

Industry Research Report on Structural Steel Products Industry

September 2026

Disclaimer

This report is prepared by CARE Analytics and Advisory Private Limited (CareEdge Research). CareEdge Research has taken utmost care to ensure accuracy and objectivity while developing this report based on information available in CareEdge Research's proprietary database, and other sources considered by CareEdge Research as accurate and reliable including the information in public domain. The views and opinions expressed herein do not constitute the opinion of CareEdge Research to buy or invest in this industry, sector or companies operating in this sector or industry and is also not a recommendation to enter any transaction in this industry or sector in any manner whatsoever.

This report must be seen in its entirety; the selective review of portions of the report may lead to inaccurate assessments. All forecasts in this report are based on assumptions considered to be reasonable by CareEdge Research; however, the actual outcome may be materially affected by changes in the industry and economic circumstances, which could be different from the projections.

Nothing contained in this report is capable or intended to create any legally binding obligations on the sender or CareEdge Research which accepts no responsibility, whatsoever, for loss or damage from the use of the said information. CareEdge Research is also not responsible for any errors in transmission and specifically states that it, or its Directors, employees, parent company – CARE Ratings Ltd., or its Directors, employees do not have any financial liabilities whatsoever to the subscribers/users of this report. The subscriber/user assumes the entire risk of any use made of this report or data herein. This report is for the information of the authorized recipient in India only and any reproduction of the report or part of it would require explicit written prior approval of CareEdge Research.

CareEdge Research shall reveal the report to the extent necessary and called for by appropriate regulatory agencies, viz., SEBI, RBI, Government authorities, etc., if it is required to do so. By accepting a copy of this Report, the recipient accepts the terms of this Disclaimer, which forms an integral part of this Report.

Table of Contents

1 Economic Outlook	7
1.1 Global Economy	7
1.2 Indian Economic Outlook	8
1.2.1 GDP Growth and Outlook	8
1.2.2 Fiscal Deficit (as a % of GDP)	9
1.2.3 Consumer Price Index	9
1.2.4 GVA in the Industrial Sector	11
1.2.5 Investment Trend in Infrastructure	11
1.2.6 Per capita Private Final Consumption Expenditure (PFCE) and Gross National Disposable Income (GNDI)	12
1.2.7 Industrial Growth	13
1.2.8 National Infrastructure Pipeline	13
1.2.9 Budgetary expenditure on Infrastructure	14
1.2.10 Correlation of Steel Demand with GDP Growth	15
1.3 Concluding Remarks	16
2 Global Steel Industry	18
2.1 Overview of the Global Steel Industry	18
2.2 Global Production of Steel	19
2.3 Global Steel Demand	21
2.4 Global Steel Prices Trend	22
3 Indian Steel Industry	24
3.1 Overview of the Indian Steel Industry	24
3.2 Indian Crude Steel Production	25
3.3 Indian Finished Steel Production and Consumption	25
3.4 Trend in Steel Trade	26
3.5 Domestic Price Trends	29
4 Indian Re-rolled Structural Steel Products Market	32
4.1 Overview	32
4.2 Price Trends	33
4.2.1 Angles	33
4.2.2 Joists	33
4.2.3 Channels	34
4.2.4 MS Section	34
4.2.5 Bars and Rods	35
4.2.6 Beams	35
4.3 Overview of End-User Industry	36
4.3.1 Windmills	40
4.3.2 Refinery	41
4.3.3 Renewable (Solar)	41
4.3.4 Power	42
4.3.5 Telecommunications	42
4.3.6 Warehouses	42
4.3.7 Construction	43
4.3.8 Furniture	43
4.3.9 Airports	44
4.3.10 Railways	44
4.3.11 Automotive	45
4.3.12 Steel and Power Plant	45

4.4	Galvanized Structural Steel Products.....	46
4.5	Key Demand Drivers.....	46
4.6	Key Challenges.....	49
5	Power Transmission Sector in India	53
5.1	Sector Evolution and Institutional Framework.....	53
5.2	Infrastructure Expansion.....	54
5.3	Voltage-Level Diversification	55
5.4	Policy and Planning Alignment.....	55
5.5	Challenges and Risk Factors.....	55
5.6	Near-Medium-Term Outlook.....	56
6	Power Substation Infrastructure in India.....	57
6.1	Sector Evolution and Institutional Framework.....	57
6.2	Capacity Expansion and Voltage-Level Diversification.....	59
6.3	Multi-Sector Participation	59
6.4	Policy and Planning Alignment.....	59
6.5	Challenges and Risk Factors.....	59
6.6	Near-Medium-Term Outlook.....	59
7	Strategic Positioning of Structural Steel and Fabricated Component Manufacturers in India's Power Transmission and Substation Infrastructure.....	61
7.1	Sectoral Alignment with National Infrastructure Priorities	61
7.2	Regulatory Approvals and Market Access	61
7.3	Operational Capabilities and Cost Efficiency	61
7.4	Product Innovation and Scalability	62
7.5	Risk Mitigation and Strategic Partnerships	62
8	Railway Electrification in India	63
8.1	Sector Evolution and Policy Framework.....	63
8.2	Electrification Status and Coverage.....	64
8.3	Investment and Budgetary Support	64
8.4	Strategic Importance	64
8.5	Near-Medium-Term Outlook.....	64
9	Strategic Positioning of Structural and Electrical Infrastructure Manufacturers in Railway Electrification.....	65
9.1	Sectoral Alignment with National Rail Modernisation	65
9.2	Regulatory Approvals and Vendor Accreditation.....	65
9.3	Operational Capabilities and Cost Efficiency	65
9.4	Product Innovation and Scalability	65
9.5	Risk Mitigation and Strategic Partnerships	66
10	Key Government Policies/Regulations for the Steel Industry.....	67
11	SWOT Analysis of the Industry	70
12	Porters Five Force model of the Industry	71
13	Threats and Challenges for the Issuer Company and its Products	73
14	Industry Production Process.....	75
15	Competitive Benchmarking.....	77
15.1	Brief Profile of Company	77
15.1.1	Business Profile of Company	77
15.1.2	SWOT Analysis of the Company	78

15.1.3	Services and Product Mix with the End-use application areas	79
15.1.4	Geographic presence and Operational Footprint	79
15.1.5	Competitive Positioning Summary.....	79
15.1.6	Growth Outlook for the Company	80
15.2	Brief Profile of Peers	81
15.3	Competitive Benchmarking.....	82

List of Tables

Table 1:	GDP growth trend comparison - India v/s Other Economies (Real GDP, Y-o-Y change in %)	7
Table 2:	GDP Growth Outlook (Y-o-Y %)	9
Table 3:	Industrial sector growth (Y-o-Y growth) -at Constant Prices	11
Table 4:	Pricing Trends in Angles (In Rs/Tonne)	33
Table 5:	Pricing Trends in Joists (In Rs/Tonne).....	34
Table 6:	Pricing Trends in Channels (In Rs/Tonne)	34
Table 7:	Pricing Trends in MS Section	35
Table 8:	Pricing Trends in Bars and Rods (In Rs/Tonne).....	35
Table 9:	Target Set Under the NSP, 2017	67
Table 10:	Competitive Landscape Across Operational Metrics	82
Table 11:	Competitive Landscape Across Financial Metrics.....	82

List of Charts

Chart 1:	Global Growth Outlook Projections (Real GDP, Y-o-Y change in %).....	7
Chart 2:	Trend in Real Indian GDP growth rate	8
Chart 3:	Gross Fiscal Deficit (% of GDP)	9
Chart 4:	Retail Price Inflation in Terms of Index and Y-o-Y Growth in %	10
Chart 5:	RBI Historical Repo Rate	10
Chart 6:	Gross Fixed Capital Formation (GFCF) as % of GDP (At Current Prices).....	11
Chart 7:	Y-o-Y growth in IIP (in %).....	13
Chart 8:	National Infrastructure Pipeline Sectoral Split (%).....	14
Chart 9:	Budgetary outlay towards infrastructure	15
Chart 10:	Growth in Steel Demand Vs Real GDP Growth.....	16
Chart 11:	Global Per capita consumption (in kg)	18
Chart 12:	Breakup of region-wise global production capacity in CY25.....	19
Chart 13:	Global Crude Steel Production.....	20
Chart 14:	Steel Production Geographical Region in CY25 – 1,849 MT	21
Chart 15:	Global Steel Demand (in million tonnes)	22
Chart 16:	Trend in Global Steel Prices	23

Chart 17: Finished steel use per capita (Kg)	24
Chart 18: Domestic Crude Steel Production	25
Chart 19: Finished Steel Production in India	26
Chart 20: Finished Steel Consumption in India	26
Chart 21: India's finished Steel exports	27
Chart 22: Country wise exports of finished Steel during FY26	28
Chart 23: India's finished Steel imports	29
Chart 24: Country wise imports of finished Steel during FY26	29
Chart 25: Domestic Average Finished Steel Prices	31
Chart 26: Trend in Indian Automobile Industry Domestic Sales Growth	48
Chart 27: Domestic Steel Prices	49
Chart 28: Iron Ore Prices	50
Chart 29: Billet (100 mm) Prices	50
Chart 30: Sponge Iron (HBI) Prices	50
Chart 31: Coal Prices	51
Chart 32: Progress of Transmission by Type	53
Chart 33: Progress of Transmission by Entity	54
Chart 34: Transmission Lines Progress	54
Chart 35: Progress of Substation by Type	57
Chart 36: Progress of Substation by Entity	58
Chart 37: Substation Capacity Progress	58
Chart 38: Trend of Railway Electrification in India	63
Chart 39: Pace of Railway Electrification	63

1 Economic Outlook

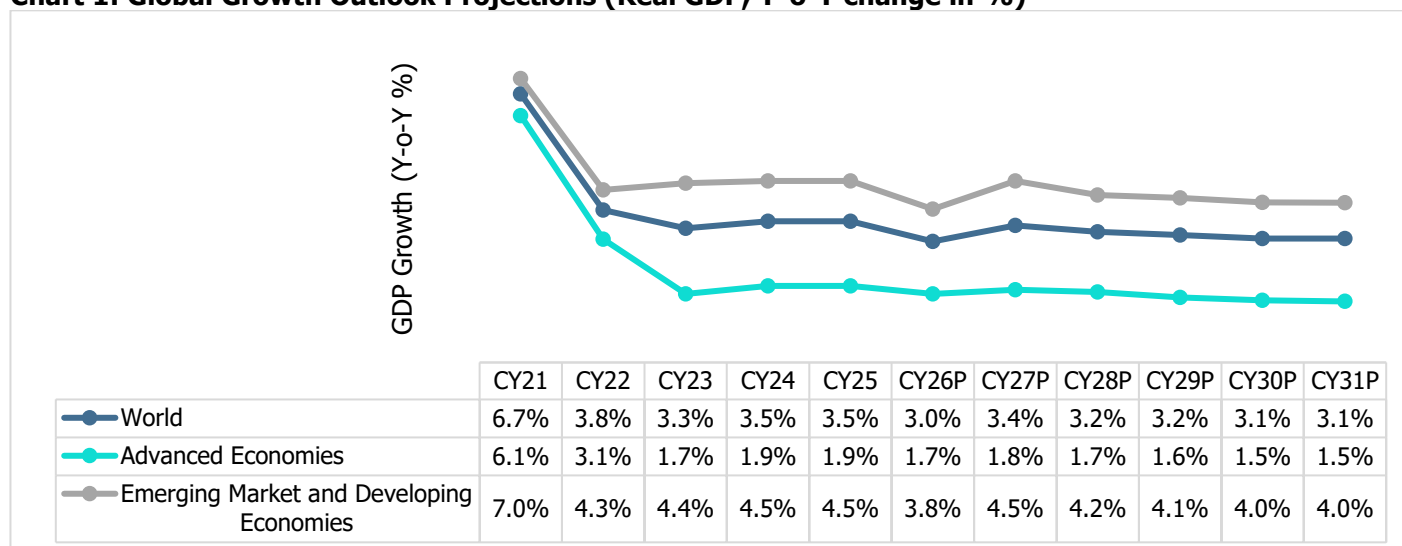
1.1 Global Economy

Global Economic Growth Expected to Sustain at ~3% in Near Term

Global economic growth is projected to moderate to around 3.0% in 2026, reflecting the impact of geopolitical tensions in energy and trade flows. The ongoing Middle East conflict poses downside risks with prolonged disruptions, potentially reducing growth further to 2.5%, or lower.

However, supportive factors such as continued investment momentum and policy support are helping offset some of these pressures.

Chart 1: Global Growth Outlook Projections (Real GDP, Y-o-Y change in %)



Source: IMF – World Economic Outlook, April 2026 and July 2026; Note: P-Projections

Table 1: GDP growth trend comparison - India v/s Other Economies (Real GDP, Y-o-Y change in %)

	Real GDP (Y-o-Y Change in %)										
	CY21	CY22	CY23	CY24	CY25	CY26P	CY27P	CY28P	CY29P	CY30P	CY31P
India	9.69	7.61	7.21	7.10	7.70	6.40	6.70	6.50	6.52	6.50	6.51
China	8.56	3.11	5.38	5.00	5.00	4.60	4.10	4.00	3.67	3.35	3.29
Indonesia	3.70	5.31	5.05	5.00	5.10	5.00	5.10	5.17	5.19	5.22	5.23
Saudi Arabia	6.52	12.00	0.54	2.60	4.60	1.70	5.50	3.65	3.54	3.52	3.55
Middle East and Central Asia	4.69	6.37	2.58	3.10	3.70	0.70	6.50	3.96	3.96	3.82	3.78
Latin America	7.50	4.30	2.33	2.40	2.40	2.40	2.70	2.87	2.86	2.75	2.63
Brazil	4.76	3.02	3.24	3.40	2.30	2.40	2.20	2.35	2.50	2.50	2.50
Euro Area	6.42	3.64	0.44	1.00	1.40	0.90	1.20	1.36	1.24	1.12	1.10
United States	6.15	2.52	2.94	2.80	2.10	2.30	2.20	2.10	1.88	1.75	1.76

Source: IMF- World Economic Outlook Database (April 2026, July 2026); Note: P- Projections, India's fiscal year (FY) aligns with the IMF's calendar year (CY). For instance, FY24 corresponds to CY23.

1.2 Indian Economic Outlook

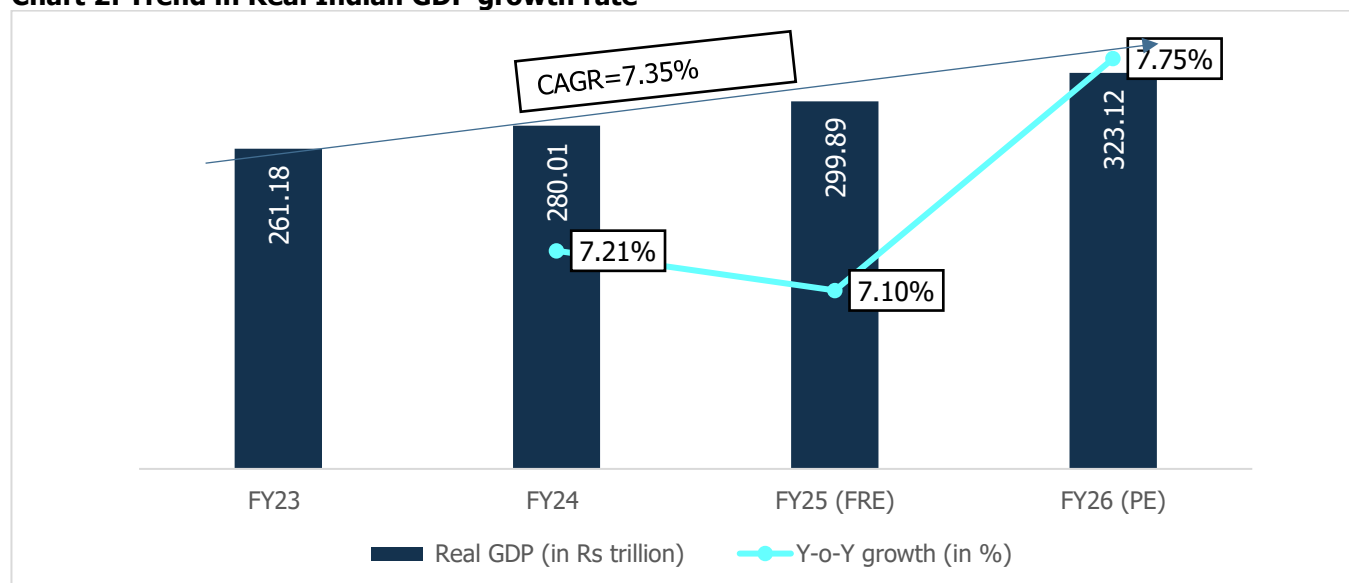
1.2.1 GDP Growth and Outlook

Resilience to External Shocks remains Critical for Near-Term Outlook

The Indian economy continues to show rapid growth. As per provisional estimates, GDP in FY26 is expected to have grown by 7.75%, supported by strong domestic consumption, investment, manufacturing and services activity. The economy showed resilience while the global economic environment remains challenging due to geopolitical tensions, trade-policy uncertainty and financial vulnerabilities.

For FY25, first revised estimates show a growth of 7.10% (Rs 299.89 trillion), led by robust performance in manufacturing, construction and financial services. Consumer spending rose by 7.70%, and government spending increased by 5.50%, both contributing to the overall growth. In FY23, the real GDP stood at Rs 261.18 trillion and registered Y-o-Y growth of 7.21% in FY24 (Rs 280.01 trillion).

Chart 2: Trend in Real Indian GDP growth rate



Source: MOSPI; Note: PE – Provisional Estimates, FRE- First Revised Estimates. Note: The trend for FY23-FY26 is based on new series base year 2022-23.

GDP Growth Outlook (August 2026)

FY27 GDP Outlook: The Reserve Bank of India (RBI) projects real GDP growth at 6.70% for 2026–27, supported by sustained momentum in the services sector, strong reservoir levels aiding the agricultural sector, and private consumption expected to remain uplifted by discretionary spending.

However, elevated energy and other commodity prices, cost pressures, as well as the travel disruptions in the Strait of Hormuz are likely to affect growth this year. However, the government is working towards minimising the impact of the supply chain disruptions towards critical sectors to ensure limited interruptions.

Table 2: GDP Growth Outlook (Y-o-Y %)

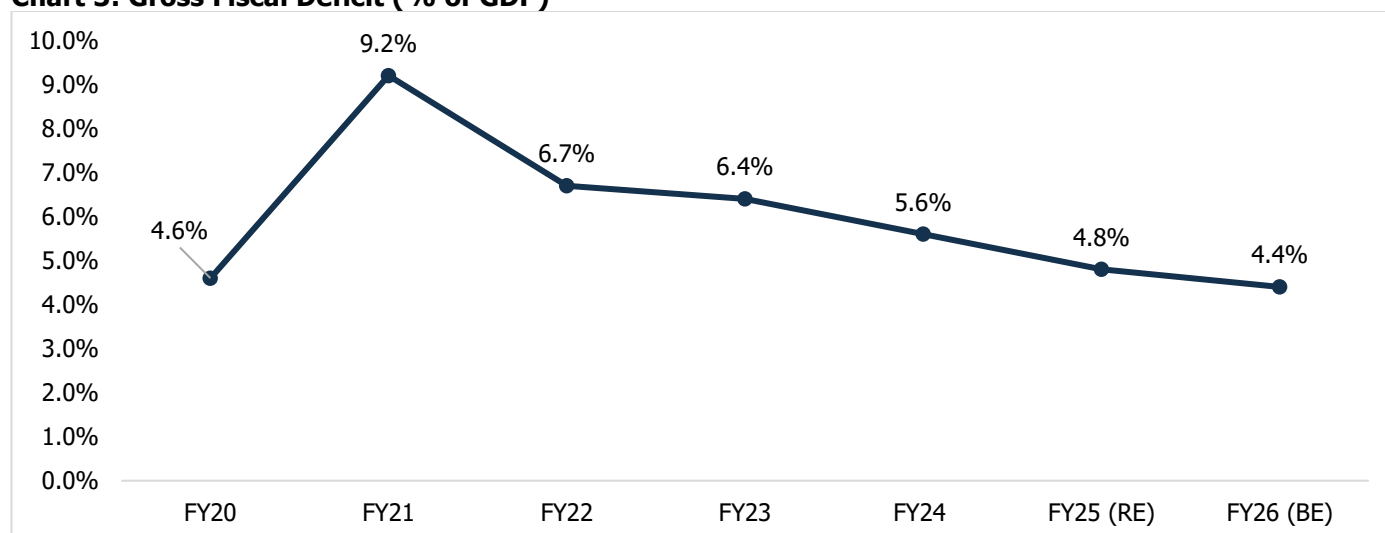
FY27P (Complete Year)	Q1FY27P	Q2FY27P	Q3FY27P	Q4FY27P	Q1FY28P
6.70%	7.00%	6.40%	6.50%	6.80%	7.30%

Source: Reserve Bank of India; Note: P-Projected

The trend is based on the old series base year 2022-23.

1.2.2 Fiscal Deficit (as a % of GDP)

In FY21, India's fiscal deficit was 9.2% due to the impact of COVID-19, since then it has seen a steady improvement is expected to reduce to 4.8% of GDP FY25 (RE), driven by strong economic growth and higher tax and non-tax revenues. The government aims for further fiscal consolidation, setting a target of 4.4% of GDP for FY26 to maintain fiscal prudence.

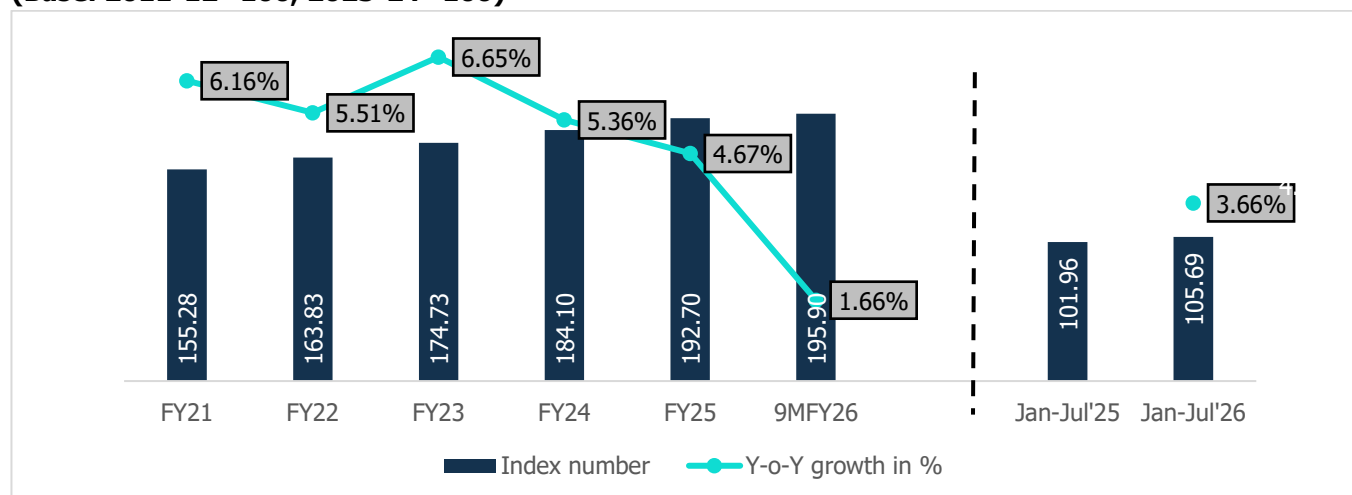
Chart 3: Gross Fiscal Deficit (% of GDP)


Source: RBI; Note: RE-Revised Estimates, BE-Budget Estimates

1.2.3 Consumer Price Index

Between January and July 2026, inflation averaged around 3.66% across the Consumer Price Index. By July 2026, inflation increased to 4.45% on a Year-on-Year basis, compared with 4.38% in June 2026 over June 2025. Within this, the rural inflation rate stood at 4.84%, while the urban inflation rate was comparatively lower at 3.96%. This indicates an overall modest inflationary trend, with rural areas experiencing relatively higher price pressures than urban regions.

Chart 4: Retail Price Inflation in Terms of Index and Y-o-Y Growth in %
(Base: 2011-12=100, 2023-24=100)

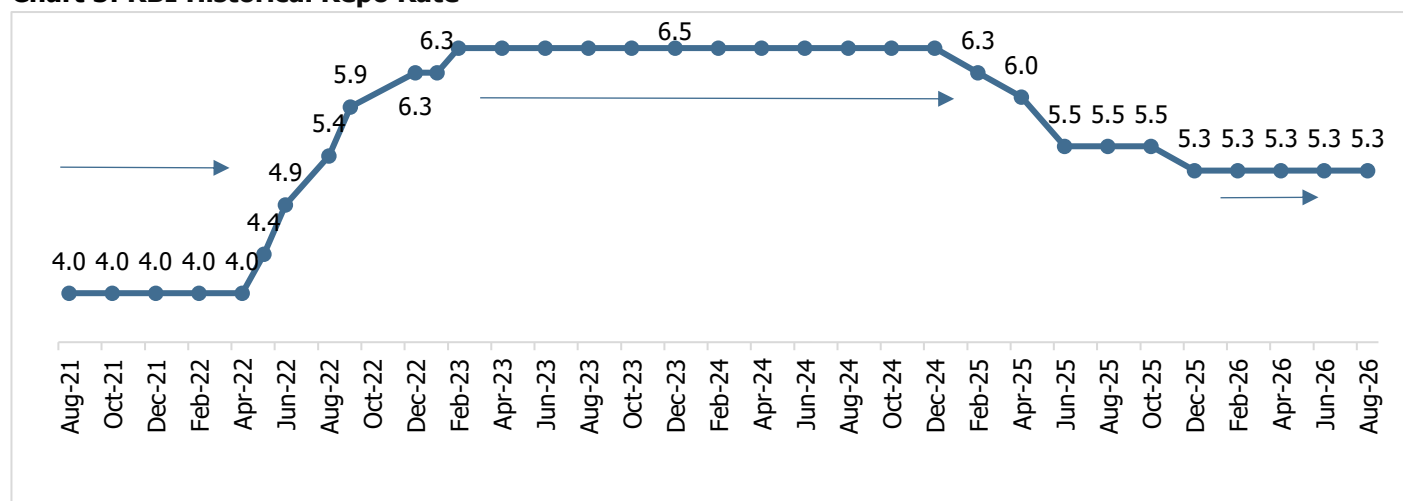


Source: MOSPI

The CPI is primarily factored in by the RBI while preparing its bi-monthly monetary policy. At the bi-monthly meeting held in August 2026, the RBI projected inflation at 5.00% for FY27, with inflation during Q2FY27 at 4.70%, Q3FY27 at 5.90%, Q4FY27 at 5.50%, and Q1FY28 at 5.30%.

Considering the current inflation situation, RBI has maintained the repo rate at 5.25% in the August 2026 meeting of the Monetary Policy Committee (MPC).

Chart 5: RBI Historical Repo Rate



Source: RBI

RBI maintained a 'neutral' monetary policy stance, even as the Monetary Policy Committee (MPC) noted an increase in geopolitical tensions. The RBI has adopted a non-inflationary growth strategy, supported by strong demand and supply fundamentals while maintaining macroeconomic stability. With volatile trade conditions in view, the domestic growth and inflation curve requires policies to be supportive.

The India Meteorological Department (IMD) expects a below-normal monsoon, with rains in most parts of the country, except in some areas of the northeast, southern peninsula, and northwest India, which is likely to affect inflation levels.

Despite elevated global crude oil prices, India initially kept retail petrol and diesel prices stable by reducing central excise duty and absorbing part of the cost through state-owned oil marketing companies. Subsequently, retail fuel prices were increased in a phased manner to partly pass on the higher input costs to consumers. The rise in energy prices and weather disturbances affecting food prices are upside risks to inflation.

1.2.4 GVA in the Industrial Sector

GVA is the measure of the value of goods and services produced in an economy. GVA gives a picture of the supply side, whereas GDP represents consumption. GVA in FY25 was powered by a broad-based rebound across sectors.

In FY26 (PE), real GVA growth of 7.9% is primarily led by Manufacturing. Industry is estimated at 8.5%, supported by a pickup in manufacturing and construction (10.7% and 7.4%, respectively). The gap between GDP and GVA growth stood at 0.15 percentage points in FY26, with GDP growing at 7.75% and GVA at 7.90%.

Table 3: Industrial sector growth (Y-o-Y growth) -at Constant Prices

At Constant Prices	FY24	FY25 (FRE)	FY26 (PE)
Industry	10.90	8.30	8.50
Mining & Quarrying	2.40	11.70	5.20
Manufacturing	12.70	9.30	10.70
Electricity, Gas, Water Supply & Other Utility Services	10.70	2.90	1.70
Construction	9.90	7.30	7.40
GVA at Constant Price	7.20	7.30	7.90

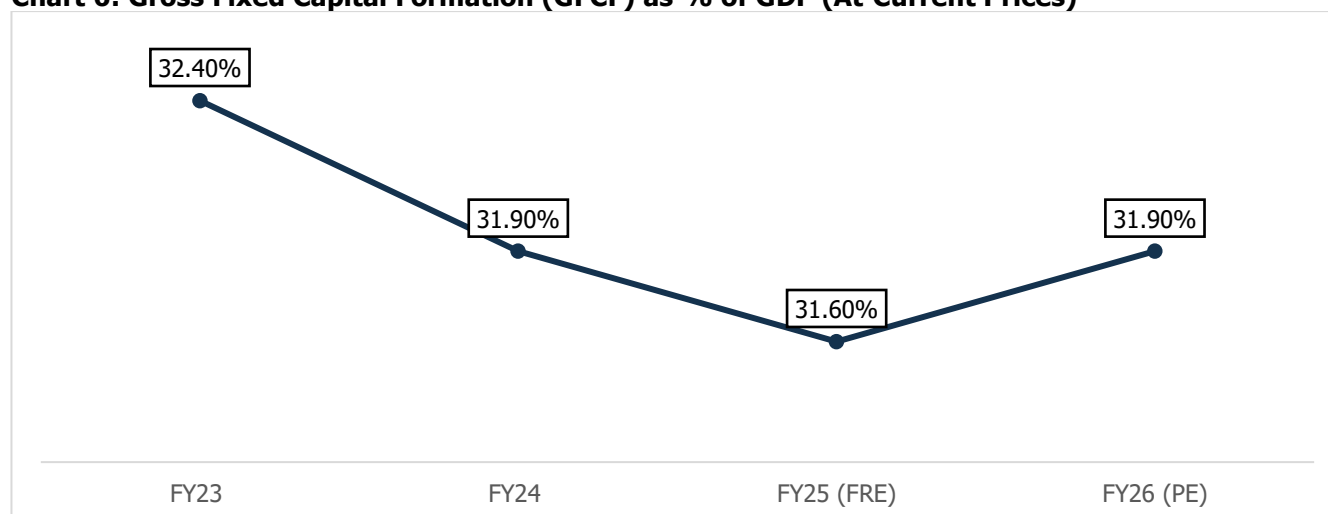
Source: MOSPI; Note: FRE- First Revised Estimates, PE – Provisional Estimates;

The trend for FY24-FY26 is based on new series base year 2022-23.

1.2.5 Investment Trend in Infrastructure

Gross Fixed Capital Formation (GFCF) is a measure of net increase in physical assets. GFCF as a share of GDP eased during FY23–FY25 and was estimated to be broadly stable in FY26. This pattern is aligned with a period in which nominal GDP expanded, while investment growth remained positive, it did not outpace the overall nominal expansion. GFCF rose by 8.9% in FY25 and 9.9% in FY26 in real terms, alongside continued growth in consumption, indicating that the movement in the ratio reflects relative GDP shares rather than a decline in investment activity.

Chart 6: Gross Fixed Capital Formation (GFCF) as % of GDP (At Current Prices)



Source: MOSPI; Note: FRE- First Revised Estimates, PE- Provisional Estimates

Overall, the support of public investment in infrastructure is likely to gain traction due to initiatives such as Atmanirbhar Bharat, Make in India, and Production-linked Incentive (PLI) scheme announced across various sectors.

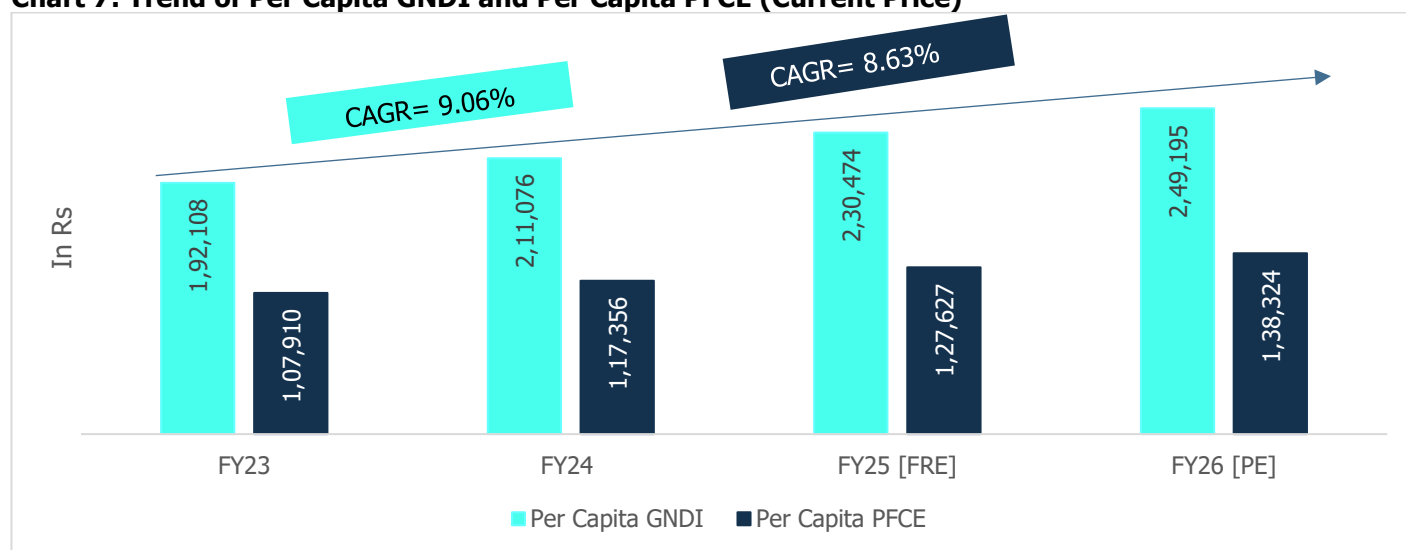
1.2.6 Per capita Private Final Consumption Expenditure (PFCE) and Gross National Disposable Income (GNDI)

• Increasing Disposable Income and Consumer Spending

Gross National Disposable Income (GNDI) is a measure of the income available to the nation for final consumption and gross savings. Between the period FY23 and FY26, per capita GNDI at current prices registered a CAGR of 9.1%. More disposable income drives more consumption, thereby driving economic growth.

With an increase in disposable income, there has been a gradual change in the country's consumer spending behaviour. Per capita Private Final Consumption Expenditure (PFCE), which is a measure of consumer spending, has also shown significant growth from FY23 to FY26 at a CAGR of 8.6%.

Chart 7: Trend of Per Capita GNDI and Per Capita PFCE (Current Price)

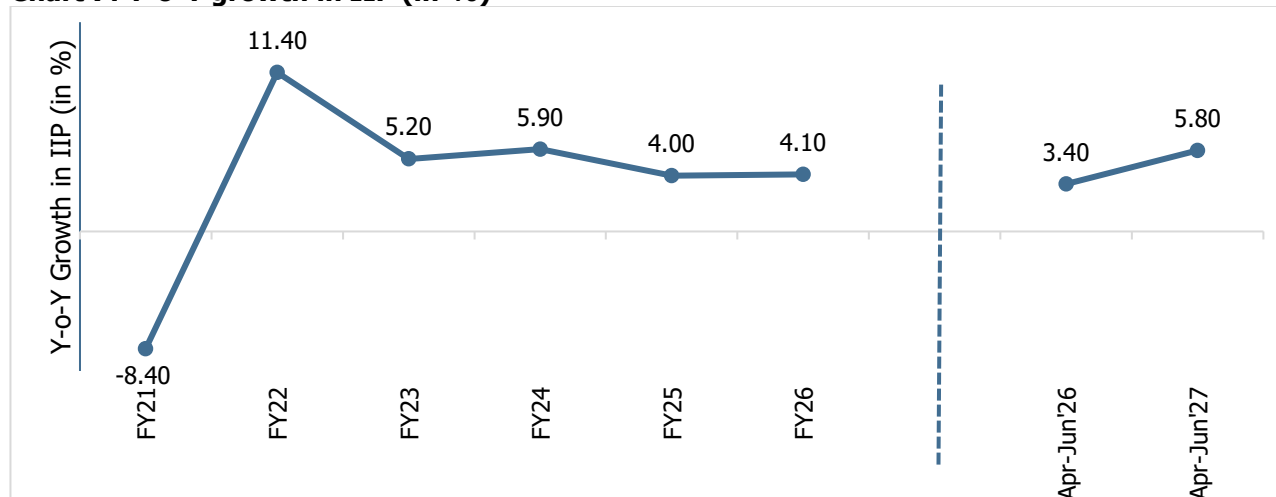


Source: MOSPI; Note: FRE – First Revised Estimates, PE- Provisional Estimates;
 The trend for FY23-FY26 is based on new series base year 2022-23

1.2.7 Industrial Growth

The Index of Industrial Production (IIP) in India grew by 5.80% Year-on-Year from April-June (FY27), showing steady but moderate industrial momentum, supported by 7.80% growth in the manufacturing sector and strong growth of 10.60% in the Electricity & Gas Supply sector.

Chart 7: Y-o-Y growth in IIP (in %)

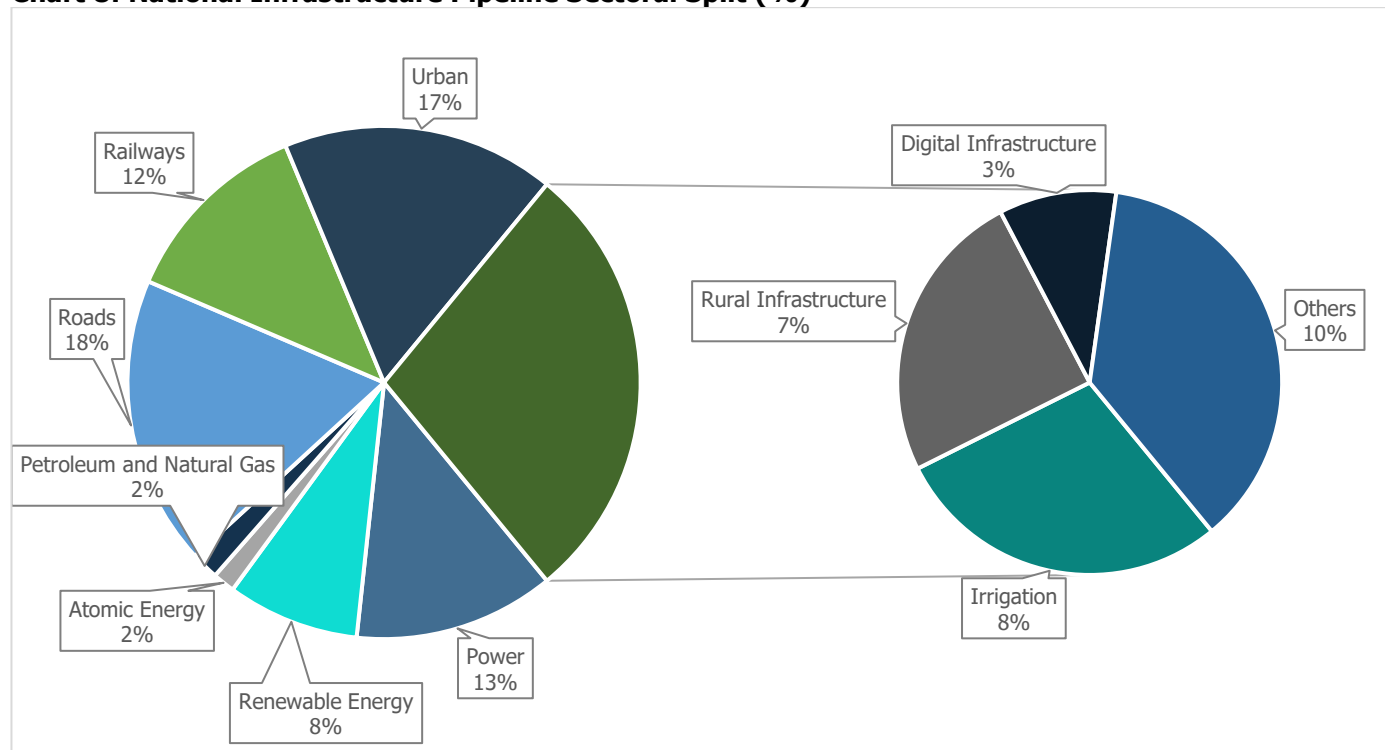


Source: MOSPI

1.2.8 National Infrastructure Pipeline

NIP was launched in December 2019 with a focus on infrastructure development to enable the country to achieve its target of USD 5 trillion economy by FY25 and USD 10 trillion by FY30. Infrastructure to play a major role with 3% contribution to the GDP by FY25 (Rs 11.21 lakh crore) and is expected to remain same or increase its share by FY30 (Rs 25.00 lakh crore).

A taskforce was created to set up the pipeline. In the final report submitted by the task force in April 2020, the pipeline covers multiple sectors, such as urban infrastructure, renewable and conventional energy, roads and railways that constitute nearly 71% of the projected total capex of Rs 11.21 lakh crore. It also includes investments in other sectors such as rural infrastructure, ports, airports among others. The proposed investments will be implemented by both the government and the private sector.

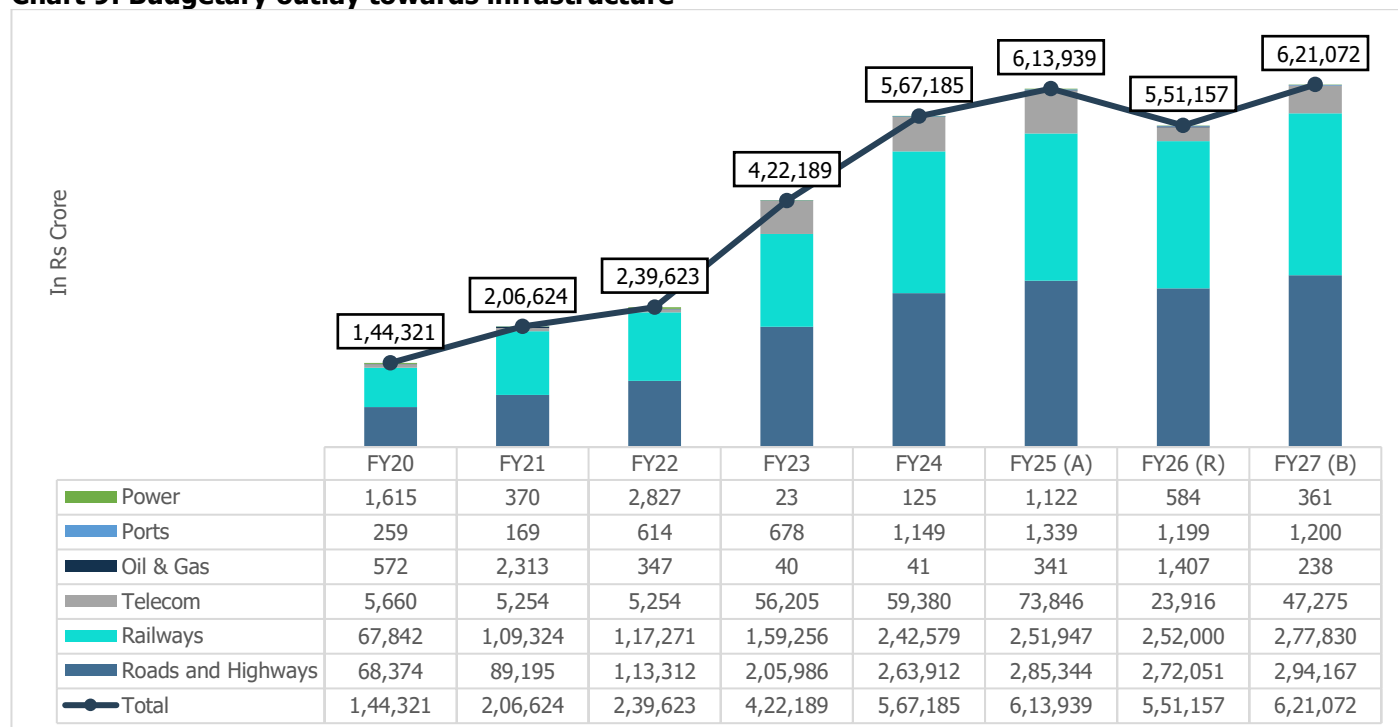
Chart 8: National Infrastructure Pipeline Sectoral Split (%)


Source: NITI Aayog's report on National Infrastructure Pipeline

During FY20–25, sectors-wise breakup of NIP investment is with energy contributing the highest at Rs 26,900 billion around 24% of the total plan followed by roads Rs. 20,338 billion at 18%, urban Rs. 19,193 billion at 17%, and railways with an investment of Rs. 13,676 billion, which contributes 12% amount to ~71% of the projected infrastructure investments in India.

1.2.9 Budgetary expenditure on Infrastructure

With the growing population, the long-term need for robust infrastructure is necessary for economic development. This generates the need for massive investments in the development and modernisation of infrastructure facilities, which will not only cater to the growing demand but will also ensure competitiveness in the global market.

Chart 9: Budgetary outlay towards infrastructure


Source: Union Budget FY26 document

Some of the key government infrastructure schemes include:

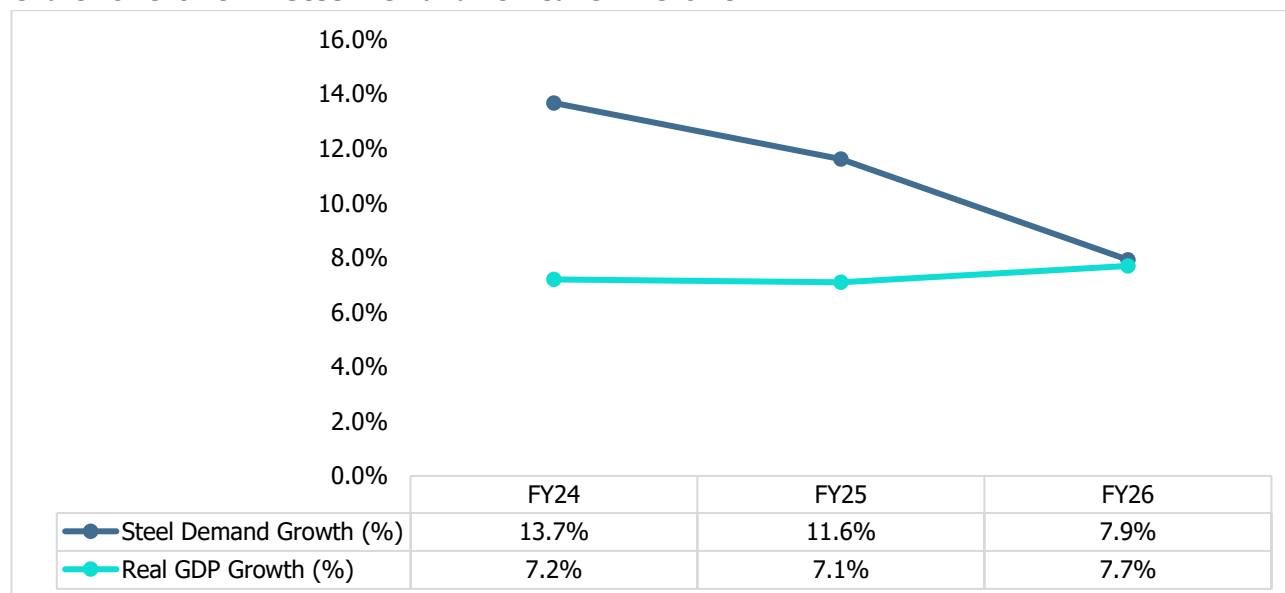
- **Infrastructure financing and asset monetisation (Budget 2026-27)**
 - **Infrastructure Risk Guarantee Fund** announced to strengthen private developer confidence by addressing construction-phase risk.
 - **Dedicated REITs for CPSE assets** announced to accelerate recycling and monetisation of significant CPSE real estate assets, supporting capital redeployment into infrastructure.
 - **Public capex push** continues, with higher Central Government capital expenditure for FY 2026-27 to sustain infrastructure-led growth.
- **Urban infrastructure and city development (Budget 2026-27)**
 - **City Economic Regions (CER)** introduced to support competitive, region-based urban infrastructure and economic agglomerations (Tier II and Tier III focus), with multi-year funding support.
 - **Urban Rejuvenation Mission (including AMRUT and Smart Cities)** continues as the principal umbrella for water supply, sewerage and urban infrastructure investments, with FY 2026-27 allocations provided in the Budget documents.
- **PMAY-Urban 2.0** remains the primary affordable housing programme for urban areas, with FY27 allocations provided in the Budget documents.

1.2.10 Correlation of Steel Demand with GDP Growth

The growth in India's steel demand closely mirrors the country's real GDP performance, underscoring the strong connection between these sectors. Additionally, increased investments in infrastructure and manufacturing play a crucial role in increasing demand for capital-intensive industries like steel. Domestic finished steel consumption has surged, driven by infrastructure investments and a recovery in the automotive sector, particularly with the rise of electric vehicles. This growing demand reflects broader economic recovery and expansion.

Robust GDP growth, fueled by investments in construction and manufacturing, supports the rising demand for steel. The construction, automotive, and infrastructure sectors are key drivers, with government initiatives like Make in India and the PM Gati Shakti plan propelling steel demand. Investments in railways, airports, and metro rail projects, with allocations of Rs 3.09 trillion for the Ministry of Road Transport and Highways and Rs 2.78 trillion for Indian Railways, further strengthen this trend. Additionally, the automotive sector, driven by strong support for electric vehicles, and the growing two-wheeler and three-wheeler markets, fuel ongoing steel demand. As these sectors continue to expand, the demand for steel will remain tightly aligned with India's economic growth, fostering long-term, sustainable growth in steel consumption.

Chart 10: Growth in Steel Demand Vs Real GDP Growth



Source: MOSPI, CMIE

Note: For Real GDP growth, FY25 is First Revised Estimates and FY26 is Provisional Estimates

1.3 Concluding Remarks

From a macroeconomic standpoint, India remains one of the most resilient large economies in a challenging global environment. The IMF forecasts GDP growth for India at 6.70% in CY26, far outpacing the estimated CY26 global average of 3.06%. This performance reflects a combination of strong domestic fundamentals, policy stability and a sustained focus on capital formation. While the global economy continues to face uncertainty from geopolitical conflicts, commodity price volatility and rising public debt, India's diversified growth drivers, stable policy framework and expanding export ecosystem position it well to navigate these headwinds.

The key sectors with potential exposure to changes in US tariff policy include engineering goods, electronics, gems and jewellery, pharmaceuticals, textiles and automobiles/auto components, given their material export linkages to the US market.

As of June 2026, India-US trade negotiations are ongoing, and the final Bilateral Trade Agreement (BTA) has not yet been concluded. In February 2026, both countries announced a framework for an Interim Agreement aimed at promoting reciprocal and mutually beneficial trade. Under this framework, the United States proposed an 18% reciprocal tariff rate on Indian goods, while also indicating the possible removal of tariffs on sectors such as generic pharmaceuticals, gems and diamonds, aircraft parts and certain engineering products, subject to finalization of the agreement.

India continues to strengthen its position through diversification of trade partnerships and expansion of FTAs with the EU, UK, EFTA and other economies. This, along with India's growing manufacturing capacity and supply-chain integration, supports its competitiveness in sectors such as electronics, textiles, pharmaceuticals and auto components.

A ceasefire agreement between the US and Iran is expected to be finalized soon; however, a permanent truce between the two remains uncertain. The Iran conflict has led to an increase in prices of consumer products in India due to potential higher fuel, freight and input costs, which can make everyday goods like FMCG items, plastics and packaged foods more expensive. Disruptions in shipping and fertiliser supplies are also pushing up food prices, affecting imports of agricultural inputs and leading to costlier food products for consumers. Overall, delays in trade routes and rising logistics costs are reducing availability and increasing prices of imported consumer goods, especially from Gulf-linked supply chains. Overall, this is leading to supply shortages, rising costs, and production slowdowns in India's chemical and pharma sectors, with the impact likely to worsen if the conflict continues. Prolonged geopolitical tensions or conflict in the region could lead to sustained increases in crude oil and LPG prices, which may translate into higher input costs across industries and contribute to inflationary pressures in the Indian economy.

Domestically, a below-normal monsoon and potential El Niño conditions may contribute to higher food inflation, which could affect household spending and consumer sentiment, particularly in rural markets. Elevated prices of essential commodities may reduce discretionary spending; however, strong domestic demand, urban consumption, and rising income levels are expected to support overall growth in the consumer sector.

Policy momentum remains strong. The 56th meeting of the GST Council marked a major structural reform by proposing a simplified two-rate system of 5% and 18%, replacing the earlier four-slab framework, along with a 40% demerit rate for luxury and sin goods. This rationalisation aims to reduce compliance burdens, enhance efficiency, and stimulate private consumption. Together with recent revisions in personal income tax rates, these measures are projected to release savings exceeding Rs 2.5 lakh crore into the economy, supporting demand and easing inflationary pressures.

The Union Budget's allocation of Rs 12.20 lakh crore for capital expenditure in FY27 further reinforces the government's commitment to infrastructure-led growth. Public investment is expected to catalyse private sector activity, evidenced by rising project announcements and growing imports of capital goods. Improving rural demand, supported by healthy monsoon progress, favourable sowing conditions, and adequate reservoir levels, provides additional tailwinds for consumption and investment.

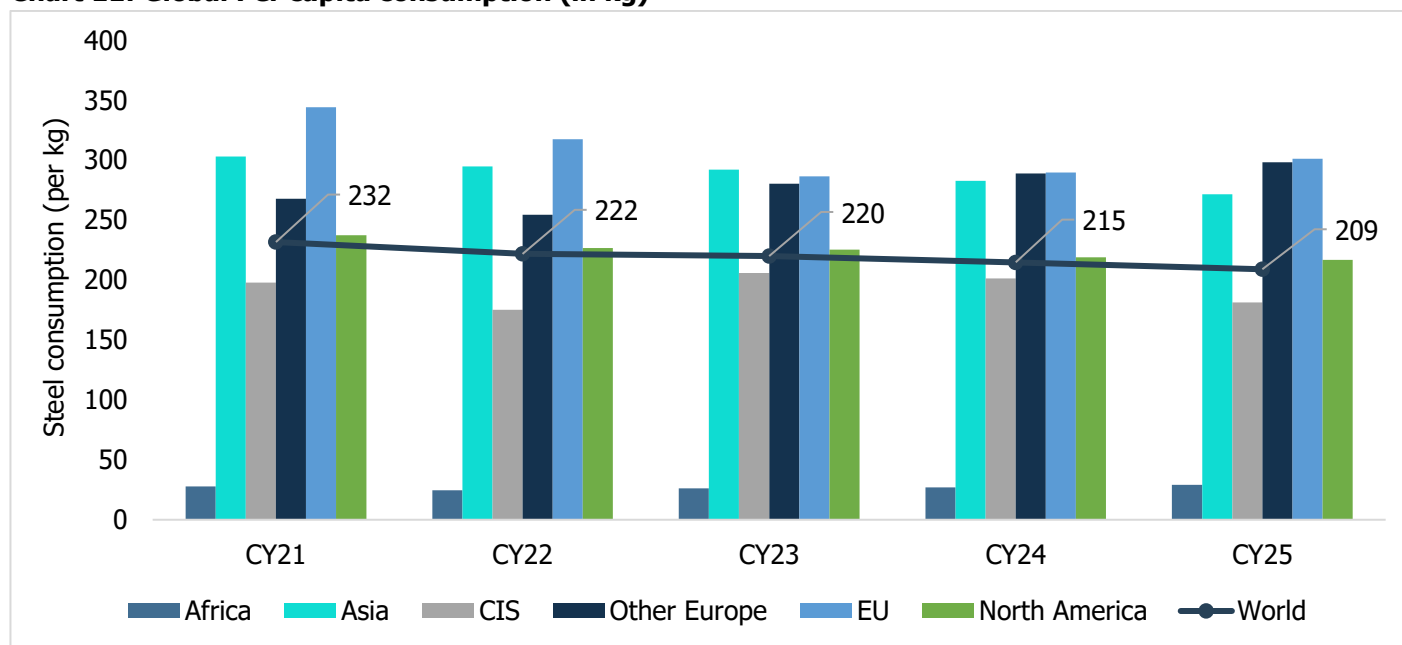
2 Global Steel Industry

2.1 Overview of the Global Steel Industry

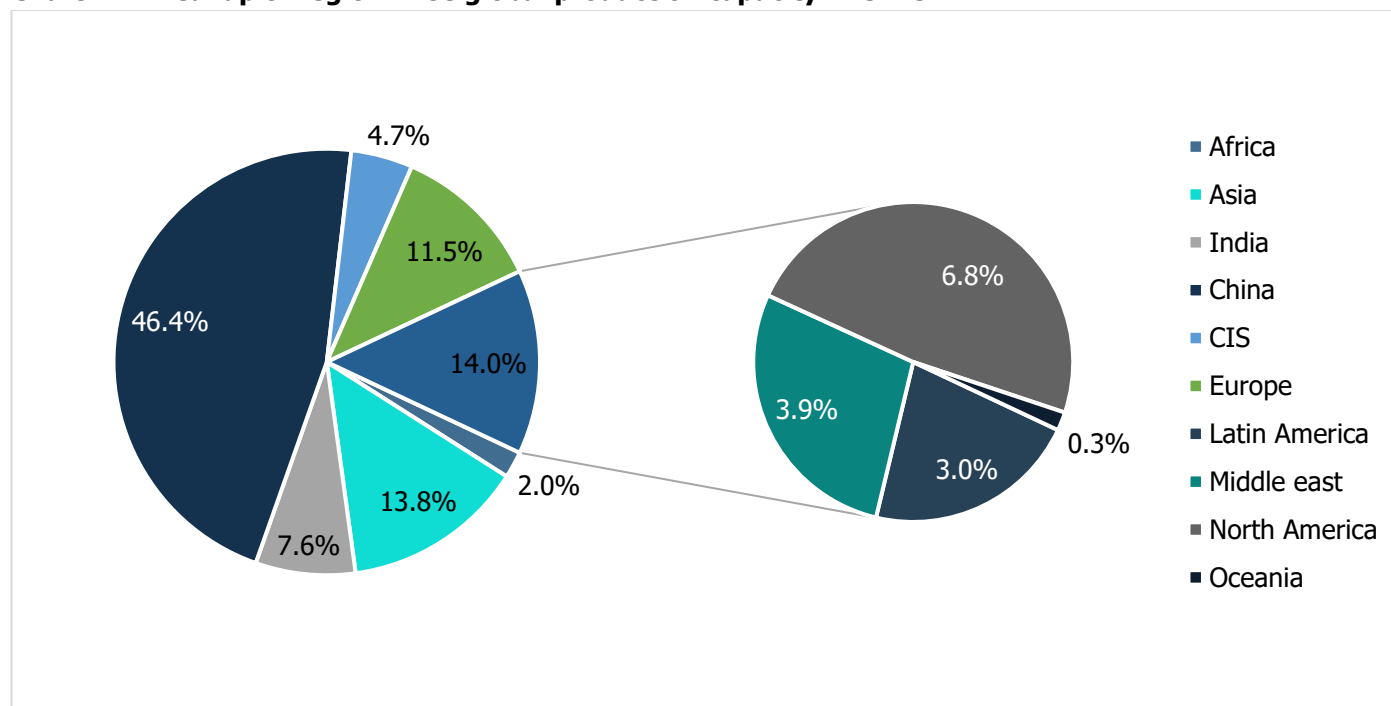
Steel plays a pivotal role in construction and engineering, serving a wide range of industries including automotive, infrastructure, consumer goods, mechanical and medical equipment, packaging, and household utensils. Industry professionals consistently prefer steel as a building material due to its widespread availability, cost-effectiveness, strength, durability, ductility, and recyclability. According to the World Steel Association, manufacturers across the globe produce over 3,500 grades of steel, each offering distinct physical, chemical, and environmental properties tailored to specific applications.

Global per capita steel consumption has declined steadily since CY21. By CY25, consumption dropped to 209 kg, down from 220 kg in CY23. This downward trend reflects a combination of cyclical and structural factors. The most significant driver has been the prolonged slowdown in China's property and construction sector, which historically accounted for a substantial share of global steel consumption. As China's urbanization and infrastructure build-out slow, steel intensity has moderated, reducing global demand growth. At the same time, weaker manufacturing activity in several developed economies, elevated interest rates, economic uncertainty and slower investment in construction have constrained steel consumption across major regions. Increased material efficiency, greater use of high-strength steels requiring lower volumes, and a gradual shift toward circular economy practices and scrap-based production have also reduced steel requirements per unit of economic output. Consequently, growth in emerging markets such as India has not been sufficient to fully offset the moderation in mature steel-consuming economies.

Chart 11: Global Per capita consumption (in kg)



Source: World Steel Association

Chart 12: Breakup of region-wise global production capacity in CY25


Source: Organisation for Economic Co-operation and Development (OECD)

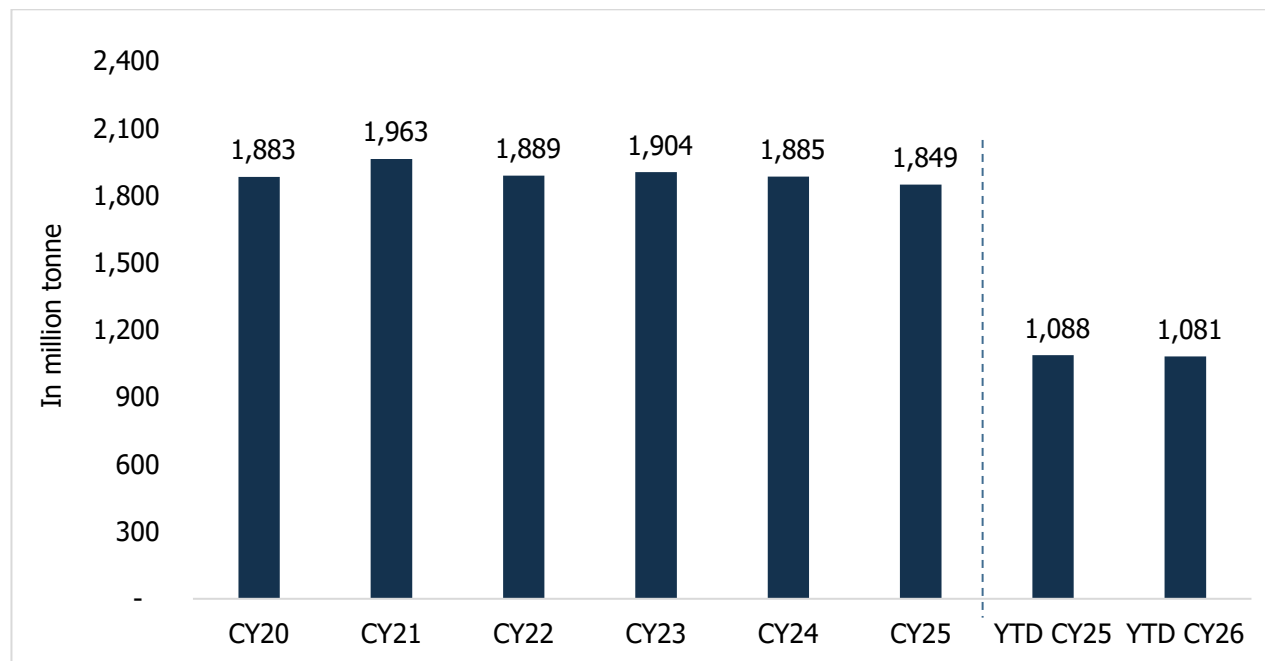
In 2025, global steel producers operated with a combined production capacity of 2,445.1 million metric tonnes (MT), with Asia accounting for the largest share at 68%. China led the global steel industry, dominating capacity, production, and consumption. It maintained the highest steel production capacity worldwide, followed by producers in the European Union and India.

2.2 Global Production of Steel

Global crude steel production grew at a compound annual growth rate (CAGR) of -0.4% over the past six years, decreasing from 1,883 million tonnes (MT) in CY20 to 1,849 MT in CY25. Additionally, in the first seven months of CY26 (January–July), producers reduced output by 0.6% compared to the same period in CY25. This decline was primarily because reductions in a few large regions outweighed growth elsewhere. Global production fell year-on-year for the quarter, with Asia & Oceania down (driven mainly by China), along with declines in the EU and Russia/CIS/Ukraine and the Middle East. China was the biggest drag as mills cut output amid weak property/construction demand, seasonal disruptions around Lunar New Year, weaker margins and reduced export flexibility, contributing to a sharper Q1 decline in Chinese steelmaking. Russia/CIS output remained pressured by sanctions-linked constraints, weak domestic demand and tight financial conditions, limiting production momentum. The Middle East saw a sharp March shock and broader disruption linked to conflict-related capacity and logistics constraints, pulling the quarter down. In Europe, persistently weak demand and high cost pressures kept production subdued entering 2026. Global crude steel production declined by around 2% in CY25, mainly due to reduced output in major producing regions such as China and Europe. China witnessed a notable drop in production amid a prolonged slowdown in its real estate sector, which weakened construction-led steel demand. At the same time, sluggish industrial activity and weak manufacturing demand in Europe further contributed to the decline. Additionally, persistent global overcapacity and cautious production strategies by steelmakers, in response to uncertain demand conditions, limited output growth. Despite this decline, global steel demand is expected to stabilise in CY26 and recover in CY27.

Global crude steel output experienced a brief rebound in CY23, rising by 0.8% compared to the previous year. That was after a steep 4% decline in CY22, during which time output declined from 1,963 MT in CY21. That decline was powered by China's slowdown, US and European monetary tightening, through-the-roof input prices due to inflation, and general supply chain disruptions resulting from the Russia-Ukraine war.

Chart 13: Global Crude Steel Production



Source: World Steel Association

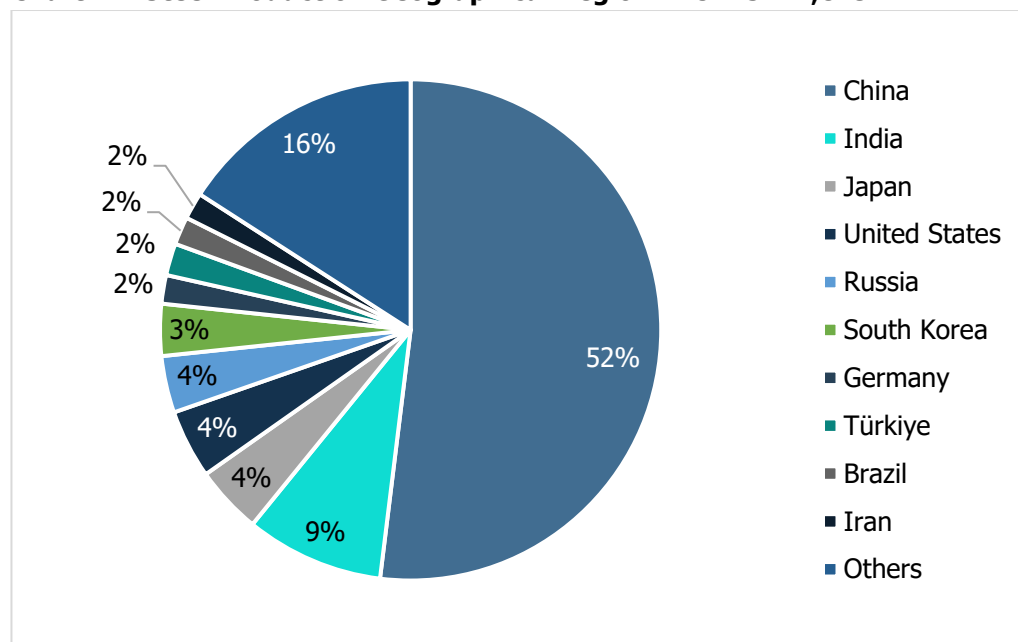
Note: YTD CY25 refers to the period from January 2025 - July 2025

YTD CY26 refers to the period from January 2026 - July 2026

In CY25, global crude steel production totalled 1,849 MT. China retained its position as the largest producer, contributing 52% of the total output. However, Chinese production declined by 4.4% year-on-year to 961 MT, down from 1,005 MT in CY24. This reduction resulted from persistent global overcapacity and cautious production strategies by steelmakers, in response to uncertain demand conditions.

India ranked as the second-largest producer in CY25, accounting for 9% of global output. The United States, Japan, and Russia followed, each contributing approximately 4% to total production.

Global crude steel production is likely to see modest growth in the next few years due to economic uncertainty and geopolitical risks. China's output may remain muted due to its real estate slowdown and environmental policies, while India is expected to drive growth, backed by rising infrastructure and construction demand. Longer-term, green steel initiatives and decarbonisation efforts could reshape the industry, particularly in advanced economies.

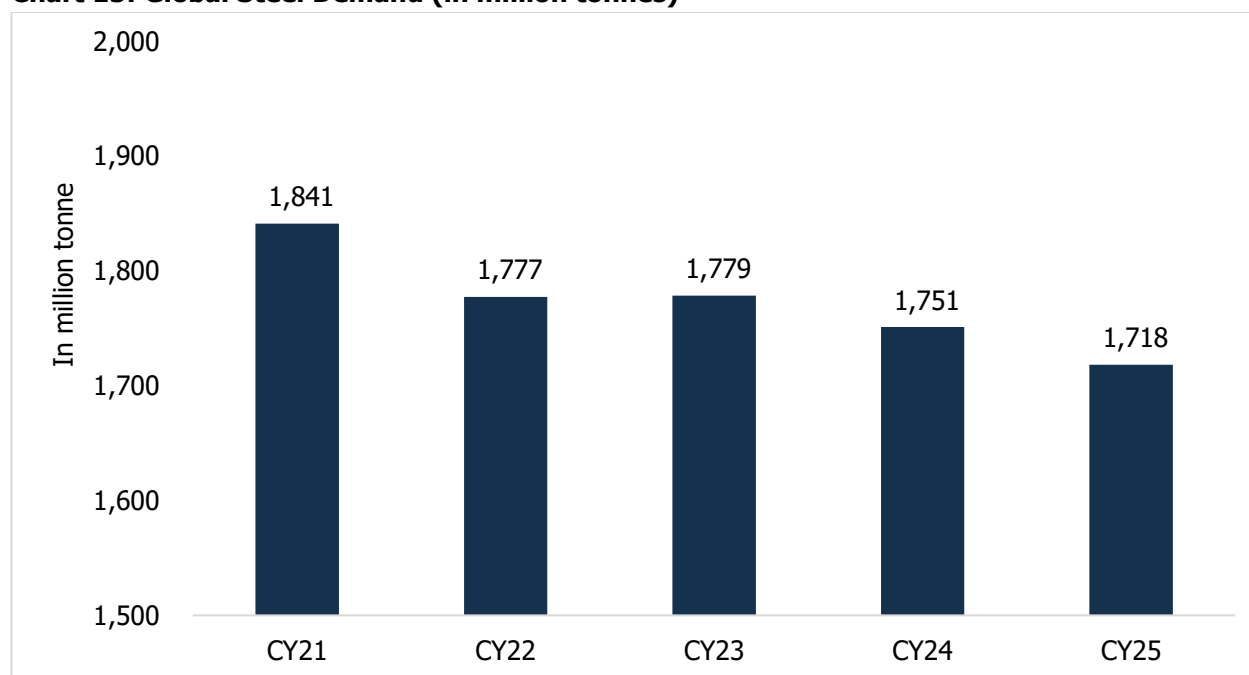
Chart 14: Steel Production Geographical Region in CY25 – 1,849 MT


Source: World Steel Association

2.3 Global Steel Demand

Industries such as energy, construction, automotive, transportation, infrastructure, packaging and machinery rely heavily on steel for their operations. In CY25, global finished steel consumption declined by 2% year-on-year to 1,718 million tonnes (MT). The decline suggests that end-use sectors remain under pressure, particularly construction, real estate, and heavy manufacturing. Demand appears constrained by cautious investment sentiment, tighter financing conditions, and slower industrial activity across key steel-consuming regions. While infrastructure spending, energy transition projects, and emerging-market development may provide some support, these drivers do not appear sufficient to offset broader weakness in traditional steel demand. Overall, CY25 reflects a subdued demand environment, with the market likely focused more on stabilisation and selective regional recovery than broad-based growth.

Global finished steel consumption is expected to recover gradually over the next few years, driven by infrastructure spending, energy transition projects, and automotive recovery in several regions. While China's demand outlook remains cautious due to real estate headwinds and environmental constraints, India is positioned for strong growth, supported by government's infrastructure programs and industrial expansion. Additionally, green technologies, renewable energy projects, and electric vehicles (EVs) are likely to create new avenues for steel demand globally. However, near-term growth may remain moderate given geopolitical tensions and persistent economic uncertainty in developed markets.

Chart 15: Global Steel Demand (in million tonnes)


Source: World Steel Association

2.4 Global Steel Prices Trend

International steel prices increased by 4.1% q-o-q in the quarter ended June 2026, reaching USD 529 per tonne. This marked a gradual recovery from the weakness observed through June 2025, when prices had declined to USD 488 per tonne amid weakening demand across key markets. Prices subsequently declined marginally by 0.5% q-o-q to USD 498 per tonne in December 2025, reflecting subdued global demand and continued weakness in China's property and construction sectors. Prices then increased by 2.0% q-o-q to USD 508 per tonne in March 2026, supported by improved restocking activity and firmer raw material prices, followed by a stronger 4.1% q-o-q increase in June 2026, driven by improved sentiment in select export markets and higher raw material costs. However, the recovery remained limited as construction and real-estate demand continued to remain subdued, particularly in China. Export-focused producers in Japan and South Korea also continued to face pressure from muted domestic demand and intensified regional competition.

As of March 2025, international steel prices stood at USD 506 per tonne, marking a decrease of 4.4% q-o-q and 14.1% y-o-y. This price decline reflects a continued weak demand and subdued economic activity in global steel-consuming hubs, with China contributing to increased global supply amidst its domestic slowdown.

Steel prices increased by 3.6% q-o-q for the quarter ended December 2024, following an 8.6% drop in prices for the quarter ended September 2024. In the quarter ended June 2024, prices had decreased by 5.1% q-o-q to USD 560 per tonne due to China's increased supply in the global market and weak domestic demand. Prices rose slightly by 0.7% to USD 589 per tonne for the quarter ended March 2024, driven by a minor recovery in global steel demand.

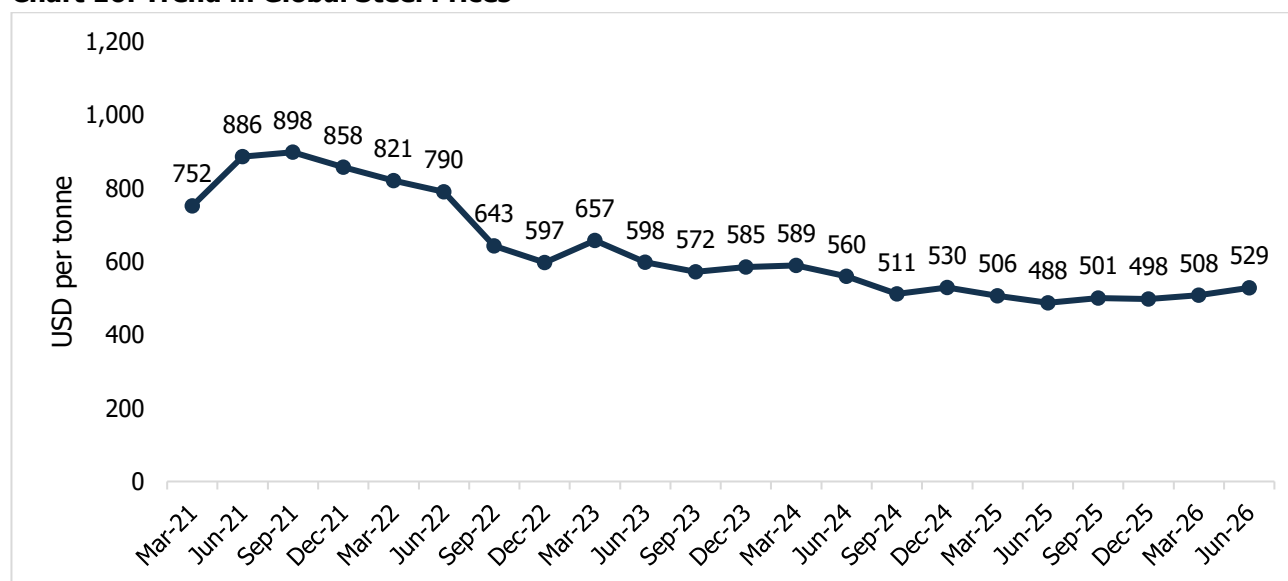
During FY24, global steel prices had fallen by 11% y-o-y, standing at USD 572 per tonne in the quarter ended September 2023. The weak demand from China, which accounts for half of the world's steel production and consumption, particularly due to a decline in real estate investments, led to a surge in China's steel exports, thereby exerting downward pressure on international steel prices.

In FY23, global steel prices averaged around USD 672 per tonne, marking a 22.4% decline compared to the previous year. This price decline followed a period of significant price rises, particularly after December 2020, driven by disruptions

in supply chains caused by the COVID-19 pandemic and rising raw material costs. The Russia-Ukraine war, which started in February 2022, further fuelled this price escalation. However, from June 2022, prices started to gradually decrease, falling to USD 597 per tonne in December 2022, primarily due to weak demand from China, caused by lockdowns, COVID-19-related restrictions, and sluggish global demand. A drop in iron ore and coking coal prices also contributed to this decline.

From December 2022 onward, prices began to rise once again, supported by the relaxation of COVID-19 restrictions in China and expectations of demand recovery. By March 2023, steel prices had increased by 10.1% quarter-on-quarter, reaching USD 657 per tonne.

Chart 16: Trend in Global Steel Prices



Source: CMIE

3 Indian Steel Industry

3.1 Overview of the Indian Steel Industry

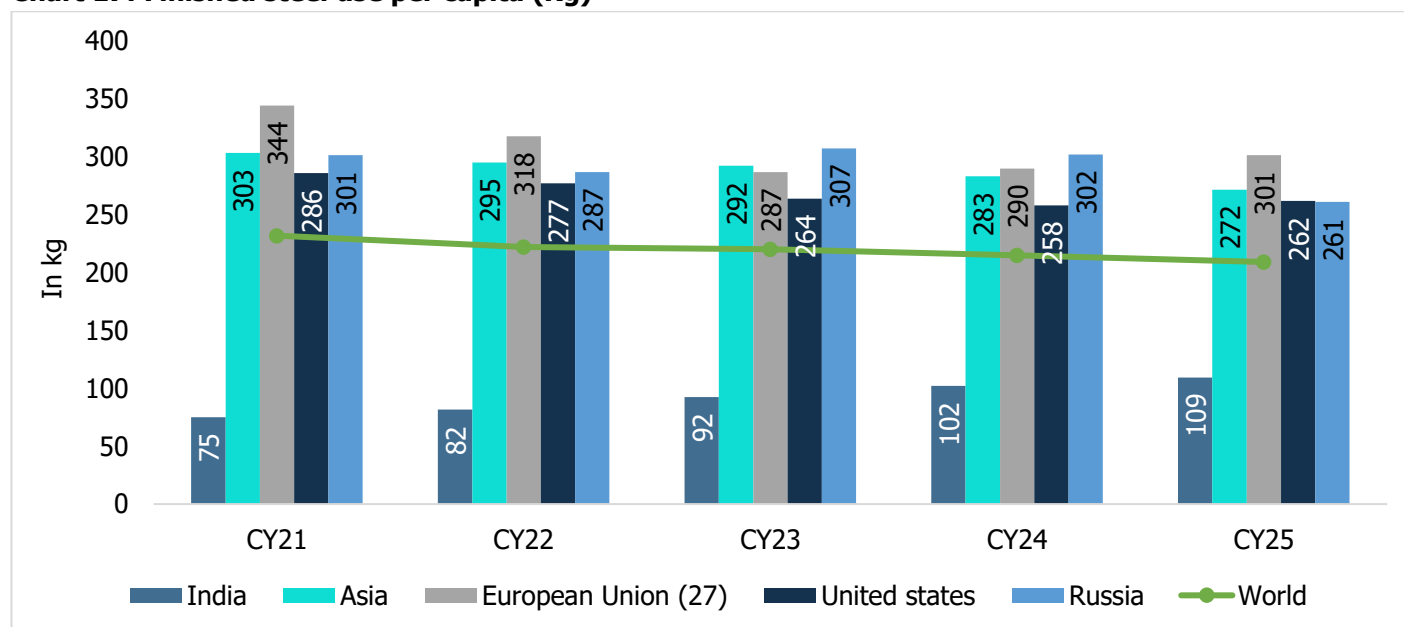
As of FY27 (April–June 2026, provisional), India's installed steel production capacity stood at 222 MTPA (Million Tonnes Per Annum). The country ranks as the second-largest consumer of finished steel, with consumption reaching 164 MT in FY26. This growth stems from the domestic availability of key raw materials such as iron ore, cost-effective labour, and strong demand from sectors like construction, consumer durables, capital goods, railways, real estate, and automobiles. Additionally, India's extensive coastline has facilitated both exports and imports, positioning the country as a major player in the global steel industry.

In CY25, India's per capita finished steel consumption stood at 109.2 kg, well below the global average of 209 kg. To address this gap, the Government of India, under its Atmanirbhar Bharat vision, introduced the National Steel Policy 2017. The policy targets a steel-making capacity of 300 MT by CY30 and aims to raise per capita steel consumption to 160kg. These goals highlight the sector's untapped domestic potential and its critical role in driving India's future economic growth. India has attracted substantial investment into its steel sector through initiatives such as joint ventures and 100% foreign direct investment (FDI). These efforts have accelerated the industry's expansion and integration into global value chains.

The steel industry contributes meaningfully to all facets of the economy including GDP growth, industrial output, and infrastructure development. It generates a strong economic ripple effect, with an output multiplier of 1.4x on GDP and an employment multiplier of 6.8x.

Steel plays a vital and versatile role in modern life, significantly enhancing convenience and serving as a foundational material across manufacturing sectors. As a core input for infrastructure and industrial development, steel underpins national economic growth and often acts as a barometer of economic progress.

Chart 17: Finished steel use per capita (Kg)



Source: World steel association

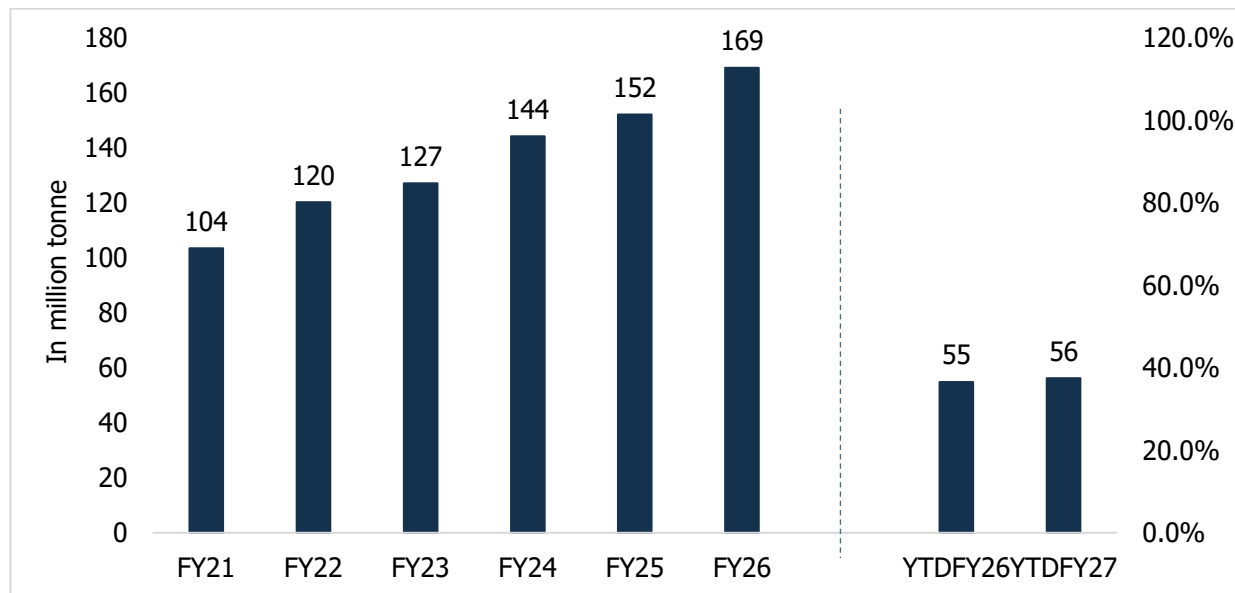
3.2 Indian Crude Steel Production

India's domestic crude steel producers expanded output at a compound annual growth rate (CAGR) of 10.3% over the past six years, increasing production from 104 million tons (MT) in FY21 to 169 MT in FY26. During the YTFY27 (April–July 2026), producers further accelerated growth, recording a 2.6% year-on-year increase. In FY26, crude steel production rose by 11.2% to reach 169 MT, supported by sustained infrastructure development, industrial expansion, and rising manufacturing activity.

Government-led initiatives including capacity-enhancement schemes and policy incentives played a key role in driving output growth. Steel manufacturers also expanded plant capacities, with large players achieving 88% capacity utilization in FY26. Most major producers have announced plans to further increase crude steel capacity, backed by improved financial health across the industry. This financial stability has positioned companies to comfortably undertake capital expenditure for future expansion.

Under the National Steel Policy, the government aims to scale production capacity to 300 MT by FY31, to meet the projected steel demand of 230 MT. This ambitious target reflects the sector's strategic importance in supporting India's long-term economic growth.

Chart 18: Domestic Crude Steel Production



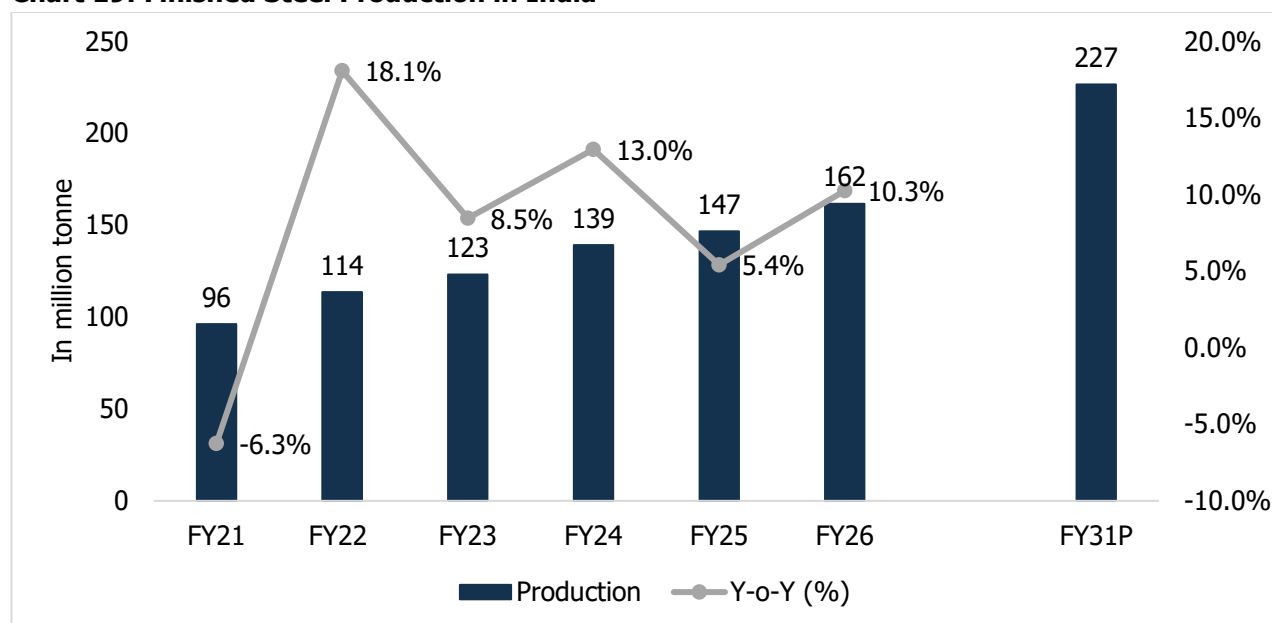
Source: CMIE

Note: YTFY26 refers to April 2025-July 2025

YTFY27 refers to April 2026-July 2026

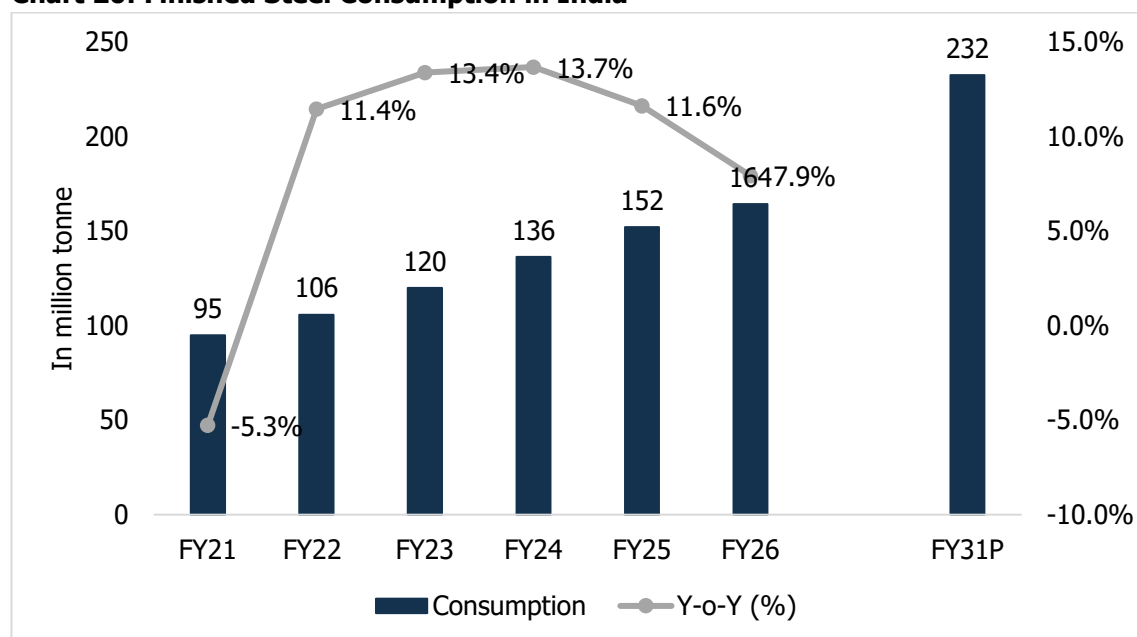
3.3 Indian Finished Steel Production and Consumption

In the last 6 years, the finished steel production has grown at a CAGR of 10.9% to 162 MT in FY26 from 96 MT in FY21. The growth in production has been supported by the rising domestic steel consumption due to increasing economic activities in the country. This is further supplemented by increased infrastructure and construction spending by the government and a rise in automobile and consumer durable demand, among others.

Chart 19: Finished Steel Production in India


Source: CMIE; Note: P-Projection

The domestic finished steel consumption has increased at a CAGR of 11.6% to 164 MT in FY26 from 95 MT in FY21. During FY26, India's consumption of finished steel increased by 7.9% compared to the same period last year, driven by strong domestic demand, rise supported by increased activity in infrastructure, construction, railways and manufacturing sectors. The government's continued focus on large-scale infrastructure development, urbanisation and capital expenditure played a crucial role in boosting steel demand. Additionally, sustained industrial momentum and expansion in end-use sectors ensured stable consumption growth.

Chart 20: Finished Steel Consumption in India


Source: CMIE; Note: P-Projection

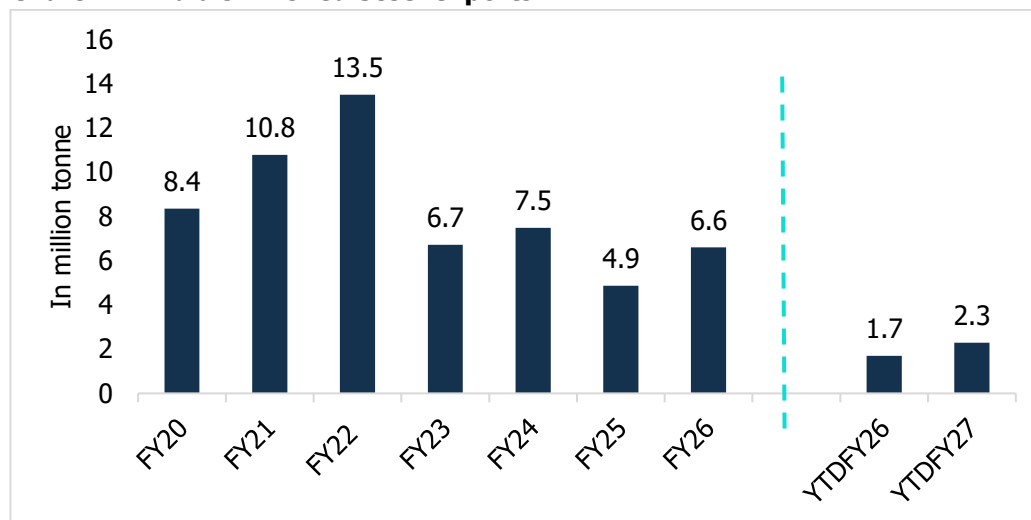
3.4 Trend in Steel Trade

Exports:

India's steel trade dynamics have shifted significantly in recent years. During FY26, Indian steel exporters increased shipments by 35.9% Y-o-Y. This rise was driven by improved global competitiveness of Indian steel and diversification into key markets such as the Middle East, Europe, and Southeast Asia. Additionally, a sharp decline in imports and better price realizations supported higher export volumes. Furthermore, sustained capacity expansion and strong production growth enabled surplus availability for exports. The same momentum is continued in YTD FY27 with a 35.0% increase in exports compared to YTD FY26.

In FY25, exports fell sharply by 35.1% year-on-year, continuing the downward trend that began in FY23. Weak foreign demand, intensified competition from low-priced Chinese steel particularly in the Middle East and Vietnam and declining shipments to key markets like Italy drove this decline.

Chart 21: India's finished Steel exports

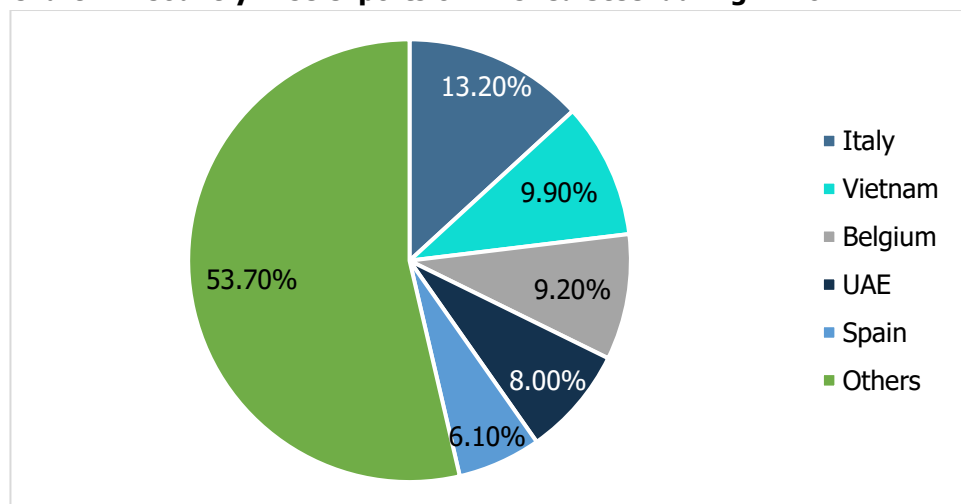


Source: CMIE

Note: YTD FY26 refers to April 2025 – July 2025

YTD FY27 refers to April 2026 - July 2026

The exports to top 5 countries (Italy, Vietnam, Belgium, UAE, and Spain) accounted to 46% of the total outbound shipments from India during FY26.

Chart 22: Country wise exports of finished Steel during FY26


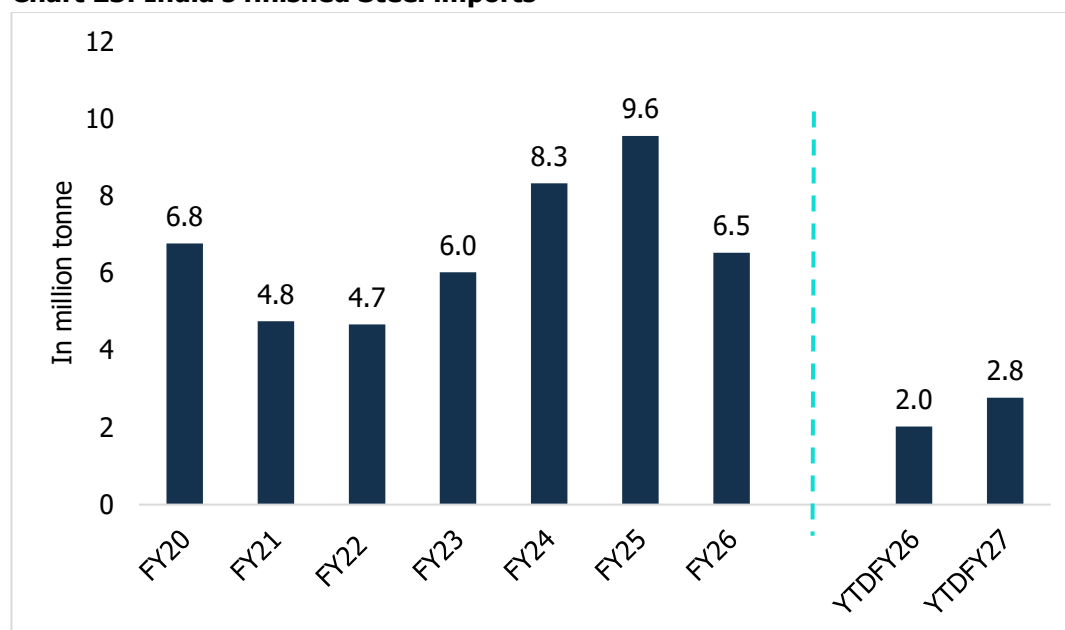
Source: CMIE

Imports:

During YTFY27, imports increased by 36.6%, supported by sustained growth in domestic steel demand, which outpaced the increase in domestic finished steel production during the period. The resulting supply-demand gap, together with the availability of imported steel across key flat and long steel categories, contributed to higher import volumes. In FY26, import volumes fell by 31.7% y-o-y, driven primarily by policy interventions and improving domestic competitiveness. The government imposed safeguard duties of around 12% on certain steel products and strengthened quality control measures, which discouraged cheaper imports. Additionally, a narrowing price gap between imported and domestic steel made local products more attractive. Strong domestic production growth also reduced reliance on imports.

In FY25, Indian importers increased steel imports by 14.8% y-o-y, supported by a surge in low-cost flat steel products and specialty grades. This followed a sharp 38.2% rise in FY24, when imports jumped from 6 million tonnes (MT) in FY23 to 8.3 MT. The spike was largely attributed to low-cost shipments from Russia and increased volumes from China. After four consecutive years as a net exporter, India became a net importer of steel in FY24.

India's steel import patterns have evolved significantly in recent years, primarily driven by rising domestic demand for special-grade steel used in end-user segments such as automobiles, defence, shipbuilding, power, and railways. Domestic manufacturers continued to rely on imports to meet the growing need for high-grade materials that were either unavailable or in short supply locally.

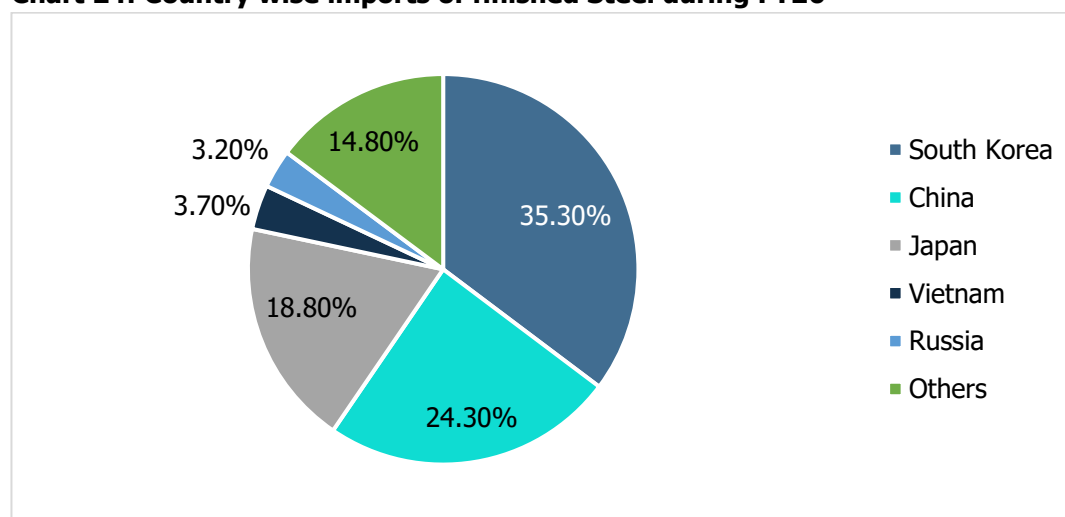
Chart 23: India's finished Steel imports


Source: CMIE

Note: YTD FY26 refers to April 2025 – July 2025

YTD FY27 refers to April 2026 - July 2026

The imports to top 5 countries (South Korea, China, Japan, Vietnam, and Russia) accounted to 85% of the total outbound shipments from India during FY26.

Chart 24: Country wise imports of finished Steel during FY26


Source: CMIE

3.5 Domestic Price Trends

Domestic finished steel prices in the quarter ending June 2026 increased to Rs 73,216 per tonne, extending the recovery observed in March 2026, when prices had risen to around Rs 66,783 per tonne from the lower levels recorded in the preceding quarter. The recovery appears to have been supported by strengthening domestic steel demand across infrastructure, construction and manufacturing, with demand growth remaining firm relative to the pace of domestic finished steel production. This resulted in more supportive demand-supply dynamics and contributed to an improvement

in domestic market conditions. In addition, measures affecting steel imports, including safeguard duties on specified steel products, may have provided some support to domestic pricing by moderating import competition. The broader recovery also reflects changes in global steel market conditions and domestic trade flows, although price movements remain subject to changes in domestic demand, production, import volumes and international steel prices.

In contrast, prices during the quarter ended December 2025 remained relatively subdued, declining to around Rs 60,121 per tonne. The weakness during this period was consistent with relatively softer demand conditions, adequate domestic availability and continued availability of imported steel. During the quarter ended September 2025, average domestic finished steel prices declined by 3.7% q-o-q and 4.9% y-o-y. In the quarter ending June 2025, prices increased by 4.1% q-o-q to Rs 65,413 per tonne, supported in part by the introduction of safeguard measures on specified steel imports, which provided some support to domestic market conditions. In comparison, prices in March 2025 stood at Rs 62,811 per tonne, representing a marginal q-o-q decline. The decline observed through FY24 and FY25 was influenced by a combination of softer global and domestic demand, lower international steel prices, higher import availability and subdued export conditions.

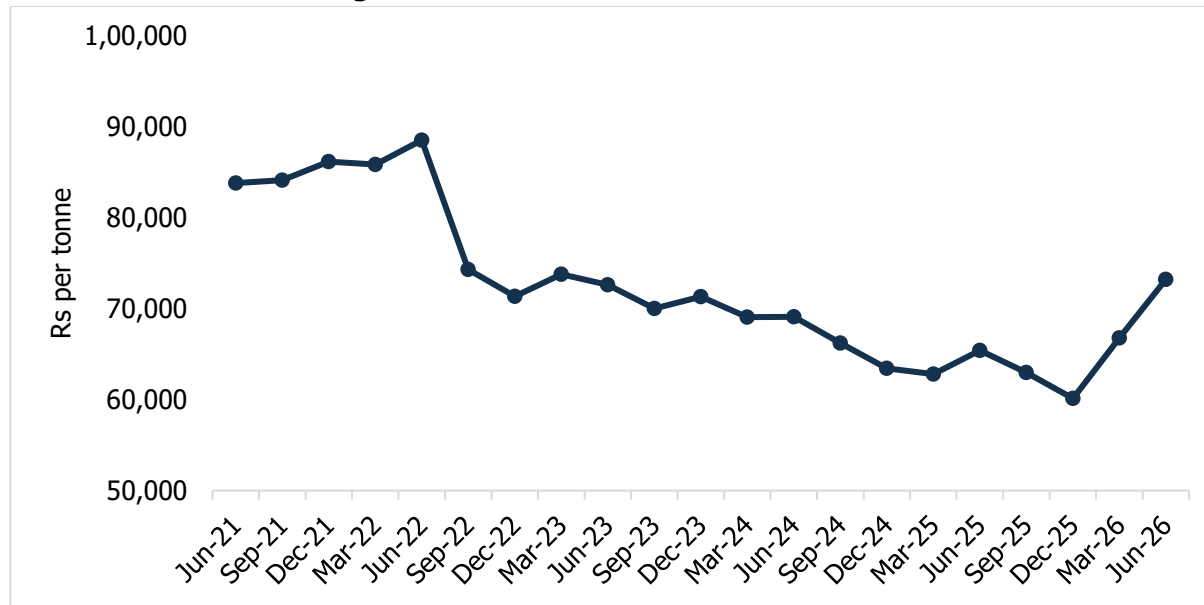
Earlier, in March 2024, prices declined to Rs 69,051 per tonne from Rs 71,320 per tonne in December 2023, indicating that the preceding price improvement was not sustained. During FY24, domestic steel prices remained under pressure despite certain supportive domestic and global factors, reflecting weak external market conditions and competitive supply.

In September 2023, prices declined to Rs 70,001 per tonne, representing a 5% q-o-q decrease and a 6% y-o-y decline. The softness was broadly consistent with international steel market trends and weaker demand conditions, alongside lower raw material prices.

The downward trend had commenced earlier in FY23, when prices declined materially from the June 2022 peak of Rs 88,498 per tonne to Rs 71,326 per tonne in December 2022. The decline followed the Government's imposition of export duties on certain steel products during May-November 2022, which affected export economics and contributed to greater availability of steel in the domestic market. Softer iron ore and coking coal prices during the period also reduced input-cost pressures, contributing to lower domestic steel prices.

Overall, the recovery from December 2025 trough through March and June 2026 indicates an improvement in domestic steel-market conditions, supported by firmer demand and more favorable demand-supply and trade dynamics. However, the sustainability of the recovery remains dependent on prevailing domestic and global market conditions, including steel demand, production, import flows, raw material prices and international steel prices.

Chart 25: Domestic Average Finished Steel Prices



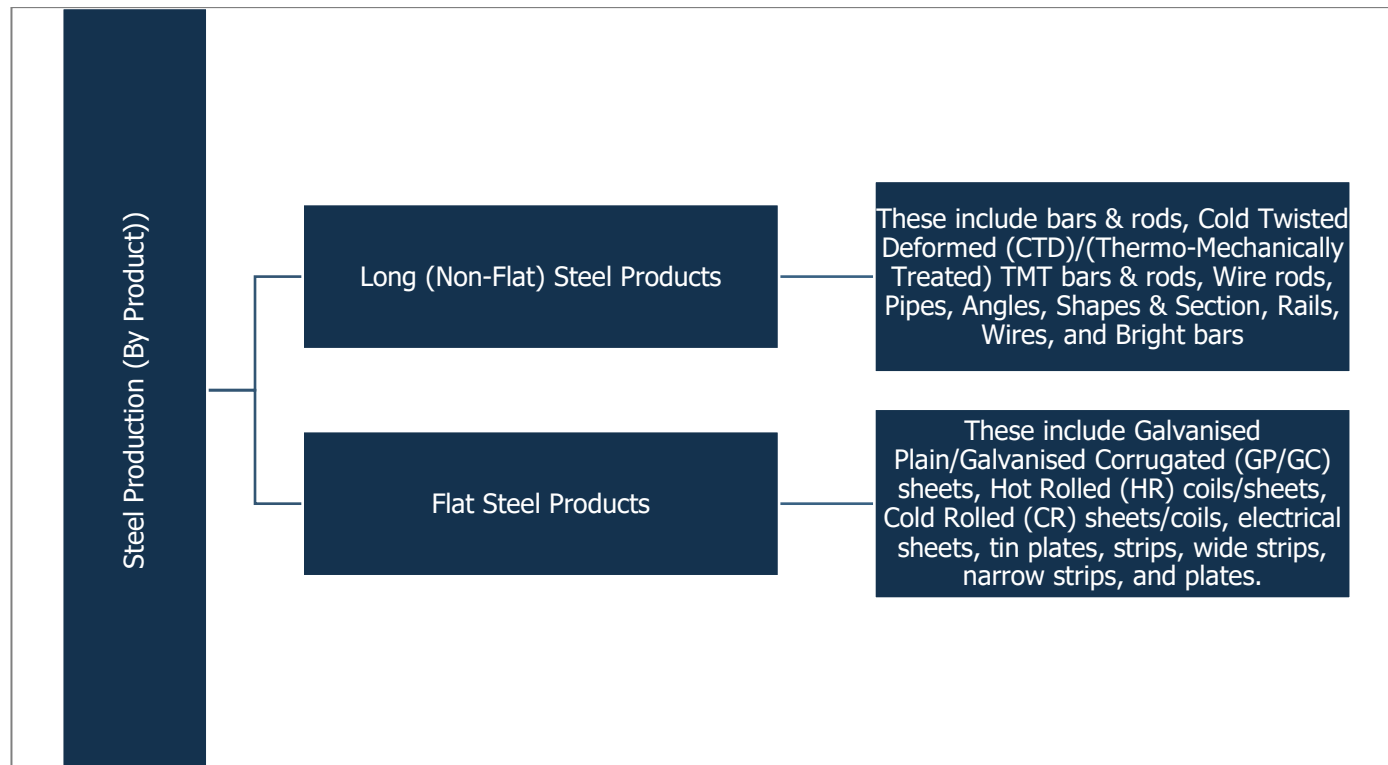
Source: CMIE

4 Indian Re-rolled Structural Steel Products Market

4.1 Overview

By product, steel can be divided into long (non-flat) and flat products, both of which have either a hot-rolled, cold-formed, or coated surface.

- Long (Non-Flat) Steel products:** Long steel products encompass a variety of forms primarily used in construction, mechanical engineering, and energy sectors. Typically, available in straight lengths or custom-cut sizes, with wire rods being the exception, often wound in irregular coils, these products undergo shaping or sizing processes from hot-rolled or forged blooms, billets, or pencil ingots to achieve their final form. Different types of long products include bars & rods, CTD/TMT bars & rods, Wire rods, Angles, Shapes & Section, Rails, Wires, and bright bars for railways. These versatile materials offer durability and structural integrity, serving as essential components in various infrastructure projects and industrial applications worldwide.
- Flat Steel products:** Flat steel products are the result of processing slabs or thin slabs in rolling mills using flat rolls, offering versatility in applications across automotive and truck manufacturing, heavy machinery, construction, packaging, and appliances. These finished steel products, supplied in Hot Rolled (HR), Cold Rolled (CR), or coated conditions, cater to diverse needs. The product range encompasses Galvanised Plain/Galvanised Corrugated (GP/GC) sheets, Hot Rolled (HR) coils/sheets, Cold Rolled (CR) sheets/coils, pipes, electrical sheets, tin plates, strips, wide strips, narrow strips, and plates. Whether it's providing structural support, corrosion resistance, or electrical conductivity, flat steel products play a crucial role in various industries globally, ensuring durability and reliability in a multitude of applications.



4.2 Price Trends

4.2.1 Angles

Pricing trends in Angles over the period September 2023 to June 2026 reflect the broader cyclicity of the domestic and global steel sector. The observed softening across most sizes during FY24–FY25 was attributable to heightened import penetration, particularly from China and Southeast Asia, combined with subdued global demand and inventory overhang, which exerted downward pressure on domestic prices despite healthy underlying consumption growth in India.

Further, moderation in raw material costs, including iron ore and coking coal, and seasonal demand disruptions such as monsoons and project slowdowns contributed to the decline in realizations, particularly in larger structural sections. The impact was more pronounced in sections such as 50×50×6 mm and 75×75×6 mm, where prices declined more materially through FY25 and remained under pressure through December 2025, indicating relatively higher sensitivity to changes in market supply-demand conditions.

However, the recovery observed from March 2026 indicates improving market sentiment, supported by policy measures such as safeguard duties, tightening supply conditions and sustained infrastructure-led demand, which enabled a partial price correction across categories. The upward movement continued through June 2026, with prices across sizes strengthening further and the recovery being particularly visible in larger sections. This improvement suggests a better balance between domestic demand and available supply, while continued infrastructure and construction activity has provided support to steel consumption. Nevertheless, prices remain exposed to fluctuations in import availability, global steel prices and raw material costs.

Table 4: Pricing Trends in Angles (In Rs/Tonne)

Size	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26	Jun-26
25*32*40*3 mm	61,130	60,500	60,633	61,655	60,843	62,280	62,375	62,247	60,669	60,550	62,078	62,370
45*5,50*5 mm	60,217	59,582	59,542	59,155	59,530	60,967	61,062	60,933	59,431	59,203	60,732	61,023
50*50*6 mm	62,819	63,373	60,663	63,998	59,359	59,477	58,488	59,353	56,088	54,145	60,610	63,266
60*6, 65*6 mm	59,750	59,120	59,142	60,555	59,130	60,567	60,687	60,563	59,053	58,800	60,328	60,620
75*75*6 mm	62,366	62,868	60,200	62,860	58,772	59,356	58,270	58,891	55,482	53,674	60,308	61,877

Source: CMIE

4.2.2 Joists

Pricing trends in joists over the period under review exhibit a moderate downcycle during FY24–FY25 followed by a recovery in early 2026, reflecting broader trends in the long steel segment. The decline in prices during FY24–FY25 can be primarily attributed to elevated import levels and global oversupply, particularly from China and Southeast Asia, which led to pricing pressure in the domestic market despite steady underlying demand.

Additionally, easing raw material costs and intermittent demand slowdowns, including seasonal factors such as monsoons impacting construction activity, contributed to subdued realizations across joist categories. The price correction was relatively consistent across sizes during FY25, with larger sections such as 175×85 mm also experiencing lower realizations toward the latter part of the period.

The subsequent uptick observed by March 2026 appears to be supported by policy interventions, including safeguard duties, improving infrastructure-led demand, and tighter domestic supply conditions, indicating a cyclical recovery in sectoral pricing. However, the trend moderated in June 2026, with prices for 150×75 mm and 160×80 mm remaining broadly stable compared with March, while the 175×85 mm section declined by around 6% during the quarter. The sharper correction in the larger section may reflect relatively weaker demand or greater price sensitivity in specific structural applications, indicating that the recovery remained uneven across joist categories. Overall, the June 2026

movement suggests that while the broader market had improved from the lows observed in late 2025, pricing momentum remained mixed across sizes.

Table 5: Pricing Trends in Joists (In Rs/Tonne)

Size	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26	Jun-26
150*75 mm	59,374	58,103	57,802	60,250	58,738	59,663	59,208	59,362	58,108	57,717	59,967	59,648
160*80 mm	61,905	60,603	60,235	62,683	61,172	62,152	61,708	61,862	60,608	60,217	62,500	62,182
175*85 mm	60,238	58,937	58,568	61,017	59,505	60,485	60,042	60,084	58,808	58,417	60,700	57,326

Source: CMIE

4.2.3 Channels

Pricing trends in channel sections over the period under review indicate a cyclical softening through FY24–FY25 followed by a recovery in FY26, broadly in line with sectoral dynamics in long steel products. The decline in prices across key channel sections was attributable to a combination of elevated import volumes and global oversupply, particularly driven by aggressive exports from China, and subdued global demand, resulting in pricing pressure in the domestic market. The impact was more pronounced in the 75×40 mm and 150×75 mm sections, while the 100×50 mm section remained comparatively stable, indicating some variation in price sensitivity across channel categories.

Further, moderation in key raw material costs such as iron ore and coking coal, along with seasonal demand disruptions in construction activity, contributed to subdued realizations across channel segments. The weakness intensified toward the latter part of 2025, with prices for the 75×40 mm and 150×75 mm sections declining to their lowest levels in December 2025.

The subsequent price recovery observed from March 2026 and continuing through June 2026 is supported by improving domestic demand, particularly from infrastructure and construction activity, and policy interventions including safeguard duties, which have collectively aided in stabilising domestic steel prices. The recovery was more pronounced in the 75×40 mm and 150×75 mm sections, which recorded sequential increases from March to June 2026, while the 100×50 mm section remained broadly stable. This indicates an improvement in market conditions, although the pace of recovery has varied across channel sections.

Table 6: Pricing Trends in Channels (In Rs/Tonne)

Size	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26	Jun-26
75*40 mm	63,191	63,347	60,396	63,434	59,126	59,555	58,397	58,821	56,453	54,748	61,421	64,699
100*50 mm	61,113	60,483	60,505	61,408	59,465	60,609	60,581	60,467	60,261	60,064	61,628	61,920
150*75 mm	62,356	62,532	59,947	62,834	58,927	59,397	58,874	59,022	55,657	53,956	60,017	62,203

Source: CMIE

4.2.4 MS Section

MS section prices exhibited a relatively soft and range-bound trend during the period, with intermittent fluctuations reflecting changes in steel demand, raw material costs and market sentiment. Prices strengthened during the first half of 2024, supported by improving construction and infrastructure activity and firmer steel market conditions, but this momentum was not sustained. The subsequent moderation through the second half of 2024 and across 2025 indicates a period of subdued pricing, likely reflecting relatively balanced or uneven demand conditions and competitive pressure in the downstream steel market.

The decline became more pronounced during 2025, with prices reaching their lowest level toward the end of the year. This weakness may have been influenced by softer steel realisations, cautious buying by downstream consumers and fluctuations in input costs. For MS section manufacturers, such an environment can place pressure on gross margins, particularly where input costs remain elevated or price pass-through to customers is delayed.

A recovery emerged during the first half of 2026, with prices improving sequentially across the March and June quarters. The recent uptrend indicates some strengthening in market conditions, potentially supported by improved infrastructure and construction demand, better steel market sentiment and stabilisation in raw material prices. Going forward, MS section prices are expected to remain sensitive to domestic infrastructure and construction activity, global steel price movements, billet and scrap costs, and competitive intensity. The recent recovery provides a more favourable pricing environment for manufacturers, although margin improvement will depend on the extent to which higher selling prices are sustained relative to input-cost movements.

Table 7: Pricing Trends in MS Section

Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26	Jun-26
54,572	53,343	52,581	54,499	52,549	53,079	52,261	52,022	50,979	50,617	51,940	52,775

Source: CareEdge Estimates; Note: The prices are average prices of MS Section

4.2.5 Bars and Rods

Pricing trends in MS rounds during the period under review reflect a cyclical moderation during FY24–FY25 followed by a recovery in FY26, consistent with broader long steel market dynamics. The decline in realizations can be attributed to elevated import pressures and global oversupply conditions, particularly driven by aggressive export pricing from China and subdued international demand, which led to excess availability in the domestic market.

Additionally, softening raw material prices, including iron ore and coking coal, alongside intermittent demand disruptions such as monsoon-related slowdowns in construction activity, contributed to pricing weakness, with the correction being more pronounced across larger diameters. The 16 mm and 25 mm sizes, in particular, recorded a sharper decline through FY25 and reached their lowest observed levels in December 2025.

The recovery from March 2026 strengthened further by June 2026, supported by policy measures such as safeguard duties, improving domestic infrastructure and construction demand, and tighter domestic supply conditions. The recovery was more pronounced in the larger diameters, with prices for 16 mm and 25 mm increasing by around 6% between March and June 2026, while 12 mm prices rose by around 4%. In comparison, 8 mm and 10 mm prices increased by around 1–2% over the same period. The stronger rebound in larger diameters indicates an improvement in demand and market conditions following the sharper correction observed during FY25, although pricing remains sensitive to import trends, raw material costs and overall steel demand.

Table 8: Pricing Trends in Bars and Rods (In Rs/Tonne)

Size	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26	Jun-26
8 mm	57,993	57,056	56,757	58,442	58,870	60,662	60,524	59,837	58,376	58,098	59,937	60,771
10 mm	58,659	57,722	57,473	59,142	57,917	61,195	61,058	60,371	58,909	58,631	60,471	61,337
12 mm	60,423	59,941	58,749	59,998	57,930	58,521	57,567	58,853	57,428	56,743	59,602	62,233
16 mm	62,258	62,581	60,667	63,180	59,075	58,976	58,183	58,773	54,823	53,430	59,052	62,626
25 mm	62,299	62,560	60,625	63,180	59,098	59,023	58,204	58,593	54,823	53,433	58,982	62,653

Source: CMIE, Note: Prices are for MS rounds

4.2.6 Beams

Pricing trends for steel beams reflect the broader cyclical movements observed in the domestic long and structural steel market. Prices typically respond to changes in steel demand, raw material costs, import availability and prevailing international steel prices. The Ministry of Steel has noted that the steel sector is deregulated, with prices of finished steel and key inputs such as iron ore and coking coal determined largely by market dynamics. Consequently, periods of weaker construction and industrial activity, together with softer input costs and higher import availability, can exert pressure on beam realizations.

The domestic market has nevertheless continued to be supported by infrastructure and construction activity. The Ministry of Steel reported that finished steel consumption increased during FY2025–26, supported by activity across infrastructure, construction, railways and manufacturing. This underlying demand provides support to structural steel products, including beams, although pricing momentum can remain uneven across product categories and dimensions.

Import trends have also remained an important consideration for domestic steel pricing. Government data indicates that China accounted for a significant share of India’s finished steel imports during FY2023–24 and FY2024–25, highlighting continued exposure of domestic prices to international supply conditions. Policy measures aimed at protecting domestic steel producers from import-related pressures, including the safeguard duty imposed on certain steel products in April 2025, have subsequently supported a more favourable domestic pricing environment.

More recently, the steel market has shown signs of improved demand and production momentum, although price movements remain sensitive to global market conditions and raw material costs.

4.3 Overview of End-User Industry

End-Use Sector Mapping

End-Use Sector	Key Steel Requirements / Applications	Underlying Demand Drivers	MISIL Position / Capability	Demand Growth
Transmission Line Towers & Communication Towers	Angles, channels, and fabricated lattice sections capable of load-bearing and wind-resistant performance	National grid expansion, renewable integration, telecom tower densification (4G/5G rollout)	Approved vendor for Power Grid; experience in tower components	High
Buildings, Bridges, and Other Structural Supports	Heavy-duty beams, flats, and channels for high-rise and bridge structures	Urban infrastructure, highways, and smart city projects	Supplies certified sections to EPCs and contractors	High

General Structural Use in Construction	Standard rolled sections, flats, and angles for columns, rafters, and reinforcement	Ongoing housing, warehousing, and industrial construction	Diversified section range and flexible production	High
Windmill Towers	Large angles, fabricated beams, corrosion-resistant sections	Wind farm additions, repowering projects	Capable of precision fabrication for tower frames	High
Industrial Sheds	Channels, beams, trusses, and roof members	Expansion of logistics parks and MSME manufacturing clusters	Strong presence in this category with repeat EPC orders	High
Railway Masts	Angles, channels, and fabricated lattice structures	Electrification and modernization of over 50,000 km rail network	CORE and Indian Railways approved vendor	High
Bridges	Heavy plates, beams, and fabricated girders	National Highway and state bridge projects	Supplies rolled sections to EPC bridge contractors	High

Construction Support Beams (Commercial & Residential)	Beams, angles, channels, and flats	Urban development, high-rise and affordable housing	Range covers most standard profiles with short lead time	High
Industrial Buildings, Refineries, Steel & Power Plants	Heavy sections, columns, beams, fabricated components	Industrial capex cycle, brownfield expansions	Experienced in supplying to power and steel plant EPCs	High
Warehouses	Beams, trusses, columns for pre-engineered buildings	E-commerce and logistics sector expansion	Proven supply capability for PEB manufacturers	High
Construction (General)	Standard rolled and fabricated structural products	Infrastructure, commercial real estate, and housing	Broad distribution network and certified production	High
Structural Components (General Purpose)	Standard and customized steel profiles	Pan-industry use across equipment and building systems	Flexible production line supports this category	High
Transportation Frames and Corners	Structural members for trucks, trailers, and railway wagons	Expansion of logistics and transport fleet, freight modernization	Supplies frames and rolled sections to OEMs and fabricators	Medium

Fencing	Rods, bars, and small-dimension angles	Border infrastructure, industrial security, and farm fencing demand	Supplies through trade network; limited margin segment	Medium
Refineries	Heavy structural sections and corrosion-resistant components	Refinery modernization, petrochemical expansion	Supplies certified structural steel to industrial EPCs	Medium
Airports	Long-span beams, trusses, and architectural sections	Tier-II and regional airport expansion under UDAN and state programs	Approved supplier for infrastructure contractors	Medium
Automobile	Flats, rounds, and sections for chassis and body structures	Commercial vehicle, bus, and trailer demand	Supplies to Tier-I vendors and fabricators	Medium
Trailer and Truck Bed Framing	Channels, flats, and fabricated assemblies	Freight transport growth, logistics modernization	Supplies rolled profiles to transport equipment makers	Medium
Manufacturing Industry	Structural steel for machinery bases and plant structures	Industrial expansion and MSME capacity additions	Supplies directly and through traders to small industries	Medium

Automotive	Precision flats and sections for chassis, trailers, and bus bodies	Growth in EV and commercial vehicle manufacturing	Supplies to component and frame manufacturers	Medium
Furniture	Light flats, rounds, and precision profiles for institutional and office furniture	Shift to steel-based, durable, recyclable designs	Ability to produce small-batch and custom dimensions	Low
Signage and Billboards	Tubular and angular sections for outdoor installations	Growth in highways, retail, and commercial real estate advertising	Standard profiles can service this segment indirectly	Low

4.3.1 Windmills

Wind power in India is a mature and fast-growing end-user industry that converts a country's wind resource into utility-scale electricity through the deployment of wind turbines, towers, foundations and balance-of-plant systems. As a generation sector it sits at the intersection of heavy engineering, civil construction and electrical systems requiring large component supply chains, predictable logistics and long-term service contracts. Policy support, auction mechanisms and grid-integration efforts have driven project development across coastal and inland wind belts, while manufacturers, EPC contractors and O&M providers form the core ecosystem.

Steel products play a foundational role across that ecosystem. Long products such as pipes, tubulars, bars and structural sections are the primary material for towers, internal tower stiffeners, yaw and pitch shafts, and a range of forged components. Their mechanical strength, weldability and availability in tall lengths enable tall multi-section towers that reduce transportation complexity and provide the structural backbone for turbine assemblies. Flat products such as plates, sheets and strip are equally critical in nacelles, hubs, hubs' cover plates, base plates for tower flanges, transformer tanks and cable trays. Precision cold-rolled strip is used where dimensional tolerance and surface finish matter, for example in electrical enclosures, grounding assemblies and certain bearing housings. Hot-rolled plates and heavy gauge sheets are preferred for welded structural items and foundation interface plates where toughness and weldability are priorities.

Together, long and flat steels reduce complexity by standardizing fabrication practices, improving joint integrity, and simplifying maintenance and spare-parts logistics. Their recyclability and compatibility with domestic fabrication capacity also help keep project costs and lead times manageable. For steel producers, the wind sector presents steady demand for higher-specification grades and long-term supply agreements; for developers, reliable access to both long and flat steel is a key enabler of faster, more resilient wind projects.

4.3.2 Refinery

Refineries are capital-intensive, continuous-process industrial facilities that convert crude oils and other feedstocks into fuels, petrochemical feedstocks and specialty products. In India, the sector sits at the intersection of heavy mechanical engineering, metallurgy, civil works and process instrumentation demanding robust materials, precise fabrication and long-term operational reliability. Refineries require large volumes of pressure-containing equipment, extensive piping networks, storage tanks, heat-transfer surfaces and supporting steel structures, all of which must meet stringent safety, corrosion and metallurgical standards over multi-decade service lives.

Long steel products (bars, sections, tubes and pipes) are the backbone of refinery mechanical systems. Pipes and tubulars form the arteries of a refinery carrying feedstock, intermediate streams and product flows between reactors, distillation columns, heat exchangers and storage. Structural sections, channels and rebar are essential for platforms, access structures, pipe-racks and foundations that support heavy equipment and enable safe maintenance. The availability of long lengths and high-strength grades reduces weld joints, shortens installation time, and improves structural integrity under cyclic loads and thermal expansion. Flat steel products (plates, sheets and strip) are equally vital for pressure vessels, column shells, jacketed reactors, heat-exchanger shells, tank bottoms and flanges. Thick plates offer the toughness and weldability required for high-pressure, high-temperature service; precision cold-rolled sheet and strip are used in cladding, enclosures and instrumentation panels where dimensional control matters. Clad plates and corrosion-resistant flat products permit combining a corrosion-resistant surface with a lower-cost structural backing, a cost-efficient solution in many refinery corrosive duties.

Together, these steel products enable standardized fabrication, simplify spares inventory, and support modular construction approaches that shorten project schedules. For refinery operators, reliable domestic sourcing of specified steel grades reduces procurement risk and lifecycle costs; for fabricators, these product families improve weld quality, inspection throughput and long-term maintainability of critical process assets.

4.3.3 Renewable (Solar)

India's solar sector has emerged as a cornerstone of the country's energy transition, a large, distributed, and fast-scaling end-user industry that spans project developers, module and tracker manufacturers, EPC contractors, financiers and long-term O&M providers. The technical scope ranges from utility-scale ground mount parks and hybrid farms to rooftop and off-grid systems, with government programmes and auctions steadily lowering costs and shortening execution timelines. India's identified solar potential is roughly 748 GW (NISE/MNRE estimate assuming 3% waste-land coverage). Policy support and active project commissioning have translated into robust additions. The current installed solar capacity stands at 164.59 GW as on 31st July 2026.

Long and flat steel products are structural enablers across the solar value chain. Long products (tubulars, hollow sections, angles and channels) form trackers, pylons for elevated mounting, poles for small/mid-scale installations and the structural skeleton of ground-mount racking; their length, straightness and high-strength grades reduce on-site splices and erection time. Flat products (hot-rolled plates, cold-rolled sheets and precision strip) are used in module mounting plates, transformer and inverter enclosures, cable trays, junction boxes and foundation interface plates.

Because many solar projects pursue modular, repeatable designs, consistent domestic supply of specified long and flat steel grades shortens lead times, simplifies logistics and reduces fabrication defects. Steel's recyclability and long service life also help lifecycle cost and sustainability metrics for solar farms. Government schemes (solar parks, CPSU programmes and rooftop incentives) that stimulate rapid capacity addition thereby create predictable demand for both long and flat steel products.

4.3.4 Power

India's power sector is a large, capital-intensive end-user industry spanning generation, transmission, distribution and system operations. It supports heavy industry, services and households, and is evolving rapidly as renewables scale up alongside conventional plants. India's total installed generation capacity reached about 552 GW as of 31st July 2026, reflecting strong additions across technologies. Electricity output has also risen sharply along with expansion in national generation.

This growth creates sustained demand for engineering, construction and long-lifecycle supply chains. Long steel products (structural sections, pipes, tubulars, rails and rebar) are fundamental: transmission towers, overhead line pylons, substation gantries, cable supports and the structural frames of switchyards rely on high-strength long sections and tubulars that resist wind, seismic loads and fatigue while minimizing onsite welding and erection time. Flat steel products (plates, sheets and precision strip) are equally critical, used in transformer tanks, switchgear and control-room enclosures, busbars, base plates for foundations and welded pressure vessels in thermal and hydro plants where flatness, weldability and thick-plate toughness matter.

Reliable domestic supply of specified long and flat steel grades shortens procurement lead times, standardizes fabrication, and reduces lifecycle maintenance risks. Expansion of grid capacity and reduction of transmission losses remain policy priorities as the system integrates more renewables; adequate, timely supply of both long and flat steels therefore underpins not just construction but long-term system resilience and operability.

4.3.5 Telecommunications

India's telecommunications industry is a vast, infrastructure-heavy end-user sector that underpins digital services, commerce and public administration. Active wireless (mobile) subscribers numbered about 1,282.38 million in June 2026, reflecting the network scale and mass market reach of mobile services.

The sector's rapid modernization including dense 4G coverage and fast 5G rollout has driven higher data consumption, enterprise connectivity and new services such as fixed wireless access and IoT; TRAI's yearly review highlights these continuing usage and service trends.

Physical infrastructure remains the backbone of the sector: India had roughly 30.37 lakh base transceiver stations (BTS) as on 30th June 2025, underscoring the scale of network infrastructure. By June 2026, around 24,000 mobile towers had been commissioned under the DBN-funded 4G Saturation Project and other mobile projects. 5G BTS increased to 5,62,971, with 5G services available in 99.9% of districts.

The Government is also supporting indigenous telecom technology through the TTDF, with 136 R&D projects and nearly Rs 543 crore of sanctioned funding as of June 2026, alongside the Rs 12,195 crore Telecom and Networking Products PLI scheme.

Long and flat steel products are essential enablers for telecom infrastructure. Long products like lattice sections, hollow tubulars, angles, channels and threaded bars form towers, monopoles, rooftop masts and foundation anchors; their high-strength grades and long lengths reduce splices, speed erection and improve wind and fatigue-resistance. Flat steels like plates, sheets and strips are used for base plates, mounting brackets, cable trays, antenna mounting platforms, equipment racks and outdoor enclosure panels where flatness, weldability and surface finish matter. Galvanised and weather-resistant coatings on both families extend service life in exposed telecom sites. Reliable, standardised domestic supply of specified long and flat steel grades shortens procurement cycles, reduces fabrication rework and supports rapid network expansion and maintenance.

4.3.6 Warehouses

India's warehousing sector is transitioning from ad-hoc storage to a strategic, asset-heavy industry driven by policy, multimodal connectivity and rising demand from manufacturing, 3PL and organised retail. The Government's decision to

grant the logistics (including warehousing and cold chain) sector infrastructure status has unlocked cheaper, longer-tenor financing and encouraged private investment.

Multi-Modal Logistics Parks (MMLPs) and Free Trade & Warehousing Zones (FTWZs) are core policy levers: the government has approved 35 MMLP locations to improve freight efficiency, and MMLP development is being pushed with large capital allocations to build hub-and-spoke freight nodes. FTWZs (under the Foreign Trade/SEZ framework) further support export-oriented inventory handling and duty-deferred trade.

From an operations standpoint, modern warehousing demands Grade-A buildings, mechanised handling, cold-chain rooms and faster throughput, all of which increase the need for standardised structural systems and modular construction. That is where steel fits in: long steel products (rolled sections, hollow sections, tubulars and rails) form the structural skeleton frames for pre-engineered buildings, mezzanine floors, heavy-duty pallet racking, and crane rails delivering long-span capacity, high duty cycles and rapid on-site erection. Flat steel (plates, sheets and strip) is integral for roof and wall cladding, dock-level plates, conveyor supports, equipment bases, and prefabricated enclosures where dimensional flatness, weldability and surface finish matter.

Galvanised long and flat steels extend life in exposed logistics yards and cold stores, reduce maintenance cycles, and simplify modular repairs and spares management. As MMLPs, FTWZs and warehouse modernisation programmes roll out, predictable, long-term demand for specified long and flat steel grades will help fabricators standardise designs, shorten lead times and lower total cost of ownership for developers and occupiers.

4.3.7 Construction

India's construction sector is a large, capital-intensive end-user industry spanning residential and commercial building, infrastructure (roads, bridges, ports, rail, airports), and specialised industrial projects. It supports employment, domestic steel and cement demand, and urbanisation-driven services across value chains. The sector recorded a moderate performance in FY26 estimated to grow 7.1% for the year.

Long and flat steel products are structural enablers across construction value chains. Long products such as rebars, structural sections (I-beams, channels, angles), hollow sections and rails form the skeleton of buildings, bridges, pre-engineered structures, pile cages and heavy-duty racking. Their high tensile strength, consistent straightness and availability in long lengths reduce splices, speed erection, and improve seismic and fatigue performance in tall and long-span structures. Flat steels such as heavy plates, hot-rolled coils, cold-rolled sheets and precision strip are used for base plates, column and beam flange fabrication, bridge decks, shuttering plates, roofing and cladding, and equipment foundations where dimensional flatness and weldability matter. Thick plates are essential for heavy civil components (bridge bearings, gantry supports) while thinner cold-rolled sheets serve facades, doors and interior systems.

Galvanised and coated long/flat steels extend service life, lower maintenance in exposed environments, and simplify modular prefabrication enabling faster onsite assembly and predictable quality for developers. Reliable domestic supply of specified grades shortens lead times and reduces procurement risk for large projects. For steel producers and fabricators, the construction sector therefore presents sustained, specification-driven demand; for developers and infrastructure owners, access to the right long and flat steels is a practical lever to control schedule, cost and lifecycle performance.

4.3.8 Furniture

India's furniture industry is a vibrant and diverse end-user sector spanning mass-market ready-to-assemble items, mid-market designer pieces, and high-value contract furniture for offices, hotels and public spaces. It blends traditional woodworking and upholstery with modern metal fabrication, modular manufacturing and integrated supply chains. Growing urbanisation, rising disposable incomes, organised retail and commercial real estate demand are driving steady replacement cycles and a stronger preference for durable, design-led products. The sector also increasingly values formal quality standards, faster lead times and sustainable material choices.

Long and flat steel products are central to modern furniture design and manufacture. Long products like hollow sections, tubulars, channels, angles and threaded bars form the structural core of sofas, bed frames, modular shelving, outdoor furniture and seating systems. Their straightness, consistent section properties and weldability enable lightweight-yet-rigid frames that reduce part counts and simplify assembly. Flat products like cold-rolled sheets, hot-rolled plates and precision strip are used for panels, tabletop cores, mounting brackets, drawer bottoms, back panels and decorative facings where flatness, surface finish and dimensional tolerance matter. Thin, cold-rolled strip enables crisp edges and tight tolerances for premium finishes; thicker plates are used in base plates and load-bearing brackets.

Steel's corrosion resistance through galvanising or powder coating makes it ideal for outdoor and hospitality furniture, while its recyclability and long service life align with sustainability goals. Standardised steel sections enable modular manufacturing, simplify inventory (fewer SKUs), and reduce on-site adjustments during installation. For manufacturers and contract suppliers, reliable domestic availability of specified long and flat steel grades shortens procurement cycles and improves quality control. For designers and end users, steel-based systems deliver predictable performance, easier maintenance and a broader palette for combining metal with wood, glass and upholstery making steel an indispensable material across contemporary and traditional furniture segments.

4.3.9 Airports

Airports in India are a strategic, infrastructure-intensive end-user industry that supports passenger mobility, air cargo, trade and regional development. Rapid expansion over the last decade has been driven by PPP-led terminal upgrades, greenfield airports, and regional connectivity programmes that boost both passenger and freight throughput. India's domestic aviation sector continued its strong expansion, with domestic air passenger traffic exceeding 1.5 crore passengers in May 2026, the highest monthly level recorded at the time. Indian airports handled 412 million passengers in FY2024-25, while the number of operational airports increased to 165 as of 15th July 2026, highlighting sustained growth in aviation infrastructure and connectivity.

From a supply-chain perspective, airports require large, long-life structures and heavy mechanical systems terminal buildings, wide-span hangars, cargo sheds, aprons, access bridges and elevated road links. Long steel products (I-beams, columns, hollow sections, rails and tubulars) provide the structural spine for long clear-span terminals, aircraft hangars and elevated road/bridge elements; their high strength and long lengths reduce joints and speed erection for time-sensitive projects. Flat steel products (plates, sheets and precision strip) are essential for cladding, roofing, dock plates, baggage-handling frames, transformer tanks, service enclosures and equipment bases where flatness, weldability and plate toughness matter.

Standardised, galvanised long and flat steels enable prefabricated modules that shorten timelines and simplify maintenance. Programmes like UDAN and cargo initiatives (including Krishi UDAN) that expand regional connectivity and airfreight for perishables create predictable, long-term demand for both steel families, making the airport sector a durable market for steel makers and fabricators.

4.3.10 Railways

The Indian Railways is the fourth-largest rail network globally, positioning it just behind the U.S., Russia, and China. In recent years, the sector has witnessed rapid modernization, with Indian Railways expanding its fleet of modern train services. As of July 2026, 162 Vande Bharat, 2 Vande Bharat Sleeper services and 72 Amrit Bharat services were operational across the country, alongside continued manufacturing and planned expansion of these next-generation trains. The Union Budget 2026–27 further reinforced this growth trajectory with a record Rs 2.93 lakh crore allocation toward railways, including a significant rise in investment for rolling stock. This push aligns with the broader goal of enhancing capacity, reducing logistics costs, and cutting carbon emissions, given that rail transport is more sustainable compared to road-based alternatives.

Freight movement remains a cornerstone of Indian Railways, and under the National Rail Plan, the freight modal share is expected to increase from the current 26% to 45% by 2030. Correspondingly, freight volumes are projected to reach 3,000 million tonnes by FY27 and 3,600 million tonnes by FY30, while freight traffic measured in net tonne kilometers is

expected to double to 1,695 billion NTKM. Parallely, projects like the Dedicated Freight Corridors (fully commissioned) and the Amrit Bharat Station Scheme covering 1,337 stations will substantially upgrade efficiency and passenger experience, stimulating demand for modern infrastructure and materials.

Steel plays a pivotal role in this transformation. Long steel products such as rails, structural beams, and steel tubes are fundamental to track networks, overhead bridges, and rolling stock frames, offering durability and ease of assembly. Flat steel products like plates and sheets are widely used in coach manufacturing, flooring, roofing panels, and station facilities, ensuring strength, flexibility, and design adaptability. With the government's sustained focus on expanding and modernizing the railway ecosystem, the demand for both long and flat steel products will continue to rise, making them critical to India's rail infrastructure development.

4.3.11 Automotive

India's automotive industry stands as a major economic engine, contributing approximately ~7% to the nation's GDP, and propelling growth across commodities, financial services, and energy sectors. The "Make in India" initiative has catalyzed this transformation vehicle production surged from around 2 million units in 1991-92 to 28 million in FY24, while automobile exports stood at approximately 5.4 million units in FY25 and further increased to over 6.6 million units in FY26. The auto component sector contributes 2.3% to GDP, employs around 1.5 million people, and is rapidly growing alongside the electrification wave.

Steel remains fundamental to this expansion, with its inherent strength, versatility, and economic viability ensuring its critical role across vehicle designs. Long steel products such as tubulars, bars, sections, and rails are foundational in forming chassis frameworks, structural reinforcements, drive shafts, and safety cages. Their consistent quality and availability in long lengths enhance manufacturability, reduce welding, and support the high precision demands of modern mass assembly lines. Meanwhile, flat steel products such as cold-rolled sheets, hot-rolled coils, and precision strip are the backbone of car bodies, panels, doors, hoods, and floor components. These materials provide the requisite flatness, surface finish, and formability for sleek designs, weight optimization, and crash-performance standards. Indeed, India's rising demand for flat steel products underscores how vehicle manufacturing drives steel consumption.

As the industry transitions to EVs and advanced vehicle architectures, demand for higher-specification steel such as advanced high-strength steel (AHSS) and tailor-welded products will only grow. The automotive sector's predictable, large-volume requirements make it a strategic long-term market for both long and flat steel product families, reinforcing the material's pivotal role in India's industrial trajectory.

4.3.12 Steel and Power Plant

India's power plant sector is a major end-user of steel, integral to nation-building and economic resilience. In FY26, national energy generation grew by around 1%, reflecting higher electricity demand across sectors. Simultaneously, India crossed 50% of its installed electricity capacity from non-fossil fuel sources in June 2025, achieving this milestone five years ahead of its 2030 target under its Nationally Determined Contribution to the Paris Agreement; non-fossil fuel capacity has subsequently surpassed 300 GW as on 31st July 2026.

Steel is indispensable in constructing and operating power plants. Long steel products like structural beams, rails, rebar, and tubular sections form the structural backbones of boiler houses, turbine halls, chimneys, stacks, water intake structures, and high-temperature support frameworks in thermal, hydro, and nuclear facilities. Their high strength and straight long lengths reduce onsite welding, enhance load-bearing capacity, and enable modular construction for faster erection and maintenance access. Flat steel products such as thick plates, hot-rolled coils, and precision cold-rolled sheets are employed extensively in pressure vessels, heat exchanger shells, steam drum panels, reactor vessels, turbine casings, switchgear enclosures, and cable trays. These critical components demand flatness, weldability, and material toughness properties that flat steel products provide reliably.

Steel's adaptability, weldability, and durability also support retrofitting, plant expansions, and structural upgrades across capacities. With India aggressively scaling both fossil and clean power generation, the demand for diverse long and flat

steel product families remains high. Steel producers benefit from this sustained demand, while power developers gain reliability, reduced lead times, and lower lifecycle costs highlighting steel's central role in powering India's energy future.

4.4 Galvanized Structural Steel Products

Galvanized structural steel products are steel products coated with a layer of zinc to improve corrosion resistance and extend service life, particularly in applications exposed to moisture, outdoor conditions and corrosive environments. Galvanizing is widely used for structural steel components where durability and relatively low maintenance requirements are important considerations.

The galvanizing process generally involves preparation of the steel surface, followed by application of a zinc coating. In the case of **Hot-dip galvanizing (HDG)**, fabricated steel components are immersed in a bath of molten zinc, allowing the zinc to bond metallurgically with the steel surface. **Electro-galvanizing** uses an electrochemical process to deposit a comparatively thinner and more uniform zinc coating. HDG is generally more suited to structural and outdoor applications requiring higher corrosion protection, while electro-galvanized products are used where surface finish and dimensional precision are more relevant.

The market for galvanized steel can broadly be segmented by type, including hot-dip and electro-galvanized steel, and by product, comprising structures, pipes and tubes, sheets and strips, and other products. Structural applications include components used in railways, solar projects and transmission infrastructure, where protection against corrosion can support longer operating life.

Fabrication forms an important intermediate stage for galvanized structural products. Steel sections, plates and other components are cut, bent, drilled, welded and assembled to the required specifications before galvanizing, particularly where the end product comprises fabricated structures. Depending on the application, fabrication may therefore precede the galvanizing stage, with appropriate design and process controls required to ensure adequate coating coverage. In some applications, galvanized steel products may subsequently undergo additional assembly or finishing before being supplied to the end user.

Zinc is the principal raw material used in the galvanizing process. Accordingly, the availability and pricing of zinc have a bearing on the cost structure of galvanized products. The assessment of the zinc value chain would include domestic production, imports and exports, and price movements.

Demand for galvanized structural steel is supported by applications in railways, solar energy and transmission towers, where infrastructure expansion, outdoor exposure and requirements for durable structures contribute to the use of corrosion-resistant steel products. Overall, the market is influenced by infrastructure investment, project activity, steel and zinc prices, fabrication requirements and the adoption of corrosion-resistant materials across end-user industries.

4.5 Key Demand Drivers

- **Continued Thrust on Construction and Infrastructure**

One of the major growth drivers of the steel industry is the infrastructure investment thrust by the Government of India. In the Union Budget 2026-27, the government continued its focus on infrastructure development with public capex increasing to Rs 12.2 lakh crore toward infrastructure.

The government has expanded the National Infrastructure Policy (NIP) to over 9,000 projects from 6,835 projects and announced plans for the National Monetization Pipeline (NMP) and the Development Finance Institution (DFI) to improve the financing of infrastructure projects. The NIP covering rural and urban infrastructure, entails investments to the tune of Rs. 111 lakh crores, which is being undertaken by the central government, state governments, and the private sector during FY20-25. Moreover, the alignment of PM Gati Shakti National Master Plan and National Infrastructure Policy (NIP) will aid in debottlenecking hurdles for faster execution of projects.

- **Power Transmission and Distribution (T&D) Expansion**

India plans large-scale investment to expand and modernize the power grid. This includes transmission towers, substations, and support structures that require certified, durable steel. Mid-Size steel fabricators, empaneled as an approved supplier to government institution and other utilities, is positioned to benefit from orders linked to rural electrification, grid upgrades, and renewable integration.

- **Renewable Energy – Solar and Wind**

Solar parks, rooftop solar, and wind farms are growing rapidly with government support and subsidies. These projects require steel for trackers, mounting systems, and turbine towers. The businesses which are producing such specialized products, have a scope to capture growth aligned with India's clean energy rollout.

- **Railways and Electrification**

Indian Railways' modernization and electrification plan is driving demand for steel used in overhead electrification structures, station frameworks, and rolling stock components. Business with existing approval for Indian Railways supply, and track record in lattice and pipe structures, have a relatively easier access to this long-cycle, government-funded demand stream. Public infrastructure expenditure is estimated to have a GDP multiplier of 2.5–3.5x over the medium term. Accordingly, infrastructure development remains a key policy priority for the Government of India as part of its broader objective of supporting economic growth and achieving the target of becoming a USD 5 trillion economy by 2026–27. To achieve this objective, the government launched the National Infrastructure Pipeline (NIP) in 2020, which identified a group of social and economic infrastructure projects to be implemented during FY20-25. The expected CapEx under NIP is USD 1.4 trillion with railways having an allocation of 12%. Railways are one of the key enablers for economic growth and an investment of USD 750 billion was suggested by the government in the Union Budget 2019-20 to improve the railway infrastructure over 2018-2030. Accordingly, the budgetary allocation to Indian Railways has consistently been on the rise. The CapEx for Indian Railways has increased substantially from Rs. 1.48 lakh crore during FY20 to Rs. 2.93 lakh crore allocated in the 2026-27 budget.

- **Expansion of Metro Rail Network**

India's metro rail network has expanded rapidly, reaching over 1,155 km across 26 cities by 2026, compared with 248 km across five cities in 2014. Daily metro ridership has crossed 1.15 crore passengers in 2026.. The government is also proposing Metro Lite and Metro Neo lines which are suitable for smaller cities with lower peak traffic. Currently, more than 2,100 metro coaches had been manufactured domestically by BEML by March 2026, reflecting increasing localisation of metro rolling stock. Continued expansion of metro networks and ongoing project development are expected to support demand for metro rail rolling stock and related components.

- **Construction and Real Estate**

Urban expansion, housing schemes, and infrastructure projects such as Sagarmala are increasing demand for steel in buildings, bridges, industrial sheds, and warehouses. Businesses with diversified product range and proximity to major demand centers allow them to serve construction contractors efficiently. The rising disposable income is expected to lead to increased demand for residential real estate in India as more people are able to afford real estate purchases. This will lead to more consumption of steel in the country and help the steel manufacturers to produce more steel, thus improving the demand in the steel industry. Rapid urbanization bodes well for the sector. The urban population is significantly growing in India. The urban population in India is estimated to have increased from 33.2% of total population in 2017 to 35.7% of total population in the year 2025. India is undergoing a significant urban transformation, with the urban population projected to rise to 39% by 2036. This shift is driven by factors such as improved living standards, increased employment opportunities in urban areas, and government initiatives aimed at urban development.

Therefore, the growing urbanization will lead to increased demand for tubular steel structures as it involves usage in the construction of buildings, pipes for water supply, improved drainage systems, waste treatment plants, elevators, etc.

- **Telecom and Warehousing**

4G/5G tower installations and e-commerce-driven warehouse construction are creating additional demand for structural steel poles, towers, and pre-engineered building components. Businesses with flexible manufacturing capabilities can take advantage by fulfilling these requirements, helping diversify demand across sectors.

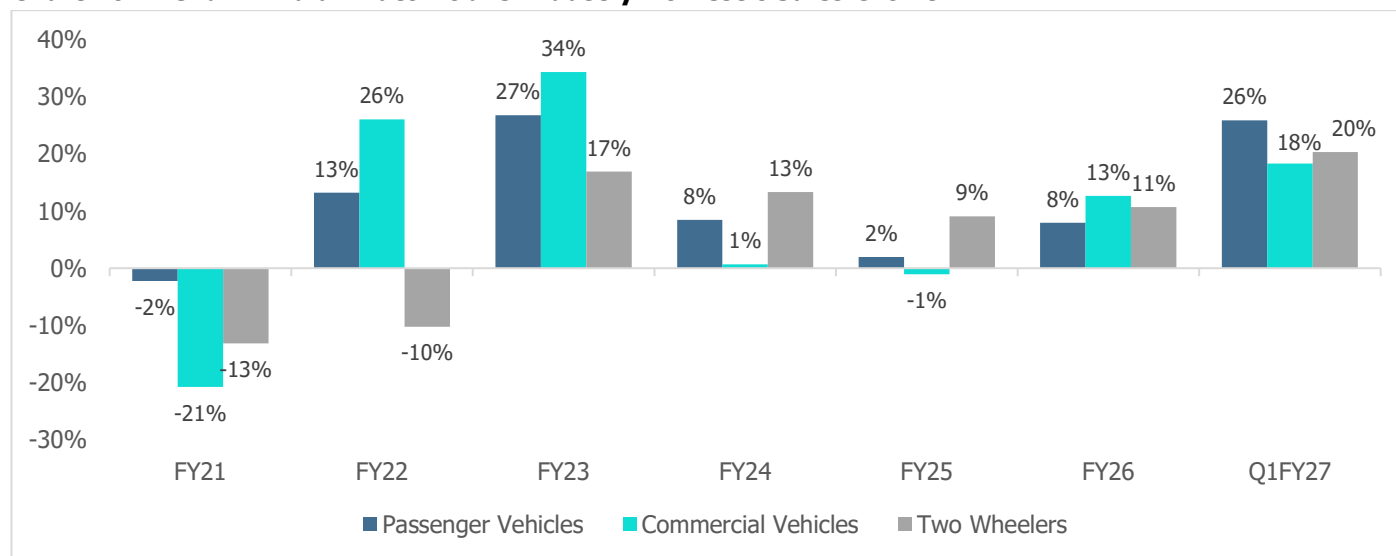
- **Stable Growth in the Automotive Industry**

Steel products are used in the main structure of the vehicle known as the chassis. They are also used in other automotive components such as control shaft tube stack pipes, shock absorbers, exhaust pipes, sway bars, other vehicle accessories (side railings, bumpers, and grill guards), etc.

India's domestic automobile sector recorded 10% year-on-year (y-o-y) increase in sales in FY26, despite a challenging macroeconomic environment. Segment-wise, two-wheelers grew by 11%, commercial vehicles by 13%, while passenger vehicles saw a modest 8% rise. It continued its growth trajectory in Q1FY27 wherein segment-wise, two-wheelers grew by 20%, commercial vehicles by 18%, while passenger vehicles saw a strong 26% rise compared to Q1FY26. The demand was driven by urban consumption, increased replacement demand, rising utility vehicle popularity, and infrastructure investments.

Across both years, the sector also saw a strategic shift toward connected, intelligent vehicles, driven by rising consumer demand for features like ADAS and sunroofs. Policy developments such as green fuel exploration and scrappage incentives further shaped the evolving landscape of India's auto industry.

Chart 26: Trend in Indian Automobile Industry Domestic Sales Growth



Source: CareEdge Research, SIAM, CMIE

Furthermore, growth in the automobile sector is expected to be supported by the increasing adoption of electric vehicles (EVs). In September 2024, the Government approved the PM E-Drive scheme with an outlay of Rs 10,900 crore over two years, including Rs 3,679 crore in subsidies to incentivize E2Ws, E3Ws, e-ambulances, e-trucks and other eligible electric vehicles. The Scheme supports the adoption of more than 28 lakh EVs. As of January 27, 2026, a total of 22.12 lakh EVs had been sold under the Scheme, comprising 19.19 lakh electric two-wheelers and 2.93 lakh electric three-

wheelers. The Scheme also provides an allocation of Rs 4,391 crore for the deployment of 14,028 electric buses, of which 13,800 buses have been allocated for deployment across Bengaluru, Delhi, Mumbai, Hyderabad, Ahmedabad, Pune and Surat in two phases. Tenders for 10,900 electric buses under Phase I have been concluded by Convergence Energy Services Limited (CESL), while tenders for the remaining 2,900 buses under Phase II were floated on January 9, 2026. Further, Rs 2,000 crore has been allocated for the deployment of electric vehicle public charging stations across India and the upgradation of EV testing facilities. As of December 31, 2025, Rs 1,703 crore had been reimbursed to original equipment manufacturers towards demand incentives for eligible electric two-wheelers and three-wheelers sold under the Scheme. Subsidies for other eligible vehicle categories, including e-buses, e-trucks and e-ambulances, are to continue subject to fund availability until March 2028.

• Others

The growth in demand for steel products will also be supported by transportation, capital goods (construction, electrical equipment, machine tools, industrial machinery, plant equipment, etc.), aircraft components, mining activities, and renewable energy projects. Further, it will also be driven by the export market, which has seen a steady increase in the past few years and contributes to the overall production in the industry.

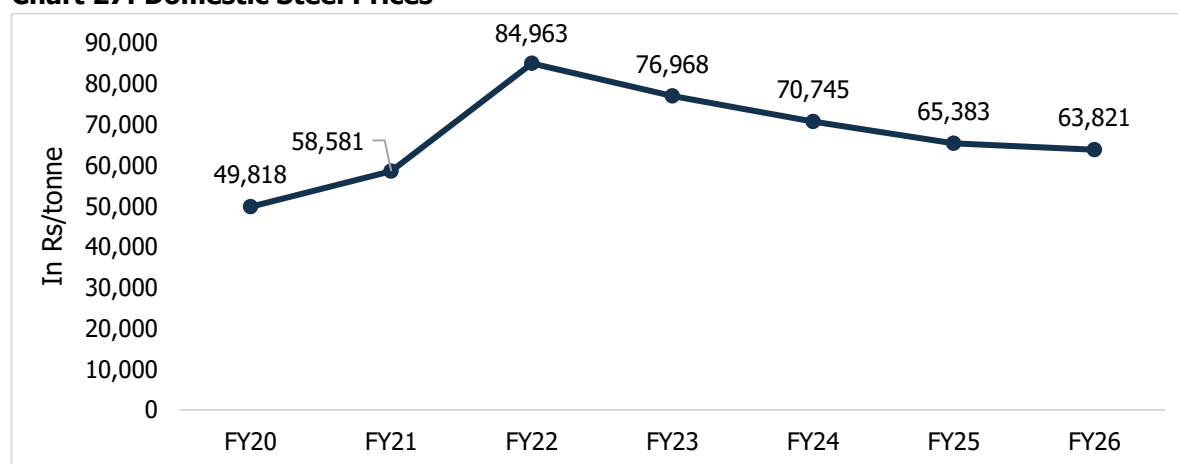
4.6 Key Challenges

• Volatility in Prices of Raw Materials and Finished goods

Raw materials such as iron ore, coal, steel scrap, etc., are used in making steel products. The prices of steel have been volatile due to geopolitical tensions, weak international demand, and fluctuation in raw material costs, such as coking coal as discussed in earlier sections.

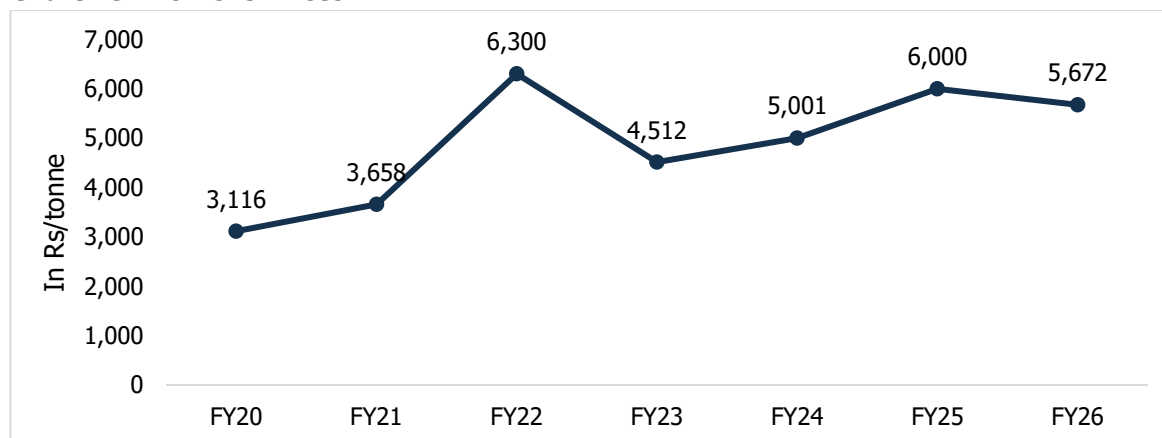
Further, volatility in steel prices could impact the input cost of steel tubes and pipe manufacturers. In case of a sharp correction in steel prices, players need to sell high-cost inventory at lower prices which temporarily impacts their margin. Further, if the prices remain high over a long period, the procurement from industries such as water infra, irrigation, etc., gets postponed, thereby impacting the demand.

Chart 27: Domestic Steel Prices



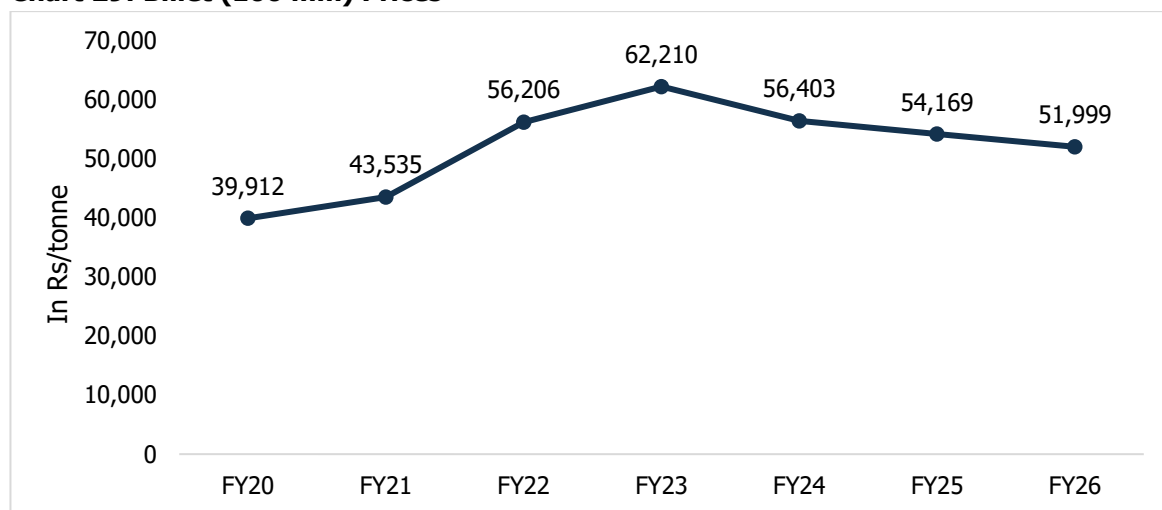
Source: CMIE

Chart 28: Iron Ore Prices



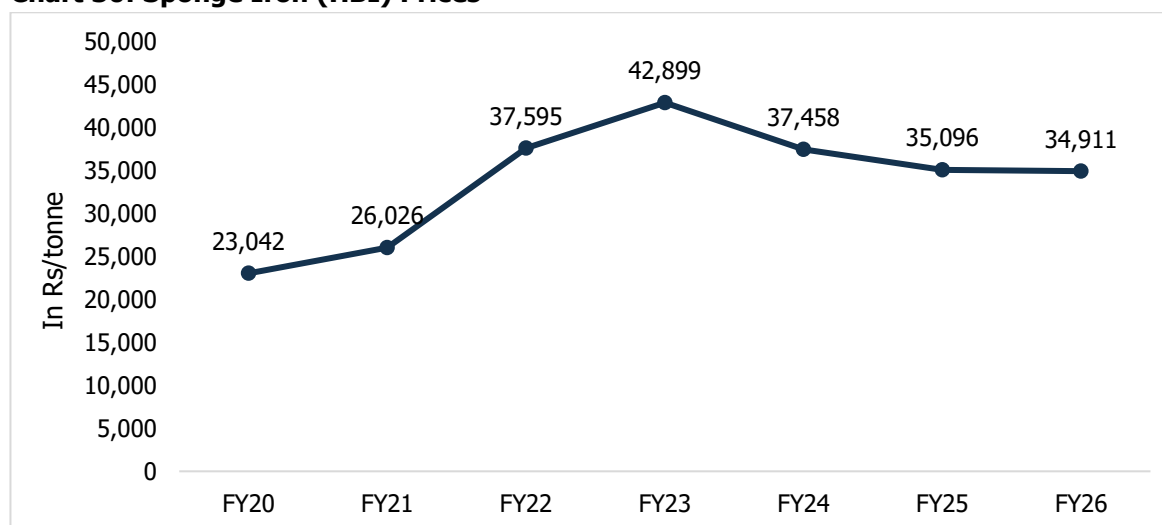
Source: CMIE

Chart 29: Billet (100 mm) Prices

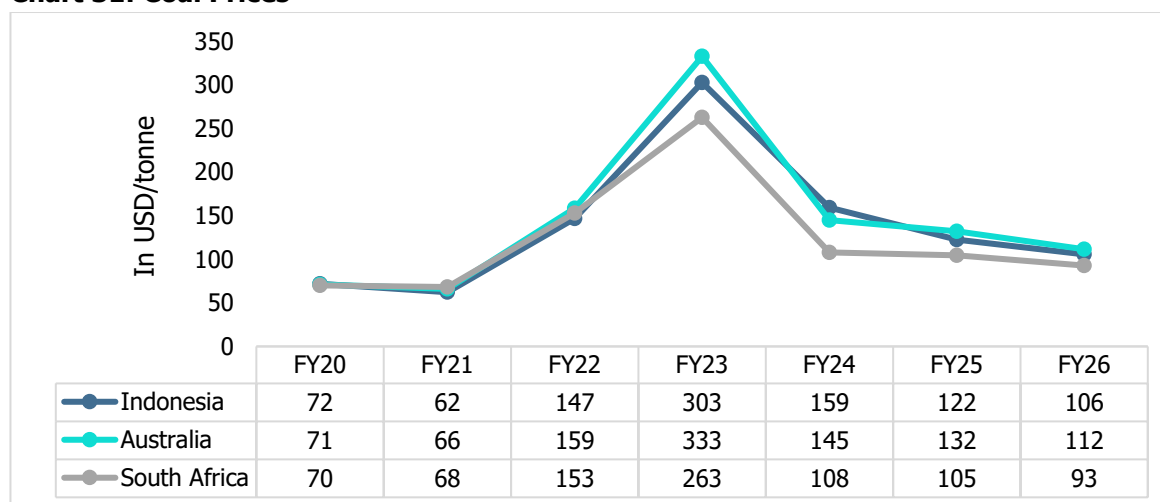


Source: CMIE

Chart 30: Sponge Iron (HBI) Prices



Source: CMIE

Chart 31: Coal Prices


Source: CMIE

• Global Slowdown

Global economic growth is projected to moderate to around 3.0% in 2026, reflecting the impact of geopolitical tensions in energy and trade flows. The ongoing Middle East conflict poses downside risks with prolonged disruptions, potentially reducing growth further to 2.5%, or lower. However, supportive factors such as continued investment momentum and policy support are helping offset some of these pressures.

• Decarbonisation and Environmental Concerns

The Indian steel industry is responsible for roughly 12% of India's carbon dioxide (CO₂) emissions, surpassing the global average of 7-9%¹. The emission intensity in the Indian steel industry stands at 2.55 T/TCS², while the global average emission intensity is 1.91 T/TCS.

India has committed to decrease the emissions intensity of its Gross Domestic Product (GDP) by 45% by 2030, compared to 2005 levels and achieve net zero by 2070. To support this target, the Ministry of Steel has committed to achieving Net Zero by 2070 and has achieved a medium-term target to reduce the intensity of the steel sector to 2.4 T/TCS by 2030.

A significant initiative in this direction is the adoption of green hydrogen in steel manufacturing. Under the National Green Hydrogen Mission, launched in January 2023 with an outlay of Rs. 19,744 crores, the Ministry of Steel has been allocated Rs. 455 crores for implementing pilot projects in the steel sector until FY30. These projects explore three approaches: producing Direct Reduced Iron (DRI) using 100% hydrogen in vertical shafts, injecting hydrogen into existing blast furnaces to reduce coal/coke consumption and partially substituting natural gas with hydrogen in vertical shaft-based DRI units. These initiatives aim to demonstrate the technical feasibility and economic viability of green hydrogen-based steel production, contributing to the sector's decarbonization goals.

Additionally, one of the ongoing challenges in reducing emissions is the handling and disposal of steel slags. Improper slag management not only contributes to environmental degradation but also limits opportunities for recycling and reuse in construction or cement production. Efficient slag handling requires investment in advanced processing technologies and infrastructure, which remains a hurdle for many domestic players, especially smaller manufacturers.

¹ World Steel Association

² Tonne of CO₂ equivalent per tonne of crude steel

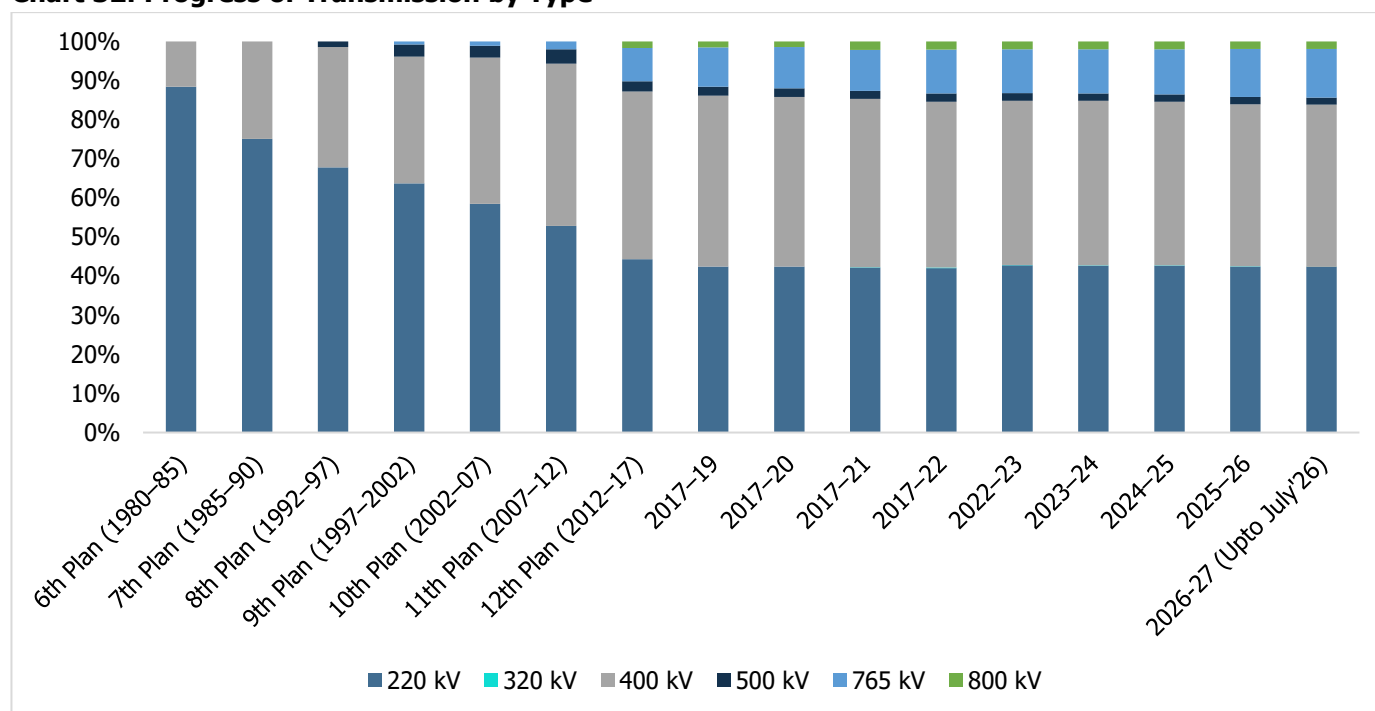
Further, emission reduction is vital for the industry to maintain its competitiveness in export markets since they are becoming increasingly environment conscious. The recent implementation of the Carbon Border Adjustment Mechanism (CBAM) – a tariff on carbon-intensive imports, aimed at preventing carbon leakage commenced in October 2023 by the European Union (EU), is likely to impact the competitiveness in the global trade market. The transitional phase of CBAM continued until December 2025, during which importers were required to report the embedded greenhouse gas emissions of covered products without any financial adjustment. From January 2026, the definitive CBAM regime has come into effect, requiring EU importers of covered goods to declare embedded emissions and surrender CBAM certificates corresponding to the emissions embedded in imports. The implementation of CBAM is therefore expected to increase the importance of emissions measurement and reduction for Indian steel exporters, with lower-carbon production becoming increasingly important for maintaining competitiveness in the European market.

5 Power Transmission Sector in India

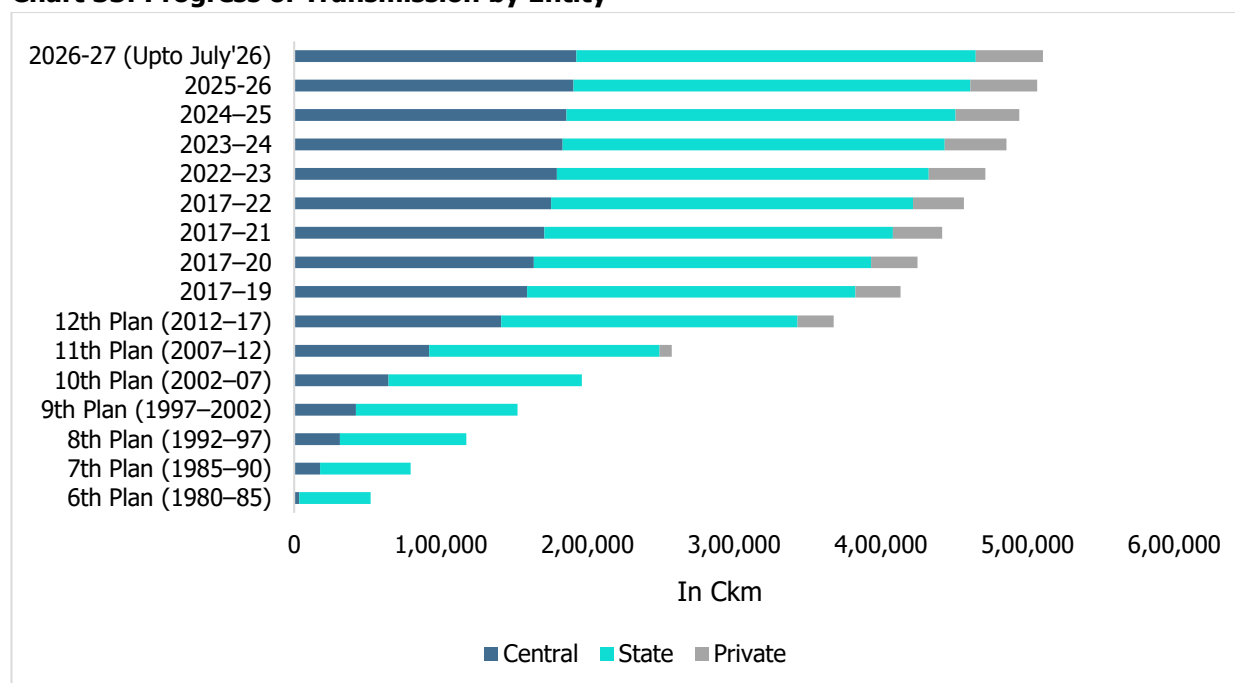
5.1 Sector Evolution and Institutional Framework

India's power transmission sector has undergone significant evolution since the 6th Five-Year Plan (1980–1985), transitioning from a state-dominated structure to a more diversified ecosystem involving central, state, and private entities. The sector is governed by the Ministry of Power and regulated by the Central Electricity Regulatory Commission (CERC), with planning inputs from the Central Electricity Authority (CEA).

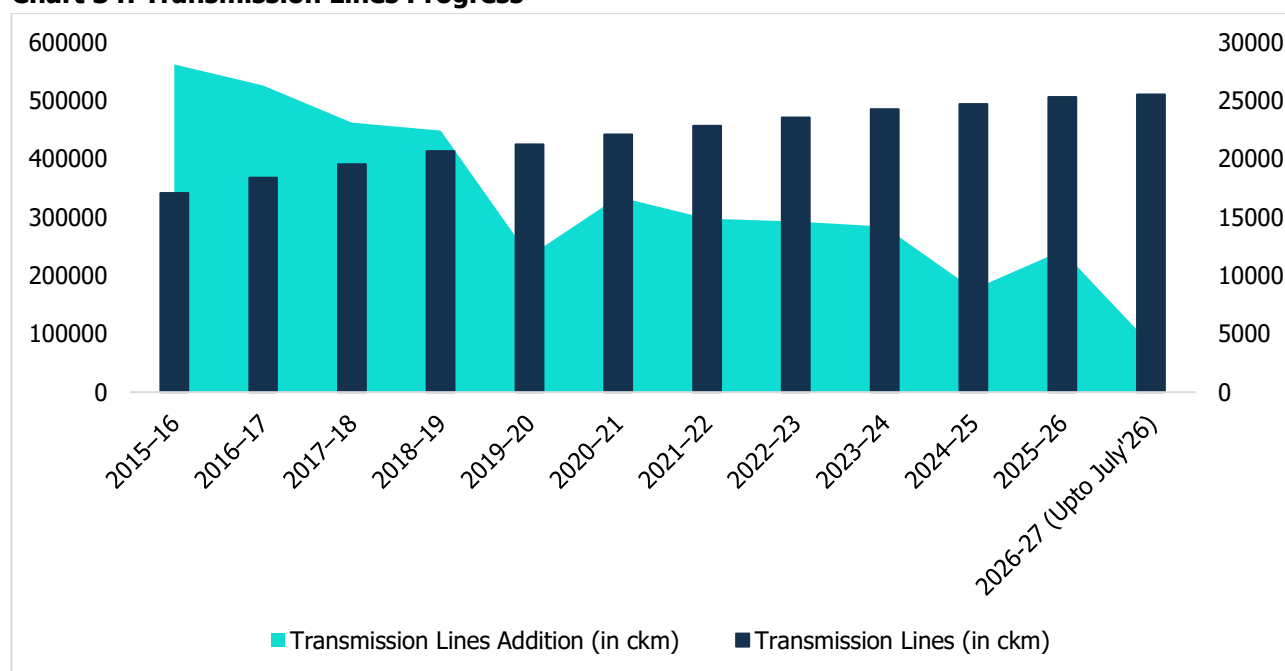
Chart 32: Progress of Transmission by Type



Source: ICED,CEA

Chart 33: Progress of Transmission by Entity


Source: ICED,CEA

Chart 34: Transmission Lines Progress


Source: ICED,CEA

5.2 Infrastructure Expansion

The transmission network has expanded from 34,000 circuit kilometres (Ckm) in 1980 to over 510,594 Ckm by FY27 (Upto July'26). This growth reflects sustained investments in high-voltage transmission lines across various voltage levels (220 kV to 800 kV), with notable additions in 765 kV and 400 kV categories under central and joint venture/private ownership.

Historical Growth Trajectory

- Early stages (6th to 9th Plans, 1980-2002): Transmission capacities exhibited a gradual increase with mean additions ranging from approximately 3,700 MW in the 6th Plan to around 10,800 MW in the 9th Plan.
- Mid-term plans (10th to 12th Plans, 2002-2017): Marked acceleration in capacity expansion was observed. The 10th Plan showed a mean capacity addition of about 14,000 MW, rising to roughly 26,000 MW by the 12th Plan. This indicates a significant strengthening of the transmission infrastructure.

Recent and Ongoing Plan Periods (2017–27)

- The 2017-22 Plan period shows a robust increase in capacity growth, with mean additions exceeding 32,000 MW by the end of the period, peaking at nearly 35,000 MW expected in the 2022-27 Plan.
- Among different voltage levels, 400 kV lines hold a dominant share of capacity additions, reaching over 113,000 MW by the projected end of the 2022-27 Plan.
- 765 kV lines have shown rapid growth from almost negligible early values to more than 41,500 MW projected for 2025.
- Lower voltage 320 kV lines show a stable but modest increase, maintaining a smaller share of total capacity.

Key Milestones

- Transition from predominantly 400 kV and 500 kV systems to increasing addition of ultra-high voltage 765 kV is evident from post-2012 data.
- The jump in capacity between the 12th Plan and the 2017-22 Plan period reflects a strategic push towards expanding national grid capability for increasing power demand and integration of renewable energy.
- Planned capacity increments for the 2022-27 period suggest a continued focus on expanding higher-voltage transmission lines to support longer-distance power transfer.

5.3 Voltage-Level Diversification

- 400 kV and 765 kV lines have seen the most significant growth, indicating a strategic shift toward high-capacity corridors for inter-regional power flow.
- JV/Private participation has increased, especially in 765 kV and 400 kV segments, reflecting policy support for private investment and competitive bidding frameworks.

5.4 Policy and Planning Alignment

The sector's development aligns with national programs such as:

- National Electricity Plan (NEP)
- Green Energy Corridor
- Revamped Distribution Sector Scheme (RDSS)

These initiatives aim to improve grid reliability, integrate renewable energy, and reduce transmission losses.

5.5 Challenges and Risk Factors

- Right-of-way (RoW) issues and land acquisition delays.
- Grid congestion in renewable-rich states.
- Capital intensity and long gestation periods.
- Regulatory uncertainties in tariff determination and project approvals.

5.6 Near-Medium-Term Outlook

Capacity Addition Trends

While annual additions have tapered from 28,000 Ckm in FY16 to 4,081 Ckm projected for FY27 (Upto July'26), the focus is shifting from quantity to quality, enhancing grid flexibility, resilience, and renewable integration.

Emerging Areas

- Private sector participation is expected to grow under the Tariff-Based Competitive Bidding (TBCB) regime.
- Green transmission corridors and battery storage-linked transmission are emerging areas.

Regulatory and Policy Support

- Continued reforms under the Electricity Act and NEP.
- Incentives for transmission projects linked to renewable energy zones.
- Emphasis on digitalisation and smart grid technologies.

Strategic Importance

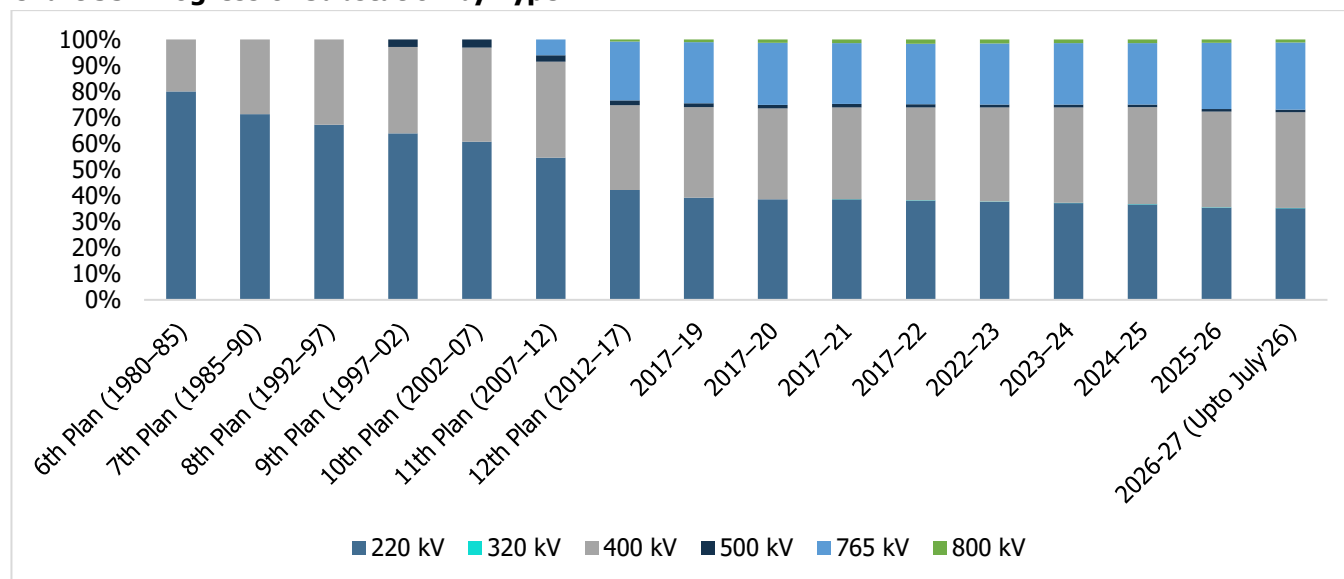
Transmission infrastructure is foundational to India's energy security, economic growth, and climate commitments. The sector is expected to remain a priority area for public and private investment in the medium term.

6 Power Substation Infrastructure in India

6.1 Sector Evolution and Institutional Framework

India's power substation infrastructure has evolved significantly over the past four decades, transitioning from basic transmission support systems to a complex, multi-voltage grid backbone. The sector is governed by the Ministry of Power and regulated by the Central Electricity Authority (CEA), with planning inputs from NITI Aayog and implementation support from central, state, and private entities.

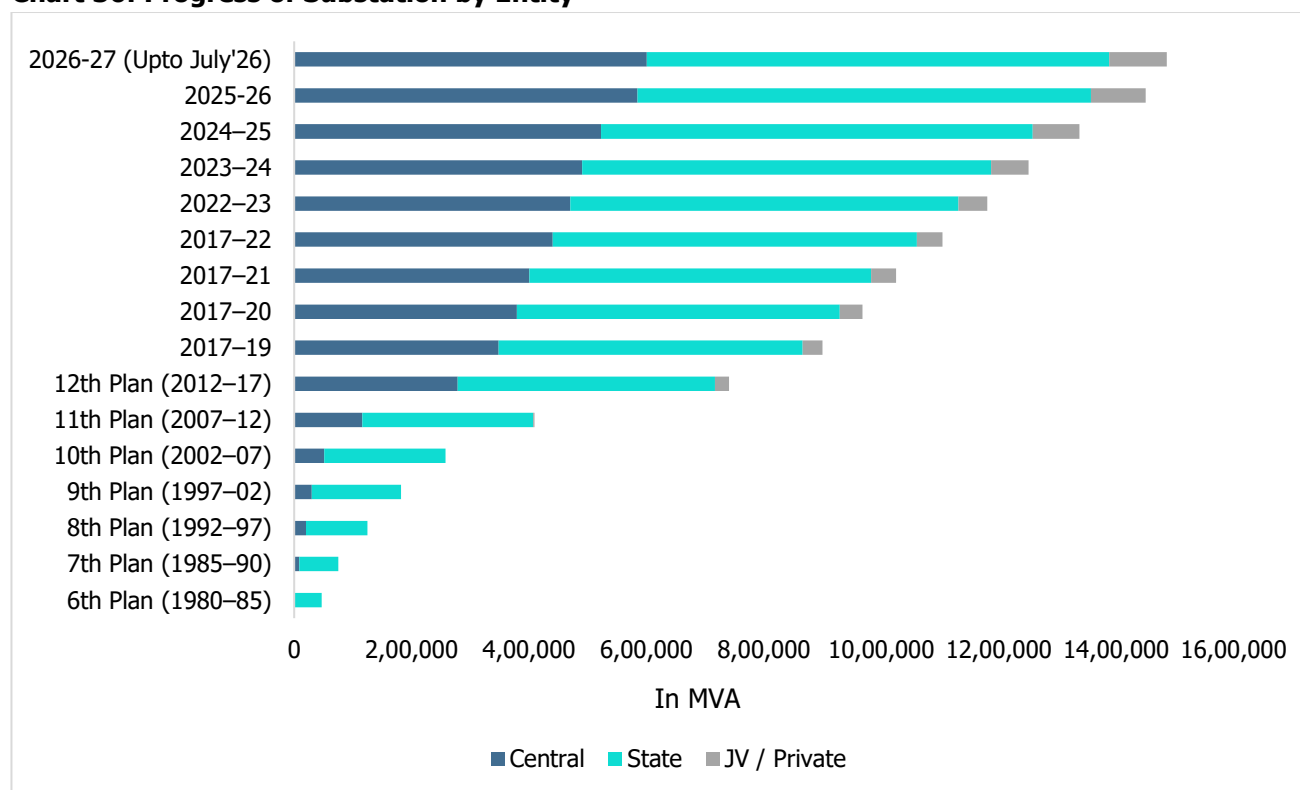
Chart 35: Progress of Substation by Type



Source: ICED,CEA

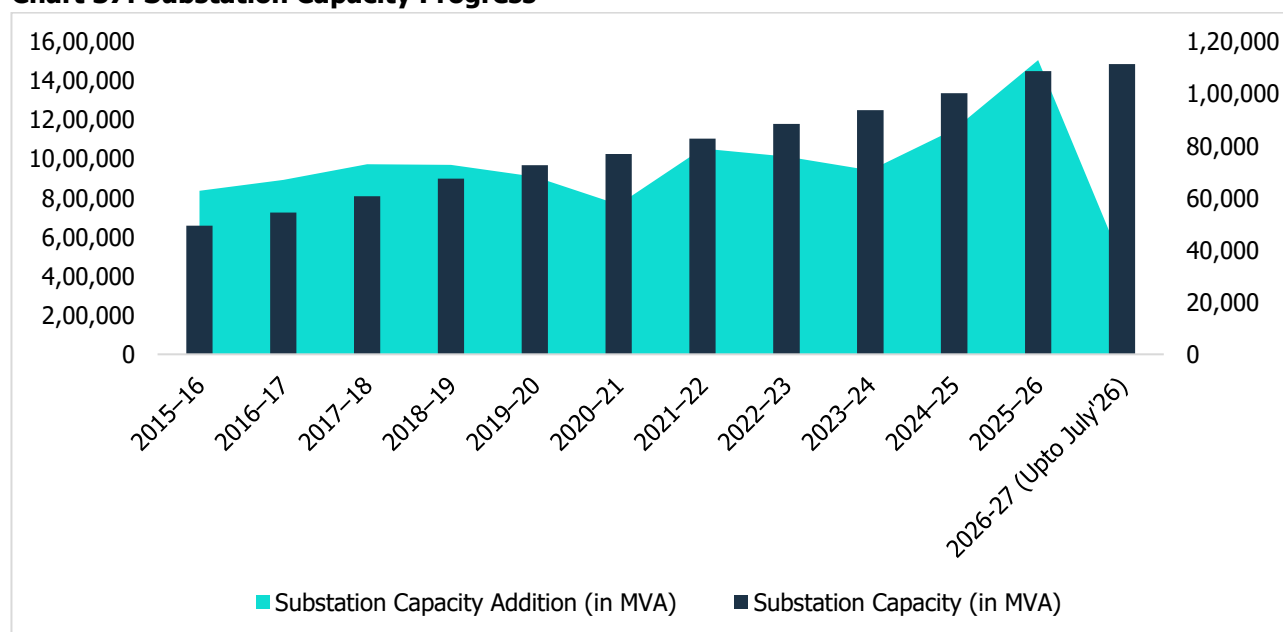
Note: PP – Plan Period

Chart 36: Progress of Substation by Entity



Source: ICED, CEA

Chart 37: Substation Capacity Progress



Source: ICED, CEA

6.2 Capacity Expansion and Voltage-Level Diversification

Substation capacity has grown from approximately 659,000 MVA in FY 2015–16 to over 1.49 million MVA projected for FY 2026–27 (Upto July'26). This expansion reflects sustained investment across multiple voltage levels, including 220 kV, 400 kV, 765 kV, and emerging ultra-high voltage categories such as 800 kV and 320 kV.

The diversification across voltage levels is driven by:

- The need to support long-distance transmission.
- Integration of renewable energy sources.
- Reduction of transmission losses.
- Enhancement of grid stability and redundancy.

6.3 Multi-Sector Participation

The substation development program is executed through three primary channels:

- Central Sector: Led by central public sector undertakings (CPSUs), contributing significantly to high-voltage capacity additions.
- State Sector: Focused on regional and intra-state grid strengthening.
- Joint Venture/Private Sector: Increasingly active in high-voltage and renewable-linked substations.

6.4 Policy and Planning Alignment

Substation development is aligned with national programs such as:

- National Electricity Plan (NEP)
- Green Energy Corridor
- Revamped Distribution Sector Scheme (RDSS)
- Integrated Power Development Scheme (IPDS)

These initiatives aim to modernise the grid, improve reliability, and facilitate renewable energy integration.

6.5 Challenges and Risk Factors

- Land acquisition and right-of-way (RoW) constraints.
- Capital intensity and long gestation periods.
- Regulatory delays in tariff approvals and environmental clearances.
- Technology standardisation across voltage levels.

6.6 Near-Medium-Term Outlook

Capacity Addition Trends

While annual additions have fluctuated, the overall trajectory remains upward, with significant capacity additions planned through FY26. The focus is shifting toward:

- High-voltage substations (765 kV and above)
- Digital substations with remote monitoring

- Renewable energy zone connectivity

Investment Opportunities

- Private sector participation is expected to grow under the Tariff-Based Competitive Bidding (TBCB) regime.
- Technology providers offering automation, GIS (Gas Insulated Substations), and smart grid solutions are likely to benefit.

Strategic Importance

Substation infrastructure is foundational to India's energy transition, economic growth, and climate commitments. It is expected to remain a priority area for public and private investment in the medium term.

7 Strategic Positioning of Structural Steel and Fabricated Component Manufacturers in India's Power Transmission and Substation Infrastructure

7.1 Sectoral Alignment with National Infrastructure Priorities

India's power infrastructure is undergoing a multi-phase transformation, driven by the need to modernise the grid, integrate renewable energy, and improve inter-regional connectivity. This includes large-scale investments in transmission lines and substations across voltage levels such as 220 kV, 400 kV, 765 kV, and emerging ultra-high voltage categories.

Manufacturers of structural steel and fabricated components are directly aligned with these infrastructure needs. Their products, including beams, channels, flats, rods, and modular assemblies, are essential for:

- Transmission tower structures
- Substation switchyard frameworks
- Transformer bays and control room enclosures
- Equipment support and earthing systems

Entities with diversified product portfolios and sectoral exposure to power infrastructure are well-positioned to benefit from sustained demand across both transmission and substation development programs.

7.2 Regulatory Approvals and Market Access

Companies that have secured approvals from central transmission authorities and are listed as qualified vendors for transmission and substation projects enjoy preferential access to procurement opportunities. These approvals act as a competitive moat, limiting market entry for new players and ensuring consistent business flow from government and private EPC contractors.

Approved vendors are often preferred for:

- High-voltage transmission corridors
- Renewable energy zone connectivity
- GIS (Gas Insulated Substations) and hybrid installations

7.3 Operational Capabilities and Cost Efficiency

Manufacturers located near raw material sources and industrial hubs benefit from logistical efficiencies and reduced input costs. Long-term sourcing agreements with primary steel producers further enhance supply chain reliability.

Operational strengths such as ISO-certified facilities, adherence to global standards (IS, BS-EN, ASTM), and optimised production processes contribute to:

- Competitive pricing
- Timely delivery
- Compliance with technical specifications

These attributes are critical in transmission and substation project execution, where quality and timelines are tightly regulated.

7.4 Product Innovation and Scalability

The ability to rapidly develop and scale new product dimensions, such as customised beams, columns, and modular assemblies, enables manufacturers to respond to evolving engineering requirements in both transmission and substation design.

Infrastructure that supports fast product rollout and innovation provides a competitive edge in securing contracts for:

- Smart grid-enabled substations
- Renewable-linked transmission corridors
- Urban and industrial grid expansion

7.5 Risk Mitigation and Strategic Partnerships

Companies with established partnerships for bulk raw material procurement and high-volume production capabilities are better equipped to manage supply-side risks. Approved vendor status also reduces buyer negotiation leverage, supporting stable margins and long-term customer relationships.

Key Takeaway

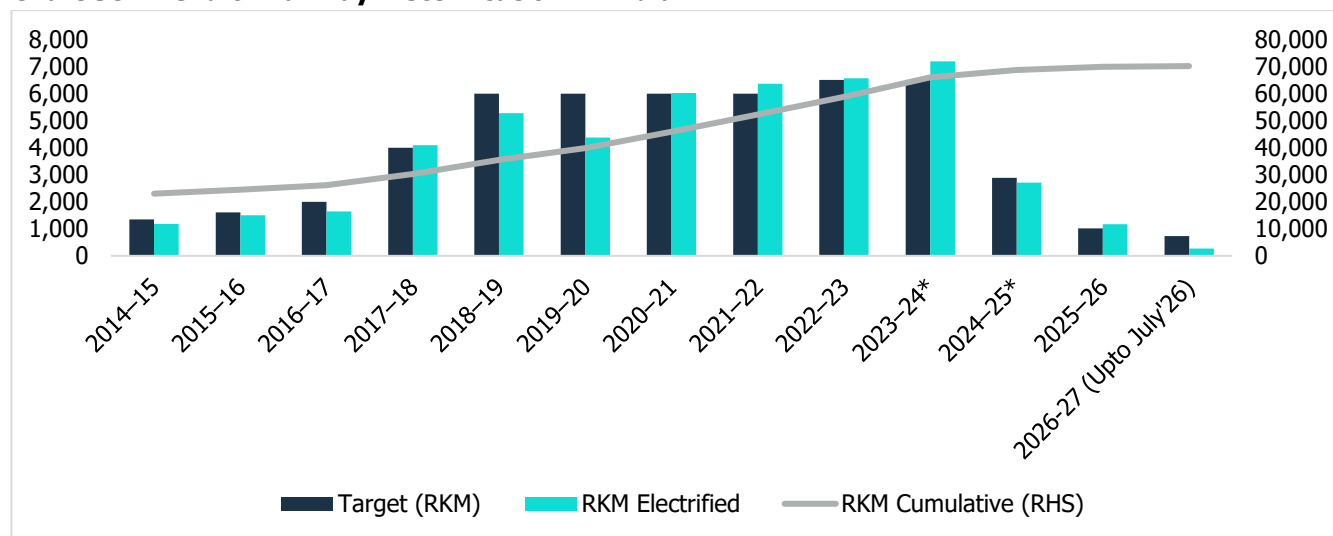
Manufacturers operating in the structural steel and fabricated components segment with the following attributes are optimally positioned to benefit from India's power infrastructure expansion:

- High exposure to transmission and substation sector demand.
- Regulatory approvals enabling direct project participation.
- Operational efficiencies and cost competitiveness.
- Product innovation aligned with engineering needs.
- Strategic sourcing and supply chain resilience.

These factors collectively enhance growth visibility, margin stability, and long-term value creation potential.

8 Railway Electrification in India

Chart 38: Trend of Railway Electrification in India



Source: Indian Railways

Note: *Including DFCCIL

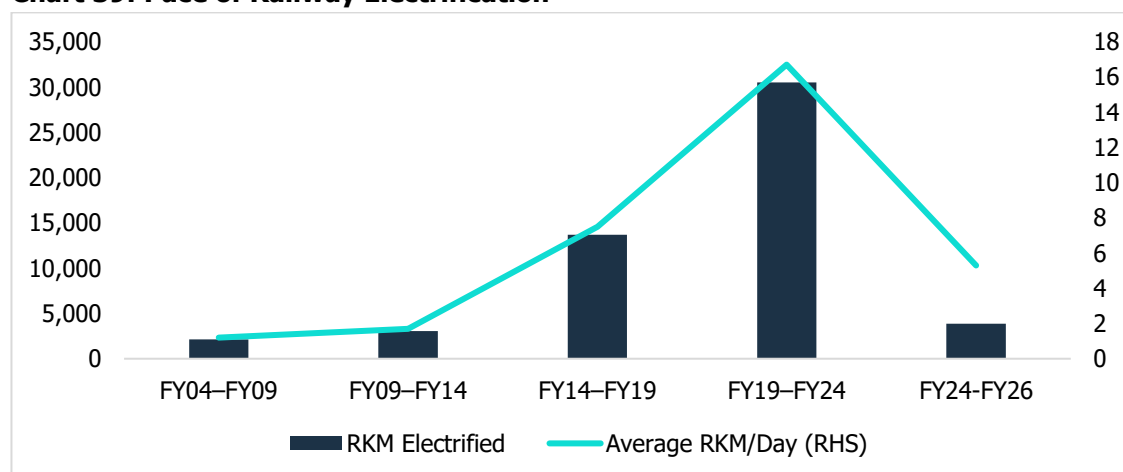
8.1 Sector Evolution and Policy Framework

Railway electrification in India has transitioned from a limited pre-independence initiative to a nationwide strategic infrastructure program. The sector is governed by the Ministry of Railways and supported by policy frameworks such as the National Rail Plan, Vision 2030, and the Indian Railways' decarbonization roadmap.

The electrification program aims to:

- Reduce dependence on imported fossil fuels.
- Enhance operational efficiency and speed.
- Lower carbon emissions and environmental impact.
- Improve cost competitiveness of freight and passenger services.

Chart 39: Pace of Railway Electrification



Source: Indian Railways

8.2 Electrification Status and Coverage

As of July 31st, 2025, 99.6% of the Broad Gauge (BG) route network of Indian Railways stands electrified, covering 70,143 route kilometres (RKM), including Dedicated Freight Corridors (DFCCIL). This milestone reflects a near-complete transition to electric traction across the national railway grid.

Electrification has been achieved across all zones and nearly all states, with only marginal RKM pending in select regions such as Rajasthan, Karnataka, Tamil Nadu, Goa, and Assam.

8.3 Investment and Budgetary Support

The budget outlay for railway electrification in FY 2026–27 stands at Rs 5,000 crore, indicating continued fiscal commitment to completing residual electrification and upgrading existing infrastructure.

8.4 Strategic Importance

Railway electrification is central to India's energy transition and infrastructure development goals. It supports:

- Freight corridor efficiency
- High-speed rail deployment
- Urban and regional connectivity
- Integration with renewable energy sources

8.5 Near-Medium-Term Outlook

Completion of Residual Electrification

With only 269 RKM pending electrification, the focus will shift toward:

- Upgrading existing electrified routes
- Enhancing energy efficiency
- Deploying smart monitoring systems

Technology Modernization

The sector is expected to adopt:

- GIS-based asset tracking
- Predictive maintenance systems
- AI-enabled energy optimisation

Investment Opportunities

- EPC and equipment firms will benefit from modernisation contracts.
- Technology providers will find opportunities in automation and digitalisation.
- Green financing and ESG-linked investments will support sustainable electrification.

9 Strategic Positioning of Structural and Electrical Infrastructure Manufacturers in Railway Electrification

9.1 Sectoral Alignment with National Rail Modernisation

Companies engaged in the supply of structural steel, fabricated assemblies, and electrical infrastructure are directly aligned with the material and engineering requirements of railway electrification. Their products are essential for:

- Overhead equipment (OHE) support structures
- Gantries, masts, and portals
- Substation enclosures and control rooms
- Cable trays, brackets, and earthing systems

Entities with diversified product portfolios and sectoral exposure to railway infrastructure are well-positioned to benefit from both new installations and modernisation of legacy assets.

9.2 Regulatory Approvals and Vendor Accreditation

Approved vendors listed with the Ministry of Railways and zonal procurement authorities enjoy preferential access to electrification contracts. These approvals act as a competitive differentiator, ensuring consistent business flow from central and zonal railway agencies.

Such companies are typically engaged in:

- EPC execution of electrification projects
- Supply of pre-engineered components
- Integration of signalling and telecom systems

9.3 Operational Capabilities and Cost Efficiency

Manufacturers located near industrial hubs and railway zones benefit from logistical efficiencies and reduced input costs. Long-term sourcing agreements with primary steel producers and electrical OEMs further enhance supply chain reliability.

Operational strengths such as ISO-certified facilities, adherence to RDSO specifications, and optimised fabrication processes contribute to:

- Competitive pricing
- Timely delivery
- Compliance with railway engineering standards

These attributes are critical in railway electrification, where quality, safety, and execution timelines are tightly regulated.

9.4 Product Innovation and Scalability

The ability to rapidly develop and scale new product dimensions, such as modular gantries, lightweight masts, and prefabricated substation structures, enables manufacturers to respond to evolving engineering requirements in electrification projects.

Infrastructure that supports fast product rollout and innovation provides a competitive edge in securing contracts for:

- High-speed rail corridors
- Dedicated freight corridors (DFCCIL)

- Urban and regional rail electrification

9.5 Risk Mitigation and Strategic Partnerships

Companies with established partnerships for bulk raw material procurement and high-volume production capabilities are better equipped to manage supply-side risks. Approved vendor status also reduces buyer negotiation leverage, supporting stable margins and long-term customer relationships.

Key Takeaways

Manufacturers operating in the structural steel, fabricated components, and electrical infrastructure segment with the following attributes are optimally positioned to benefit from India's railway electrification program:

- High exposure to railway infrastructure demand.
- Regulatory approvals enabling direct project participation.
- Operational efficiencies and cost competitiveness.
- Product innovation aligned with railway engineering needs.

Strategic sourcing and supply chain resilience.

10 Key Government Policies/Regulations for the Steel Industry

National Steel Policy, 2017

NSP was introduced in 2017 with the objective to increase domestic steel production and consumption, produce high-quality steel, and increase India's competitiveness globally. It also focuses on cost efficiency, raw material availability, and research & development to achieve the overall objectives laid out under the policy.

The mission defined under NSP, 2017 is as below:

- Self-sufficiency in steel production by providing policy support & guidance to private manufacturers, MSME steel producers, and CPSEs and encouraging adequate capacity additions
- Development of globally competitive steel manufacturing capabilities
- Cost-efficient production and domestic availability of iron ore, coking coal, and natural gas
- Facilitate investment in overseas asset acquisitions of raw materials
- Enhance domestic steel demand

Table 9: Target Set Under the NSP, 2017

Parameter	Projections (FY31)
Total crude steel capacity (in MTPA)	300 (222 MTPA in FY27*)
Total crude steel demand/production (in MTPA)	255
Total finished steel demand/production (in MTPA)	230
Sponge iron demand/production (in MTPA)	80
Pig iron demand/ production (in MTPA)	17
Per Capita Finished Steel Consumption (in kg)	158

Source: Ministry of Steel

Note: *refers to April-June 2026 (Provisional)

AtmaNirbhar Bharat Policy

- Government initiatives such as Make in India and AtmaNirbhar Bharat which consist of 5 pillars (Economy, Infrastructure, System, Vibrant Demography, and Demand) have been playing a significant role in economic development.
- In the steel tubes and pipes sector, the demand for seamless and ERW pipe sectors is increasing due to these policies. According to this policy, any purchases made by PSUs must include at least 35% local value addition in the supply of pipes. This will eventually support domestic manufacturers in the country.

Under this policy, a stimulus of Rs 20 lakh crores were announced by the government to aid the country's fight against COVID-19.

Production Linked Incentive (PLI) Scheme

- India's Production Linked Incentive Scheme for Specialty Steel, launched in July 2021 with an outlay of Rs 63.22 billion, is designed to deepen domestic manufacturing capabilities, accelerate technology adoption and reduce import dependence in high-value steel grades critical to automobiles, defence, railways, aerospace, power, renewable energy and corrosion- or heat-resistant tubes and pipes. Covering coated and plated steel, high-strength and wear-resistant steel, specialty rails, alloy steel products and wires, and electrical steel, the scheme initially targeted an increase in specialty steel production from 17.6 million tonnes in FY20 to 42.2 million tonnes by FY27, alongside investment mobilisation of about Rs 396.25 billion by FY30.

- Its subsequent iterations have progressively widened participation: PLI 1.1, launched on January 6, 2025 for FY26 to FY30, relaxed investment and capacity thresholds, introduced production carry-forward flexibility and lowered entry requirements for strategically important CRGO steel; while Round 1.2, launched on November 4, 2025, expanded coverage to 22 subcategories, including superalloys, stainless steel, alloy forgings, titanium alloys and coated steels, offering incentives of 4% to 15% on incremental sales and adopting FY25 as the revised base year.
- With earlier rounds attracting committed investments of Rs 438.74 billion, the evolving framework reflects a targeted industrial strategy to create advanced capacity, encourage process innovation, substitute imports, strengthen export competitiveness and position India as a global hub for high-value specialty steel manufacturing.

Domestically Manufactured Iron & Steel Products (DMI&SP):

- The Domestically Manufactured Iron and Steel Products (DMI&SP) Policy, approved on May 8, 2017, provides preference in government procurement to iron and steel products manufactured by India-registered entities, including units in Special Economic Zones, subject to prescribed domestic value addition. The qualifying threshold, initially set at 15% to 50%, was revised to 20% to 50% under the policy dated December 31, 2020.
- Intended to stimulate domestic steel production and consumption, improve capacity utilisation and promote import substitution, the policy has been periodically extended, including for six months from May 29, 2024. Under the revised policy dated December 17, 2025, its validity has been extended to March 31, 2027, while its coverage has been broadened across Central Ministries, central public-sector enterprises and government-controlled entities, including steel-intensive infrastructure procurement.
- The revised framework also mandates manufacturer registration on a designated government portal, supported by self-certification, periodic audits and stronger enforcement provisions, including penalties and deregistration for misdeclaration or non-compliance, thereby transforming domestic procurement preference into a more transparent and accountable mechanism for strengthening India's steel-manufacturing ecosystem.

Quality Control Order on Steel:

- The Ministry of Steel has introduced a Steel Quality Control Order (QCO), thereby banning sub-standard/defective steel products from the domestic market alongside imports to ensure the availability of quality steel to the industry, users, and the public at large.
- This measure is being taken to enhance the availability of quality steel to the users. According to the Order, it is ensured that only quality steel conforming to the relevant BIS standards is made available to the end users. BIS (Bureau of Indian Standards) Certification is a quality assurance process that ensures products meet Indian standards, verifying their quality, safety, and reliability. While BIS certification is voluntary for many products, it is mandatory for specific items, including certain steel products like TMT bars, to ensure public safety and compliance with Indian Standards. Certified products bear the ISI mark, indicating adherence to prescribed quality standards. The certification is typically valid for one to two years and can be renewed if the product and standards remain unchanged.
- As of August 2024, the QCO covers 151 categories of steel and steel products including carbon steel, alloy steel, and stainless steel. In addition, goods & articles made up of steel such as stainless-steel pipe & tubes, laminations/ cores of transformers, products of tin plate & tin-free steel, etc., have been notified to prevent circumvention of the Steel Quality Control Order.
- Through the Steel and Steel Products (Quality Control) Amendment Order, 2025, notified on 20 November 2025, the Ministry of Steel has temporarily deferred mandatory BIS enforcement for selected steel and steel product categories (for 1 year or 3 years, depending on the product) to allow industry time to comply, while retaining the core QCO framework covering 151 BIS notified standards, including the requirement that both finished steel and critical intermediate inputs must conform to BIS standards once enforcement becomes operative.

India's Carbon Emission Reduction Targets:

At COP30, India reaffirmed a climate-action strategy grounded in equity, national circumstances and the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC), calling for a shift from commitments to credible implementation. India emphasised that developing economies require predictable, adequate and concessional climate finance, alongside affordable technology access, to reconcile low-carbon transition with development imperatives such as rapid energy-demand growth and continued coal dependence. Highlighting its progress in expanding renewable energy and forest cover and reducing the emissions intensity of GDP, India reiterated its targets of achieving 500 GW of non-fossil-fuel power capacity and reducing GDP emissions intensity by 45% from 2005 levels by 2030, followed by net-zero emissions by 2070, supported by initiatives in green hydrogen, biofuels, renewable power and nuclear energy. By positioning COP30 as a "COP of Implementation and Delivery on Promises," India placed adaptation, resilience and a people-centric just transition at the centre of the global agenda, arguing that stronger international cooperation and fulfilment of developed-country financing commitments are essential for climate-resilient growth across the developing world.

11 SWOT Analysis of the Industry

Strength	Weakness
- India's steel consumption is driven by infrastructure projects like Bharatmala (Highways), Sagarmala (Port led development), and the National Infrastructure Pipeline (NIP). - Healthy demand from end-user segments such as real estate, water infrastructure, automobiles, railways, capital goods, etc. This diversified demand reduces cyclicalities, as growth in one segment can offset slowdowns in another, supporting long-term stability. - Rich reserves of iron ore and coal support domestic steel production. - Availability of skilled manufacturing and engineering labor, enabling efficient operations, faster process adoption, and higher productivity across steel plants. - Partially self-sufficient sector as far as power is concerned, as major industry players use captive power for production.	- Challenges in logistics and transportation infrastructure, including high logistics cost. - Steel production is highly energy-intensive, leading to significant carbon emissions and increasing regulatory pressure to shift to cleaner technologies, raising compliance costs. - Limited adoption of advanced technologies and automation. - Dependency on imports for raw materials especially, iron scrap.
Opportunity	Threat
- Increasing global demand presents export opportunities for Indian steel. - Continued investments in infrastructure projects drive steel demand. - Focus on research and development for process improvements. - Government focus on expanding the natural gas infrastructure. - Growing global emphasis on sustainability presents strong export potential for India's emerging green steel industry. - Expansion of water infrastructure in India as the majority of household's lack access to safe water daily. - Significant capacity additions in power generation are expected over the next 7-8 years, including renewable resources. - Initiatives like Production-Linked Incentive (PLI) schemes to boost manufacturing and export competitiveness. - Government initiatives such as 'One Nation, One Gas Grid', 'Jal Jeevan Mission' and 'Pradhan Mantri Awas Yojana'.	- Competition from global steel producers with lower costs and subsidies. Countries like China, Russia, and Vietnam often enjoy lower production costs and government subsidies. This creates intense price competition in export markets and increases the risk of cheap imports entering India, pressuring margins. - Fluctuations in global iron ore, coal, and steel prices could affect the profitability of the business. - Compliance with stringent environmental regulations. - Volatility in U.S. trade policies and tariffs may pose risk to Indian steel exports and global market access. - Recession fears slowing construction activity, and reduced industrial output in major economies can dampen global steel demand. This affects export orders and can create oversupply situations, depressing prices.

12 Porters Five Force model of the Industry

• Threat of New Entrants

High barriers to entry

- Approvals from large institutional buyers, and similar agencies are difficult to obtain, requiring years of compliance, investment, and audits.
- The capital required for rolling and fabrication facilities , equipment, and suitable locations is significant.
- Long-standing relationships with large EPCs and utilities, provides a head start in sales and reduces exposure to price-based competition.
- Regulatory requirements on factory licensing, environmental norms, and employment caps add further hurdles.

Result: Only a few players can realistically enter this segment, unlike other MSME-level rolling businesses.

• Bargaining Power of Suppliers

Moderate to low

- Inputs like billets and scrap are sourced from multiple suppliers.
- Companies with bulk purchase agreements and MoUs with suppliers, enjoy steady supply and some price advantage.
- Since steel supply is currently higher than demand, Bulk buyers are at an advantage.
- Businesses with minimum or partial backward integration, leverage its purchase scale and reliable credit history to bargain with the suppliers.

Result: Raw material prices remain volatile, but mid-size operators can be flexible to take advantage of market dynamics.

• Bargaining Power of Buyers

Low to moderate

- Vendor approvals from institutional and other large clients creates stickiness for preferred suppliers. Switching costs are high because of compliance and risk factors.
- Large EPCs and government buyers still negotiate aggressively, especially in tenders.
- Fast delivery, custom dimensions, and technical support add value beyond pricing.

Result: Buyers have some price influence in tenders, but their ability to replace existing suppliers is limited.

• Threat of Substitutes

Low

- In transmission, railways, solar, and civil structures, steel remains the default material due to cost and regulatory approvals.
- Alternatives like aluminium or composites are used in niche areas but are expensive and not widely certified.

Result: Substitution risk is negligible for these businesses.

- **Rivalry Among Competitors**

Moderate

- Competition is limited to a few approved regional.
- Larger players compete more in national or export markets, leaving a gap for mid-size players to win regionally.
- Demand cycles in steel create occasional pricing pressure, but infrastructure growth supports long-term demand.
- Businesses with focus on approvals, relationships, and location helps reduce competitive intensity.

Result: Competition exists but is contained, with advantage favouring companies that maintain strong client ties and compliance.

13 Threats and Challenges for the Issuer Company and its Products

• Volatility in Raw Material Prices and Supply

- Steel, billets, blooms, and scrap prices are cyclical and prone to global disruptions. International price movements—driven by demand cycles, currency fluctuations, or shifts in major producing countries—can significantly impact cost structures.
- Even with bulk purchase agreements, sudden price increases can reduce margins, as institutional clients often operate with fixed-price contracts.
- External shocks such as trade restrictions, logistics disruptions, or mining policy changes can affect the availability and cost of key inputs. Events such as conflicts, sanctions, export restrictions, shifts in trade alliances, or protectionist measures by large steel-producing nations can impact the availability and pricing of billets, blooms, coking coal, scrap, and iron ore.
- Domestic supply disruptions (e.g., plant shutdowns at key suppliers, customers or power issues) can delay projects and raise procurement costs.

Mitigant: Companies in this sector needs careful inventory planning, supplier diversification, and enough working capital to handle market shocks.

• Working Capital Pressures and Liquidity Constraints

The business is highly working-capital intensive.

- Orders often require large inventory build-up before dispatch. Cancellations or delays can tie up funds for long periods.
- Institutional clients like railways or EPC contractors may delay payments, creating cash flow mismatches.
- Heavy dependence on cash credit and high utilization reduces flexibility and increases risk during demand slowdowns.
- Expanding into new products or segments raises cash needs before additional revenue comes in.

Mitigant: Liquidity gaps on account of market or client delays can disrupt operations and restrict growth.

• Certification, Compliance, and Regulatory Risk

Approvals are essential but also a source of ongoing risk.

- Losing key certifications because of audit or quality issues can eliminate access to high-value projects.
- Stricter environmental or safety regulations can raise compliance costs or lead to temporary closures.
- Labour and licensing restrictions (e.g., employee caps) limit capacity and create regulatory risk if breached.

Mitigant: Continuous investment in compliance and quality is necessary to retain market access and avoid disruptions.

• Concentration and Cyclicity of End-User Markets

The businesses core demand depends on government-driven sectors.

- Delays or cuts in infrastructure spending can reduce demand and lead to idle capacity.

- Dependence on a few large clients makes the company vulnerable if their orders slow.
- Over-concentration in certain sectors raises exposure to structural changes (e.g., new construction technologies or alternative materials).

Mitigant: Expanding the product mix, client base, and sector presence is essential to reduce demand risks.

- **Intense Regional and National Competition**

Competition is selective but remains tough.

- New certified players or larger firms entering mid-size projects can reduce margins and weaken client relationships.
- Competition from unorganised and smaller regional players can exert additional pricing pressure, particularly in cost-sensitive and smaller projects, as such players may operate with lower overheads and greater pricing flexibility.
- Price competition intensifies during slowdowns, pressuring both profitability and credit terms.
- Peers improving capabilities (e.g., gaining approvals, automating, or using scale financing) pose long-term threats.

Mitigant: Maintaining an edge in quality, delivery, and client relationships, while improving operating efficiency, is critical to remain competitive against both organised and unorganised players.

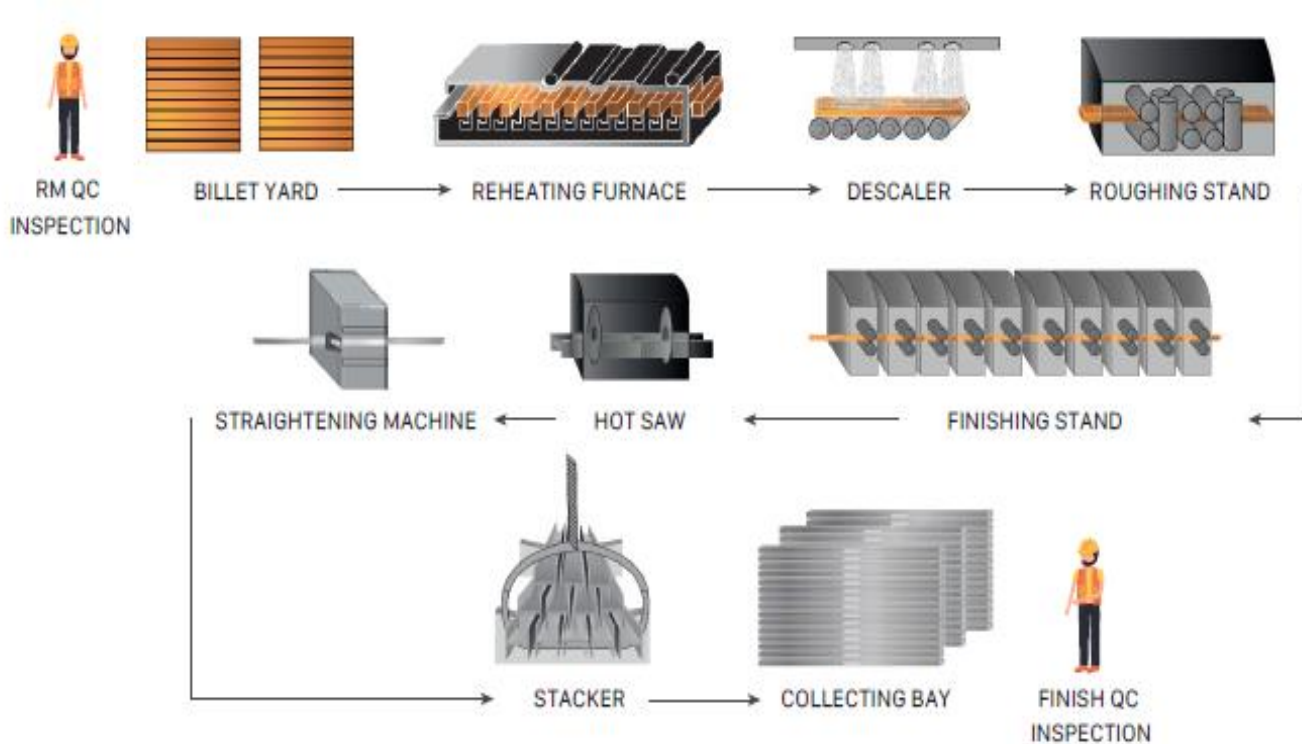
- **Geopolitical Risks, Globalisation, and International Trade Uncertainties**

The company operates in an increasingly interconnected global environment, making it vulnerable to geopolitical developments and shifts in global trade dynamics.

- Escalating geopolitical tensions, conflicts, or sanctions involving major economies can disrupt global steel and raw material supply chains, leading to price volatility, shortages, or delays in procurement.
- Protectionist measures such as higher import duties, anti-dumping actions, export controls, or changes in trade agreements can alter cost competitiveness and restrict access to certain markets or suppliers.
- Globalisation exposes the company to fluctuations in foreign exchange rates, changes in international demand cycles, and policy shifts in key steel-producing or consuming regions, which can indirectly affect domestic pricing and order flows.
- Disruptions in global logistics networks—such as port congestion, shipping route diversions, or freight cost spikes—can increase lead times and input costs, impacting project timelines and margins.

Mitigant: Managing geopolitical and globalisation-related risks requires diversified sourcing strategies, prudent exposure to international markets, flexible procurement planning, and adequate liquidity buffers to absorb short-term disruptions arising from external shocks.

14 Industry Production Process



- **Iron Ore to Billets**

- **Iron ore** is mined from the earth and is one of the main raw materials.
- The mined iron is transported to a plant and converted into **billets**, which are rectangular bars of metal.

- **Billet Processing Steps**

- **Billet Yard:** Billets are stored in a large yard.
- **Reheating Furnace:** Billets are heated to make them soft and easier to work with.
- **Descaler:** Hot billets go through a machine that removes scale (oxide layer) from their surface.
- **Roughing Stand:** Billets are pressed and shaped roughly.

- **Shaping and Finishing**

- **Cropping Shear:** Unwanted ends or portions of the billet are cut off.
- **Finishing Stand:** The material is further shaped into more precise sizes and forms.
- **Straightened Machine:** The shaped product is made straight and even.

- **Cutting, Stacking, and Final Processing**

- **Cutting Mechanism:** Finished steel is cut to desired lengths.
- **Stacker:** The cut pieces are stacked neatly.

- **Strapping Machine:** Bundles of steel are strapped together for shipping.
- **Collecting Bay:** Finished bundles are collected and prepared for delivery.
- **Steel Products Creation**
 - After all these steps, the steel is ready to be turned into different **products** such as angles, channels, flats, and rods, which are used in construction and manufacturing. This process takes raw iron and turns it into useful steel pieces through heating, shaping, cutting, and finishing.

15 Competitive Benchmarking

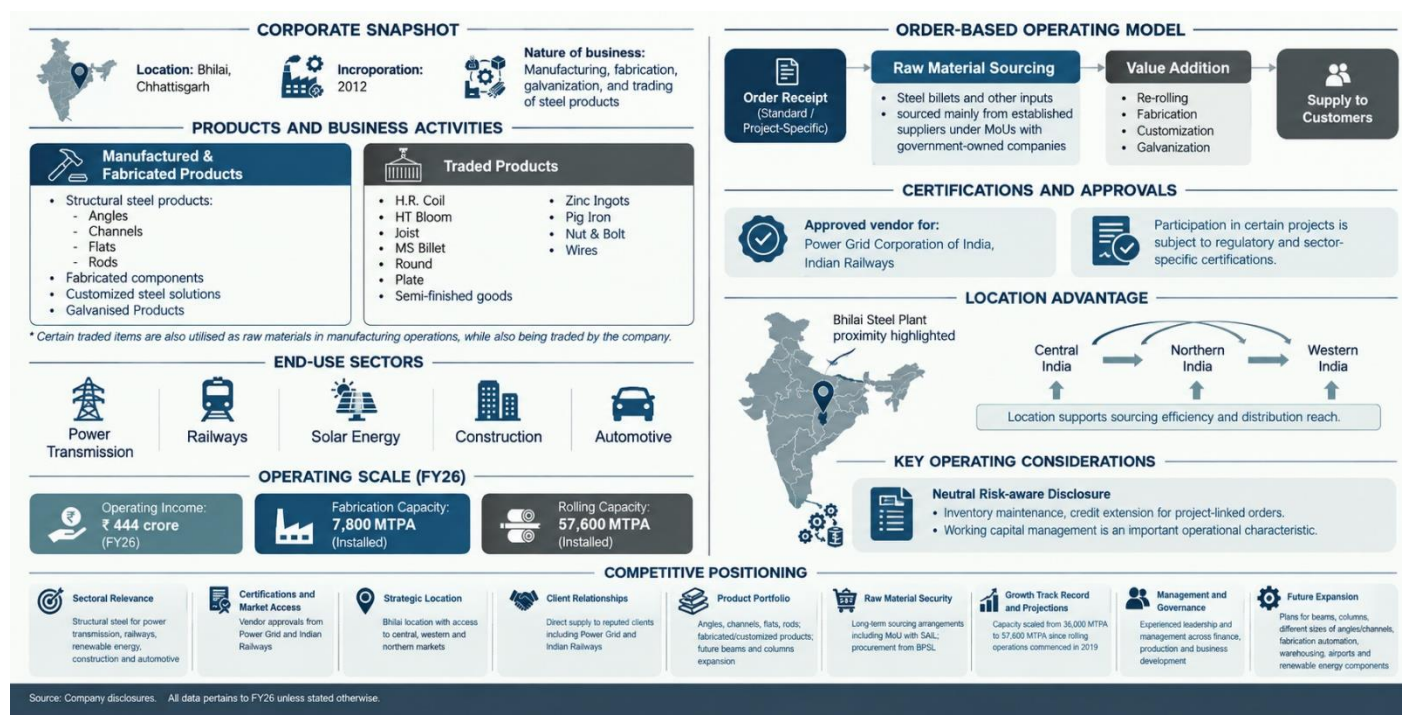
15.1 Brief Profile of Company

15.1.1 Business Profile of Company

Madhur Iron & Steel (India) Ltd. (MISIL), based in Bhilai, Chhattisgarh, manufactures, fabricates and galvanized structural steel products such as angles, channels, flats, and rods. The Company is also engaged in the trading of the following goods: H.R. Coil, HT Bloom, Joist, MS Billet, Round, Plate, Semi-finished goods, Zinc Ingots, Pig Iron, Nut & Bolt, and Wires. Certain of these items are utilised as raw materials in the Company's operations, while also these items are traded by the company. The company serves a range of infrastructure and industrial sectors including power transmission, railways, solar energy, construction, and automotive. In FY26, MISIL reported operating income of 444 crore and had a fabrication capacity of 7,800 metric tonnes per annum along with rolling capacity of 57,600 MTPA. The company is an approved vendor for Power Grid Corporation of India and Indian Railways. Operations are supported by a management team with long-standing sector experience, and MISIL has grown steadily since commencing rolling mill operations in 2019.

MISIL follows an order-based model. Steel billets and other inputs are sourced mainly from established suppliers under MoUs with government-owned companies. The company adds value through re-rolling, fabrication, galvanization and customization, supplying both standard and project-specific products. A significant part of its business depends on compliance with sector certifications, which allows it to participate in regulated projects.

Working capital management is a key factor, given the need to maintain inventory and extend credit in project-linked orders. Its location near Bhilai Steel Plant provides an advantage for both sourcing and distribution, with ready access to demand centers in central, northern, and western India.



15.1.2 SWOT Analysis of the Company

Strengths	Weaknesses
Approved supplier to Power Grid and Railways, enabling access to regulated and large projects.	High working capital intensity arises from large inventory holdings and extended receivable cycles, especially from institutional clients, leading to liquidity pressure, higher dependence on short-term borrowings, and increased financing costs.
Strategic location near steel producers and major demand hubs.	The company is exposed to raw material price volatility, and limited ability to pass on sudden cost increases under fixed-price contracts or competitive conditions can lead to margin pressure during volatile market phases.
Long-standing relationships with reputed EPCs and clients.	Smaller scale compared to large national tower and fabrication players.
Experienced management and operations team.	Expansion (for capacity, new units) depends on regulatory clearances, availability of workforce, and capital; this can slow growth and ability to respond quickly to demand surges.
Opportunities	Threats
Demand from power, railways, solar, and construction projects provides multi-year visibility, as India's ongoing focus on transmission, electrification, and renewable infrastructure positions the company well for long-term orders.	Infrastructure spending tends to be cyclical, and execution delays in power, rail, and construction projects can disrupt order flows and cash cycles. MISIL also competes with larger, well-integrated steel and fabrication companies that benefit from scale, stronger supply chains, and lower production costs. These players can offer more competitive pricing and secure major contracts more easily, posing a threat to MISIL's market share and margins.
Expansion into new product categories like beams, columns, and solar trackers.	Competition from larger and regionally entrenched players.
Government incentives in renewables and housing driving steel consumption.	The company faces risk from potential loss or delay in renewal of mandatory certifications and audit approvals, which could lead to disqualification from key tenders, adversely affecting order inflows, reputation, and long-term business continuity.

15.1.3 Services and Product Mix with the End-use application areas

MISIL supplies:

- **Angles, channels, flats, rods** – used in transmission towers, substations, railway electrification, solar trackers, bridges, building structures, telecom towers, and w` automotive frames.
- **Fabricated components** – for EPC contractors in power, railways, and industrial projects.
- **Customized steel solutions** – meeting IS, BS-EN, and ASTM standards for both domestic and export markets.
- **Trading activity** – supporting smaller industrial and construction buyers.
- **Galvanised Products**

The product mix allows MISIL to serve multiple critical infrastructure sectors where certification and reliability are key.

15.1.4 Geographic presence and Operational Footprint

The Company has two manufacturing units in Bhilai (C.G.)- Manufacturing Unit – I for Rolling Mill and Fabrication and Manufacturing Unit-II for Fabrication and Galvanization. MISIL supplies its products to customers that include multiple renowned and listed corporates.

15.1.5 Competitive Positioning Summary

1. Sectoral Relevance

MISIL manufactures, fabricates, and galvanizes structural steel products that are integral to India's infrastructure development, including power transmission, railways, renewable energy, construction, and automotive.

2. Certifications and Market Access

The company holds vendor approvals from Power Grid Incorporation of India and Indian Railways, enabling access to regulated, high-value projects where quality compliance and certification are mandatory.

3. Strategic Location

MISIL's plant in Bhilai, Chhattisgarh, is located near Bhilai Steel Plant and major consumption hubs across central, western, and northern India, ensuring raw material availability and cost-efficient distribution.

4. Client Relationships

MISIL supplies directly to reputed clients such as Power Grid and Indian Railways building recurring demand visibility.

5. Product Portfolio

The company produces angles, channels, flats, and rods, along with fabricated and galvanized components for infrastructure and industrial applications. Its expansion plans include beams, columns, and round bars to capture additional market segments.

6. Raw Material Security

MISIL has long-term sourcing arrangements, including an MoU with SAIL, and also procures from BPSL, ensuring supply stability and negotiated pricing advantages.

7. Growth Track Record and Projections

Since commencing operations in 2019, MISIL has scaled production capacity from 36,000 MTPA to 57,600 MTPA and delivered steady revenue growth, projecting further expansion to meet rising demand in regulated infrastructure markets.

8. Management and Governance

The company is led by an experienced director with over three decades in the steel industry, supported by a management team with expertise across finance, production, and business development.

9. Future Expansion

MISIL plans to expand its product mix into beams and columns, different sizes of Angles and Channels, automate fabrication processes, and target additional infrastructure sectors such as warehousing, airports, and renewable energy components.

15.1.6 Growth Outlook for the Company

Madhur Iron and Steel's growth outlook remains closely aligned with the positive medium to long-term trajectory of India's infrastructure led steel demand. The domestic steel industry continues to benefit from sustained government focus on power transmission, railways, renewable energy, housing, and large-scale infrastructure projects, all of which are core end-user segments for the company's structural steel products such as angles, channels, flats, and rods.

The company is well positioned to capitalize on these industry trends due to its strategic location near Bhilai Steel Plant and key demand centers across central, western, and northern India, which supports cost-efficient sourcing and distribution. Its status as one of the few regionally approved vendors for critical institutional clients such as PowerGrid and Indian Railways provides a strong competitive advantage, creating entry barriers and enabling steady order inflows in regulated, high-quality segments of the steel market. Industry demand for certified and compliant suppliers is expected to remain strong as infrastructure projects become more standardized and quality-driven.

Capacity expansion initiatives and planned diversification into additional structural products such as beams and columns further enhance Madhur Iron and Steel's growth prospects. These initiatives are in line with industry trends toward integrated supply solutions and value-added products, allowing the company to increase wallet share from existing clients while entering adjacent application segments. Forward integration into fabrication and galvanization also supports improved margins, stronger client stickiness, and reduced dependence on third-party processors.

Overall, supported by favorable industry fundamentals, increasing infrastructure investments, and its strong approval-led positioning, Madhur Iron and Steel is well placed to grow alongside the structural steel industry, with opportunities for scale-up, product diversification, and deeper participation in India's infrastructure growth cycle.

15.2 Brief Profile of Peers

- **Mahamaya Steel Industries Limited**

Mahamaya Steel Industries Ltd., incorporated in 1988, is a public limited company operating in heavy steel engineering and manufacturing. Over the decades, it has carved out a reputation as a pioneer in the steel structural sector, offering a broad product portfolio including joists, beams, channels, rounds, squares, billets, blooms, girders, flats, angles, rails/sleeper bars catering to industries like railways, power plants, bridges, dams and general infrastructure. The company operates a fully integrated production complex in Raipur (Chhattisgarh) comprising a structural rolling mill (SS Mill), a steel-melting shop (SMS), and a captive oxygen-gas plant making it capable of end-to-end steel production under one roof. Over time, the company has also demonstrated technological and capacity growth. Mahamaya serves a wide clientele including large industrial and infrastructure names reflecting its industry credentials and trust in delivering heavy structural steel. Overall, Mahamaya Steel Industries emerges as a mature player in the Indian steel-structure sector combining manufacturing capabilities with rigorous quality control, diversified products, and a track record of delivering for major infrastructure and heavy-industry projects.

- **Skipper Limited**

Skipper Limited, incorporated in 1981, is among India's manufacturers in power-transmission, telecom and infrastructure steel structures. Over four decades, it has built a diversified product portfolio that includes transmission towers, telecom towers, poles, railway-electrification structures, hot-rolled sections, and tower accessories serving power utilities, telecom operators, railways, and broader infrastructure sectors. The company operates fully integrated facilities allowing it to control the entire value chain from raw-angle rolling to final structure supply and EPC services. This vertical integration helps ensure consistent quality, traceability, and reliable delivery. With a broad India-wide footprint and export reach to numerous global markets, Skipper has established itself as a supplier to major utilities and infrastructure players.

- **Mittal Sections Limited**

Mittal Sections Limited is a structural steel manufacturing company that produces mild steel sections and products such as MS flat bars, round bars, angles and channels. These products serve roles across construction, infrastructure, automotive, engineering and general steel-fabrication segments. The company operates two manufacturing plants located at Changodar, Ahmedabad (Gujarat). Mittal Sections leverages its strategically located plants in Gujarat to supply structural steel products efficiently and cost-effectively across regional and national markets. Overall, Mittal Sections Limited represents a focused, mid-sized structural-steel supplier that brings dependable manufacturing capabilities to the table, catering to sectors that require standard steel sections for construction, engineering and industrial use.

- **MPK Steels (I) Limited**

MPK Steels (I) Limited, established in 2006 and based in Jaipur, Rajasthan, is a manufacturer and supplier of mild-steel structural products including MS channels, joists/beams, angles, round bars, square bars, flat bars and more. MPK Steels serves a diverse range of industries including construction, infrastructure, railways, power, automotive and general fabrication. With certifications including ISO 9001, ISO 14001 and OHSAS 45001, M P K Steels emphasises quality control, environmental standards and occupational safety in its manufacturing processes. This underlines the company's commitment to consistent product standards and compliance. Overall, M P K Steels (I) Limited stands out as a regional-level structural steel supplier combining fundamental product breadth, manufacturing discipline, and a focus on quality suitable for a variety of industrial and infrastructure-related applications.

15.3 Competitive Benchmarking

Peer Benchmarking across Operational Metrics

Table 10: Competitive Landscape Across Operational Metrics

Parameter	Madhur Iron and Steel (India) Limited	Mahamaya Steel Industries Limited	Skipper Limited	Mittal Sections Limited	MPK Steels (I) Limited
Manufacturing Locations	Bhilai, Chhattisgarh	Raipur, Chhattisgarh	West Bengal, Assam	Gujarat	Rajasthan
Installed Capacity (In MTPA)	57,600	4,05,500*	3,75,000	36,000	86,400
Product Types Being Manufactured	Structural Steel Products	Heavy Steel Structural Products	Transmission and Distribution Structures	Mild Steel Structural Products	Mild Structural Steel Products
End-Use Sectors	Power Transmission and Distribution, Railways, Automobile, Solar Infrastructure, Equipment Manufacturing, Infrastructure and Construction	Railways, Power Plants, Dams, Bridges, etc.	Power Transmission and Distribution, Railways, EPC	Infrastructure and Construction, Automotive, Manufacturing	Infrastructure and Construction, Automotive, Power and Energy

Source: Company Documents

Note: *Sum of Mill and Melting Shop capacity

Peer Benchmarking Across Financial Metrics

Table 11: Competitive Landscape Across Financial Metrics

	Madhur Iron and Steel Private Limited				Mahamaya Steel Industries Limited				Skipper Limited			
	FY23	FY24	FY25	FY26	FY23	FY24	FY25	FY26	FY23	FY24	FY25	FY26
Revenue (in Rs. Crore)	193	239	340	444	650	784	802	883	1980	3282	4624	5553
EBITDA Margin	6.8%	10.4%	11.1%	11.7%	2.1%	2.1%	2.3%	2.7%	9.9%	9.9%	9.8%	10.4%
PAT Margin	3.2%	5.2%	5.3%	5.4%	0.8%	0.9%	0.9%	1.1%	1.8%	2.5%	3.2%	3.8%
Debt Equity	1.5	1.7	1.2	1.7	0.3	0.3	0.3	0.4	0.6	0.6	0.6	0.6
Return on Equity	31.6%	29.4%	19.3%	20.3%	4.1%	4.8%	5.1%	12.1%	4.6%	9.1%	12.5%	28.6%
Return on Assets	4.8%	9.8%	7.7%	7.1%	2.4%	2.9%	3.1%	7.1%	1.6%	2.6%	4.4%	9.4%
Return on Capital Employed	16.8%	51.5%	37.9%	40.0%	5.1%	6.4%	7.3%	19.0%	13.8%	20.3%	26.0%	46.0%
Current Ratio	1.3	1.4	1.5	1.4	1.8	1.7	1.5	1.4	1.3	1.3	1.3	1.3

	Madhur Iron and Steel Private Limited				Mittal Sections Limited				MPK Steels (I) Limited			
	FY23	FY24	FY25	FY26	FY23	FY24	FY25	FY26	FY23	FY24	FY25	FY26
Revenue (in Rs. Crore)	193	239	340	444	167	161	137	149	138	187	207	259
EBITDA Margin	6.8%	10.4%	11.1%	11.7%	1.8%	3.3%	5.4%	5.0%	1.6%	2.0%	4.1%	4.1%
PAT Margin	3.2%	5.2%	5.3%	5.4%	0.3%	1.2%	2.5%	2.3%	1.3%	2.1%	2.8%	2.3%
Debt Equity	1.5	1.7	1.2	1.7	4.2	2.2	2.1	0.4	0.6	0.8	0.8	0.3
Return on Equity	31.6%	29.4%	19.3%	20.3%	11.5%	28.1%	33.8%	11.9%	12.1%	20.8%	23.6%	23.3%
Return on Assets	4.8%	9.8%	7.7%	7.1%	1.7%	6.5%	7.6%	7.0%	3.9%	6.8%	9.2%	10.3%
Return on Capital Employed	16.8%	51.5%	37.9%	40.0%	19.2%	38.3%	28.9%	20.1%	13.1%	23.6%	27.1%	34.7%
Current Ratio	1.3	1.4	1.5	1.4	1.2	1.2	0.9	1.4	1.4	1.6	2.1	1.8

Source: Company Documents, CareEdge Research

Revenue Growth

Madhur Iron & Steel has demonstrated strong revenue growth over FY23-FY26, with revenue increasing from Rs 193 Cr in FY23 to Rs 444 Cr in FY26, supported by expansion in its operations. While Madhur Iron maintained a significantly larger revenue base than the selected peers, MPK Steels recorded the second highest year-on-year revenue growth in FY26, with revenue increasing from Rs 207 Cr in FY25 to Rs 259 Cr in FY26. In contrast, Mittal Sections' revenue declined from Rs 167 Cr in FY23 to Rs 149 Cr in FY26. Overall, Madhur Iron has established a larger and steadily expanding revenue base among the selected peer set.

EBITDA Margin

Madhur Iron reported the highest EBITDA margin in FY26 among the selected peers, improving from 6.8% in FY23 to 11.7% in FY26. This indicates comparatively stronger operating profitability and ability to generate operating earnings from revenue. Mittal Sections' EBITDA margin improved meaningfully through FY25 but moderated to 5.0% in FY26, while MPK Steels maintained a relatively stable margin of 4.1% in FY25-FY26. Madhur Iron's sustained margin advantage indicates comparatively stronger operating efficiency and profitability within the peer set.

PAT Margin

Madhur Iron reported the highest PAT margin among the selected peers, increasing from 3.2% in FY23 to 5.4% in FY26. The improvement indicates a favourable conversion of operating performance into net earnings. Mittal Sections' PAT margin increased to 2.5% in FY25 before moderating to 2.3% in FY26, while MPK Steels' margin stood at 2.3% in FY26. Madhur Iron's higher net margin indicates comparatively stronger bottom-line profitability, although differences in financing and asset structures also influence the metric.

Debt-to-Equity

Madhur Iron's debt-to-equity ratio stood at 1.7x in FY26, higher than 1.2x in FY25, indicating an increase in financial leverage during the year. In comparison, Mittal Sections significantly reduced its leverage from 4.2x in FY23 to 0.4x in FY26, while MPK Steels' ratio declined from 0.8x to 0.3x over the same period. Accordingly, Madhur Iron currently operates with higher leverage than the two selected peers, which could provide greater financial capacity for expansion but also implies relatively higher balance-sheet exposure to financing costs and market conditions.

Return on Equity

Madhur Iron's ROE remained robust at 20.3% in FY26, improving from 19.3% in FY25, although below the 31.6% recorded in FY23. Mittal Sections reported a sharp decline in ROE from 33.8% in FY25 to 11.9% in FY26, while MPK Steels maintained a relatively stable ROE of around 23%. Madhur Iron therefore continues to generate competitive

returns on shareholders' equity, supported by its profitability, although the metric remains influenced by changes in leverage and the underlying equity base.

Return on Assets

MPK Steels recorded the highest ROA in FY26 at 10.3%, indicating comparatively stronger utilisation of its asset base in generating earnings. Madhur Iron's ROA moderated from 7.7% in FY25 to 7.1% in FY26, while Mittal Sections' ROA remained broadly stable at 7.0%. The relatively lower ROA for Madhur Iron, despite its stronger margins, may reflect the larger asset base supporting its operations and expansion.

Return on Capital Employed

Skipper Limited reported the highest ROCE among the selected peers at 46.0% in FY26, followed by Madhur Iron at 40.0% and MPK Steels at 34.7%, while Mittal Sections recorded 20.1%. Madhur Iron's ROCE improved from 37.9% in FY25 to 40.0% in FY26, indicating strong efficiency in generating operating returns from the capital employed. Although Madhur Iron trails Skipper on this metric, its ROCE remains comparatively strong within the selected peer set.

Current Ratio

Madhur Iron's current ratio stood at 1.4x in FY26, indicating adequate coverage of short-term liabilities, although marginally lower than 1.5x in FY25. MPK Steels maintained the strongest liquidity position among the selected peers, with a current ratio of 1.8x in FY26, while Mittal Sections improved materially from 0.9x in FY25 to 1.4x in FY26. Madhur Iron's liquidity position remains broadly adequate, although its lower ratio relative to MPK Steels indicates comparatively less short-term liquidity headroom.

Contact

Tanvi Shah	Senior Director	tanvi.shah@careedge.in	022 6837 4400
Vikram Thirani	Director	vikram.thirani@careedge.in	022 6837 4434

About CARE Analytics and Advisory Private Ltd (CareEdge Research)

CareEdge (CARE Group) is a knowledge-based analytical group that aims to provide superior insights based on technology, data analytics capability and detailed research methods. CareEdge (CARE Ratings Limited) is one of the leading credit rating agencies in India. It has an impressive track record of rating companies for almost three decades and has played a pivotal role in developing the corporate debt market in India. CareEdge provides near real time research on all domestic and global economic developments. CARE Analytics & Advisory Private Ltd is a wholly owned subsidiary focused on providing advisory and consultancy services including the following:



CARE Analytics & Advisory Private Ltd

(Wholly-owned subsidiary of CARE Ratings Ltd.)

Office No. 602, 6th Floor, Rustomjee Aspiree, Off Eastern Express Highway, Sion East, Mumbai- 400022

Phone: +91-22-68374400

Connect :

