Metal-Iron and Steel Sector- Ratings

Industry Risk	Scoring	Scoring implication	Reasons for Scoring
Demand & Supply Scenario			
Anti dumping duties	1	Largely affecting / very much dependent	Anti-dumping duties in India significantly impact the ferrous metal, iron, and steel sector, safeguarding domestic producers from unfair competition from low-priced imports.
Demand for Products (Both domestic & international)	3	High demand for products	India's ferrous metal sector, notably in iron and steel, is currently experiencing high demand both domestically and internationally, positioning it as a key global steel market player. However, the industry is cyclical in nature and the demand fluctuates based on the economic cycle
Substitute for the finished products	2	Partial Substitute available	There are some risks related to substitutes for finished steel products in India's iron and steel sector. Steel demand is impacted by substitutes like aluminum, composites, plastics, and concrete, but it remains a crucial material in most applications.
Barriers to Entry			
Number of players/competitors in the market place	2	Moderated competition	India's ferrous metal, iron, and steel sector is less fragmented compared to other global markets. The sector, dominated by a few large companies, offers improved pricing discipline and operational efficiency compared to global markets.
Entry Barriers	3	Maximum licenses given by the government	The entry barriers in India's ferrous metal, iron, and steel sector are substantial due to high capital requirements, regulatory complexities, and intense competition, potentially limiting innovation and market dynamism.
Lifestage of industry	2	Intermediate stage	India's iron and steel sector is experiencing strong growth, supported by robust production capabilities, supportive government policies, and a strategic focus on sustainability and modernization. The industry is also undergoing technological advancements to enhance efficiency, sustainability, and product quality.

Industry Rating

** Views are personal*

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