



# Management Discussion & Analysis

Market Review



## GLOBAL ECONOMY

The global economy in FY 2024–25 has seen a mix of cautious optimism and a continued uncertainty. Encouragingly, inflation has shown signs of moderation across major economies, offering some relief after years of elevated price pressures. This easing trend, supported by more stable commodity prices and improved supply chain dynamics, has allowed central banks, especially in advanced economies, to hold firm on tight monetary policies without further aggressive rate hikes. While interest rate cuts have been limited, the more predictable inflation path has helped stabilize financial markets and laid the foundation for a gradual economic recovery.

However, this progress has been overshadowed by renewed geopolitical and trade tensions, particularly between the United States and China. Early in the fiscal year, the U.S. upheld steep tariffs on Chinese imports, averaging over 145%. In March 2025, U.S. also imposed a 25% duty on all steel and aluminium products, citing national security concerns. China responded with its own set of tariffs, some reaching 125%, triggering a sharp decline in bilateral trade and causing ripple effects across global supply chains.

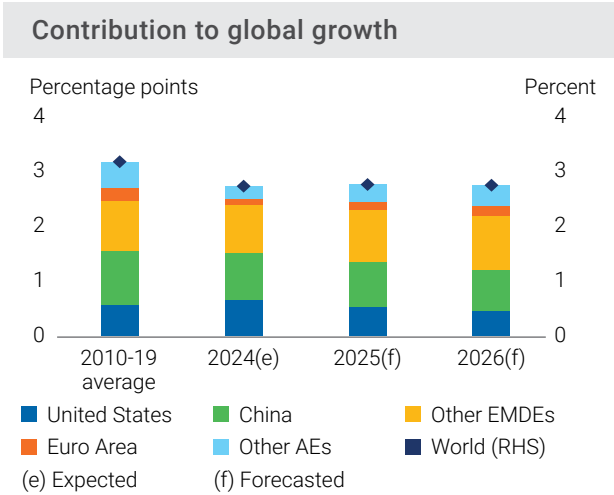
A pivotal moment came in May 2025, when both nations agreed in Geneva to a 90-day suspension of tariffs exceeding 100%, aiming to de-escalate tensions and reopen dialogue. President Trump reduced tariffs on Chinese goods to 30%, while China lowered its tariffs on U.S. products to 10%. Despite this temporary truce, deeper issues remain unresolved, particularly around U.S. export controls on advanced semiconductors and China's restrictions on rare earth minerals, both critical to high-tech and automotive industries.

High-level negotiations resumed in London in June, focusing on technology transfer, export licensing, and the broader tariff framework. Yet, the U.S. simultaneously proposed to raise steel and aluminium tariffs to 50%, signalling that tariffs remain a key strategic tool.

While the tariff pause offers a brief reprieve, the path forward remains uncertain. Businesses worldwide continue to adapt to a complex and evolving trade landscape, as the global economy cautiously navigates these turbulent times.

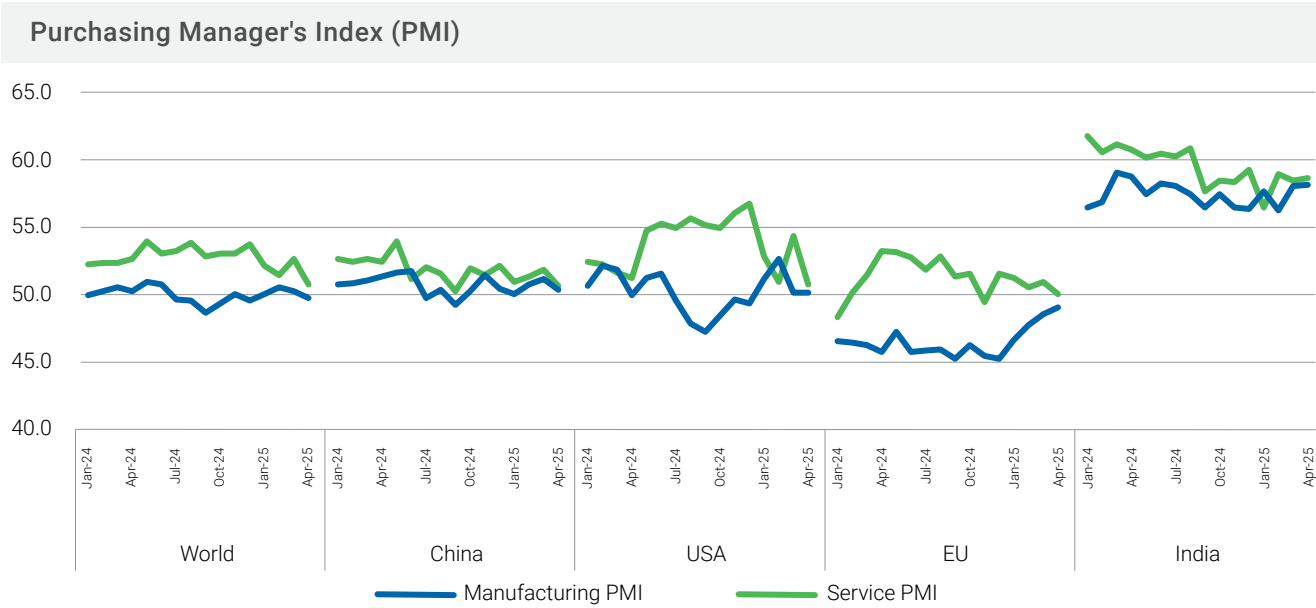


In 2024, the global economy demonstrated resilience amid various challenges. The International Monetary Fund (IMF) reported a global real GDP growth rate of 3.3%, with emerging market and developing economies growing at 4.3%, and advanced economies at 1.8%. While this was an improvement over the pandemic years, it was still lower than pre-pandemic growth rates.

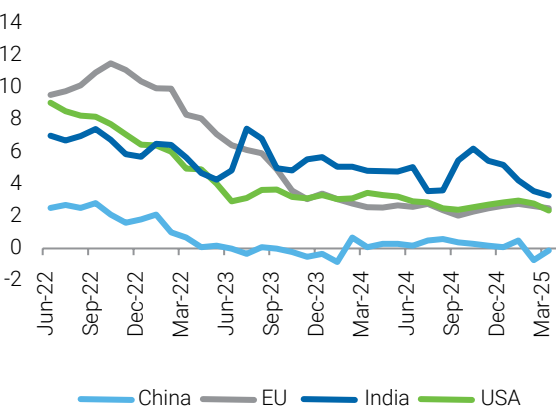


Global inflation continued to decline in 2024 following high inflation in previous years, partly due to the normalisation of supply chains after pandemic disruptions. Central banks, such as the U.S. Federal Reserve and the European Central Bank, were in a position to ease some of the aggressive monetary tightening policies they had implemented in 2022 and 2023 as inflation rates decreased. However, the disinflation stalled in certain countries and has been moving sideways, causing slower reductions in interest rate cuts.

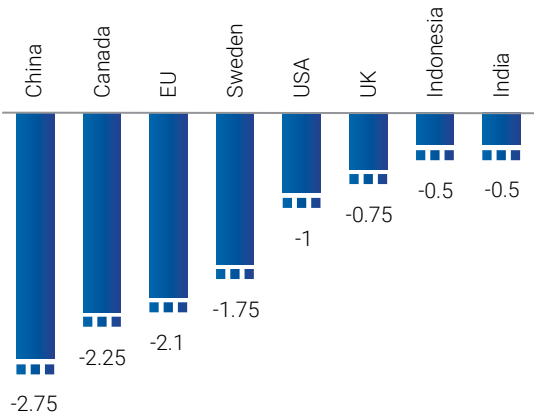
Global manufacturing activities fluctuated in 2024 with intermittent expansion and contraction. While growth uncertainties, geopolitical tensions, and high finance costs dampen activities, falling inflation and resultant improving disposable income, coupled with easing interest rates in the later part of 2024, improved manufacturing activities. Service sector activities, on the other hand, continued to perform better with rising wages.



**Trend in Global Inflation (% Y-o-Y)**



**Interest rate cut by major economies from 2024 high (%)**



However, the global economic landscape has been rapidly evolving, with trade policy uncertainty emerging as the key driver of the near-term outlook. Since taking charge of the office on 20 January 2025, the U.S. President Donald Trump has significantly escalated the U.S. tariff war, implementing sweeping measures that affect global trade dynamics.

On 01 February 2025, Trump issued an executive order to impose 25% tariffs on goods from Mexico and Canada, and 10% tariffs on China with effect from 04 February 2025. As these countries announced countermeasures, within two days, that order was held back for 30 days for Canada and Mexico, without giving any respite to China.

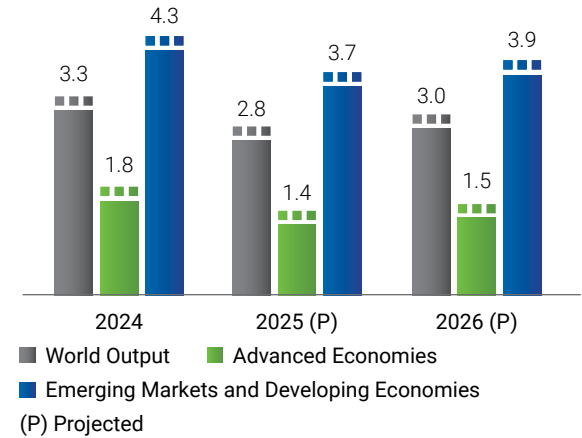
On 10 February, the U.S. President reinforced a 25% import duty on steel and imposed a 25% duty on aluminium (raised from earlier 10% tariffs imposed in 2018), effective from 12 March 2025, ending earlier exemptions to various countries. The White House also issued an executive order to conduct an investigation into whether imports of copper pose a threat to U.S. national security.

Trump affirmed the imposition of 25% tariffs on Canada and Mexico when the one-month delay expires on 04 March. An additional 10% tariff on goods from China also took effect the same day. He also imposed 25% tariffs on automobiles and certain automobile parts, with special tariff exemptions for USMCA (United States-Mexico-Canada Agreement) compliant auto parts as well as for the value of the U.S. content embedded in autos imported under USMCA.

Major headwind came on 2 April, when the White House imposed a baseline 10% tariff starting 05 April 2025, on virtually all countries and then additional "reciprocal" tariffs starting 09 April 2025, on countries that contribute to large, persistent US trade deficits. As countries like China, Canada and the EU strongly retaliated, Trump announced a 90-day pause on differential tariffs on 09 April.

But as China retaliated, the U.S. tariffs on both sides kept rising. China imposed 125% tariffs on U.S. products with other measures, while they now face a higher tariff of 145% from the U.S.

**Real GDP Growth**



**Global Economic Outlook**

The U.S.-led multiple waves of tariffs against trading partners have caused major policy shifts, resetting the global trade system and giving rise to uncertainty. This has overshadowed the positive developments that the world has achieved during the post-pandemic revival in the last two years. For example, from the multi-decade high inflation came down near the target levels of the central banks, encouraging them to reduce the interest rates. Labour markets also improved, with unemployment and vacancy rates returning to pre-pandemic levels.

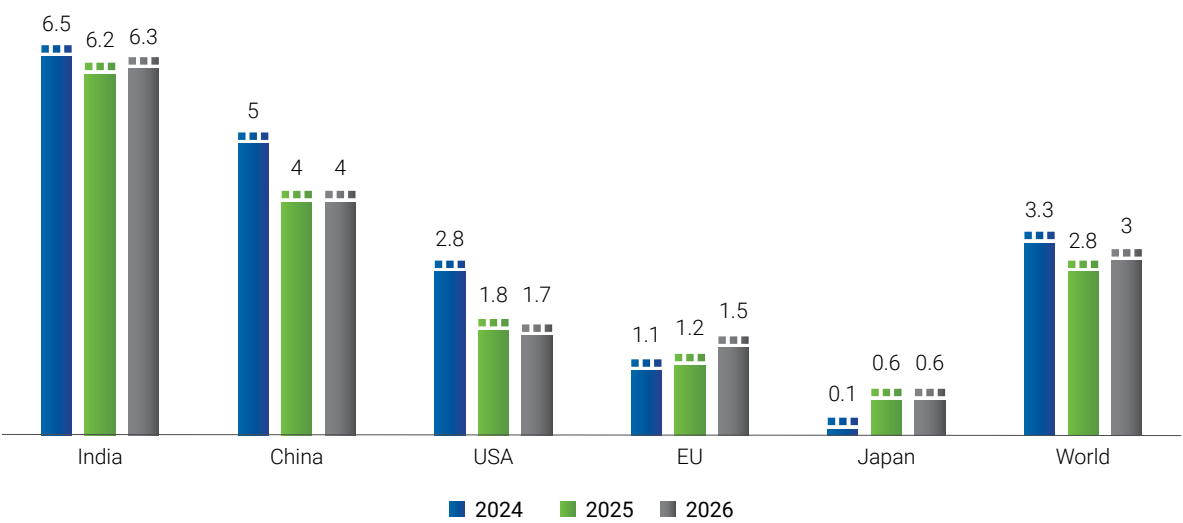
With the world's two biggest economies at loggerheads in a full-blown trade war, the fear of a global slowdown intensified. Heightened uncertainty has affected the consumer sentiment, discouraging them from making big-ticket expenditures. Business sentiment is also damaged, prompting many companies to suspend their capital spending plans. On top of that, inflation in the U.S. could rise again as Trump's policies on trade, deportation, and tax are inflationary.

The newly emerged situation has triggered a downward revision of global growth prospects by the forecasting agencies. The International Monetary Fund (IMF) in its World Economic Outlook (WEO) on 22 April has dropped global GDP projection from 3.3% in 2024 to 2.8% for 2025 and 3% in 2026, down from 3.3% for both years in its January 2025 WEO Update. This is much below the historical (2000-19) average of 3.7%. Global headline inflation is now likely to decline at a slower pace than earlier expectations in January, reaching 4.3% in 2025 and 3.6% in 2026.

However, market sentiment improved after Donald Trump had said that his tariffs on China would come down "substantially" and he had "no intention" of firing the chair of the U.S. central bank, Jerome Powell. China also signalled its openness to trade talks with the U.S.



GDP Growth Projection by IMF (% , Y-o-Y)



Geopolitical Tensions and Climate Change Impacting Trade

Global supply chains are grappling with unprecedented challenges due to escalating geopolitical tensions and the intensifying impacts of climate change. Trade conflicts, particularly between major economies, have led to significant disruptions, with new tariffs and protectionist policies forcing companies to diversify their supplier bases and rethink their manufacturing strategies. Regional conflicts, such as the crisis in the Red Sea, have resulted in a 67% decrease in container ship transits compared to the previous year, causing vessels to reroute and increasing transit times and costs.

Simultaneously, climate change has emerged as a critical factor affecting supply chain stability. Extreme weather events, including floods and droughts, have disrupted production and transportation networks. For instance, severe drought conditions have led to a 36% reduction in transits through the Panama Canal, further complicating logistics and inflating costs due to longer alternative routes. These environmental challenges highlight the urgent need for businesses to incorporate climate resilience into their supply chain planning.

In response to these dual challenges, companies are increasingly investing in technologies such as artificial intelligence and digital twins to enhance supply chain visibility and resilience. There is also a growing emphasis on reshoring and diversifying supplier networks to mitigate risks associated with geopolitical and climate-related disruptions. In future, the convergence of geopolitical instability and climate change is expected to continue posing significant risks to global supply chains. Businesses that proactively adapt by enhancing flexibility, investing in technology, and prioritising sustainability will be better positioned to navigate the complexities of the global trade environment.

United States of America

In 2024, the U.S. economy was navigating through a period of transition, marked by uncertainty over the general election, a cooling housing market, and efforts to manage inflation. But still, the U.S. economy registered impressive growth of 2.8% in 2024, which was marginally below the 2.9% achieved in 2023.

Consumer spending, which is a major driver of U.S. GDP, continued to show perseverance, but at a more moderate rate. While the job market remained relatively strong, inflation and high-interest rates were impacting purchasing power and confidence.

The Federal Reserve had significantly raised interest rates between 2022 and 2023 to combat inflation, and in 2024, it was maintaining these higher rates to keep inflation in check. But after peaking in 2022, inflation continued to moderate in 2024, and by mid-year, inflation declined closer to the Federal Reserve's target of 2%.

While inflation was cooling, the central bank reduced the interest rate by a cumulative 100 basis points in 2024 but remained cautious about potential price surges in the future.

But intensified trade war and tariff announcements have shifted this to a notably more pessimistic stance. In early April, J.P. Morgan Research raised the probability of a recession occurring in 2025 to 60%, up from 40%. Goldman Sachs also raised the odds of a U.S. recession to 45% from 35%. Despite direct pressure from the U.S. President, U.S. Federal Reserve Chair Jerome Powell said that the Fed would be in wait and watch mode before changing interest rates, as President Donald Trump's tariff policies could push inflation and employment further away from the central bank's goals.

While the possibility of the U.S. entering recession (defined as two consecutive quarters of negative GDP growth) appears to be low, particularly after achieving 2.9% GDP growth in Q4/CY2025, the pace of growth in the U.S. economy is vulnerable to considerably slow down if the current trade policies are retained. Growth in the U.S. is expected to slow to 1.8% in 2025 and 1.7% in 2026 from 2.8% in 2024, as per the IMF.

China

In 2024, China's economy showed signs of recovery after the disruptions caused by the pandemic, but it also faced a series of challenges. After a sluggish period following the pandemic's strict lockdown measures, China's economy could achieve the targeted 5.0% GDP growth in 2024.

The growth rate was partly due to the government's efforts to shift focus from manufacturing and infrastructure investment to services, consumption, and high-tech industries. In 2024, China's government rolled out various measures to boost economic growth, including targeted fiscal stimulus, monetary easing, and investments in green infrastructure. These measures were intended to stabilise the economy, promote consumption, and stimulate investment in key sectors. This rebalancing was part of China's longer-term strategy to move towards a more sustainable and consumer-driven economy.

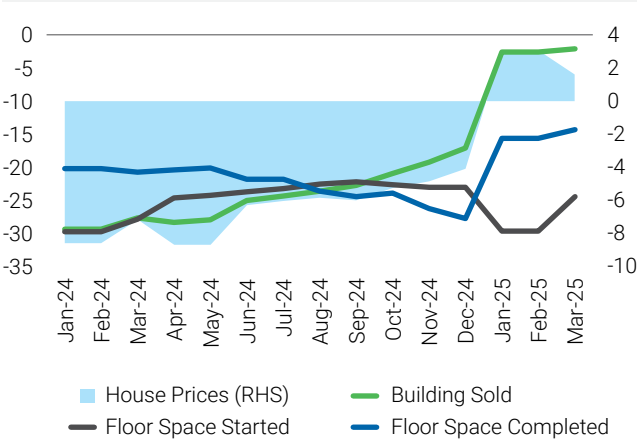
A slump in housing sales has receded from -29.3% in January 2024 to -17% in December 2024 and further improved to -2.1% in YTD March 2025. Housing prices also reversed the negative Y-o-Y growth trend.

China's industrial sector showed resilience in 2024, with strong performance in sectors like technology, green energy, and electric vehicles (EVs). The government's push for innovation and technological self-reliance led to growth in high-tech industries, including semiconductors, robotics, and renewable energy. China's industrial production also rose by 5.8% in 2024 and registered a robust jump

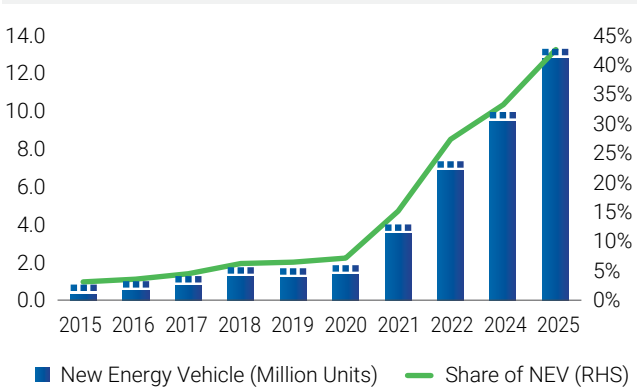
of 7.7% in March 2025, mainly backed by solid export growth before the U.S. tariffs set in.

Automobile sales in China grew modestly by 4.5%, with 31.4 million units sold in 2024. But New Energy Vehicles witnessed a huge surge of 36% to 12.9 million units sold in 2024. New Energy Vehicle now holds 41% share in China's automobile sales.

China's Real Estate Sector Growth (% , Ytd)



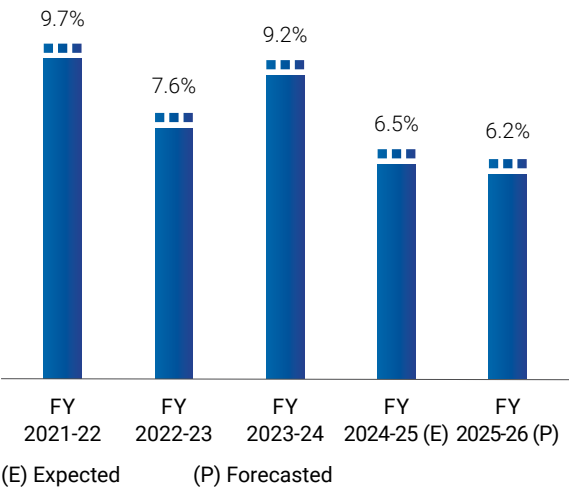
China New Energy Vehicle Sales





INDIA ECONOMY

India's economic performance in FY 2024-25 has been characterised by a combination of strong growth drivers and emerging challenges. Following a splendid 9.2% GDP growth in FY 2023-24, the Indian economy is estimated to grow by 6.5% in FY 2024-25 (per the Second Advance Estimate). Weak urban consumption, persistent food inflation, and sluggish private sector investment have contributed to the economic slowdown. Except for agriculture, all other sectors registered lower growth in FY 2024-25 than the previous fiscal year, with a more notable slowdown observed in manufacturing, which is likely to have grown by just 4.3% in FY 2024-25 vis-à-vis 12.3% in FY 2023-24.



Rising trade and tariff tensions, along with resulting financial market volatility, have sparked concerns about a potential slowdown in global growth in the near term. While this subdued global outlook may affect India's growth by weakening external demand, the country's domestic drivers, namely, consumption and investment, remain relatively insulated from global shocks.

India is relatively better placed compared to other countries to face the vagaries of trade tension. India is less dependent on exports as export contributes just 21% of India's GDP



as compared to 87% for Vietnam or 65% for Thailand. On the other hand, private consumption fuels the economic growth, having a 61% share in GDP vis-à-vis 40% for China, 55% in Vietnam and Canada. India is also better placed as compared to its regional peers if the reciprocal tariff is triggered after the 90-day pause.

Integral to this accelerated growth trajectory and increasing economic self-sufficiency have been significant governmental reforms and considerable capital allocated towards both physical and digital infrastructure. Government initiatives such as 'Make in India' and the Production-Linked Incentive (PLI) scheme have also played a crucial role.

The services sector in India demonstrated a steady expansion of 7.2%. This growth was fuelled by strong performance across a range of areas, including finance, property, professional services, public administration, and defence, amongst others.

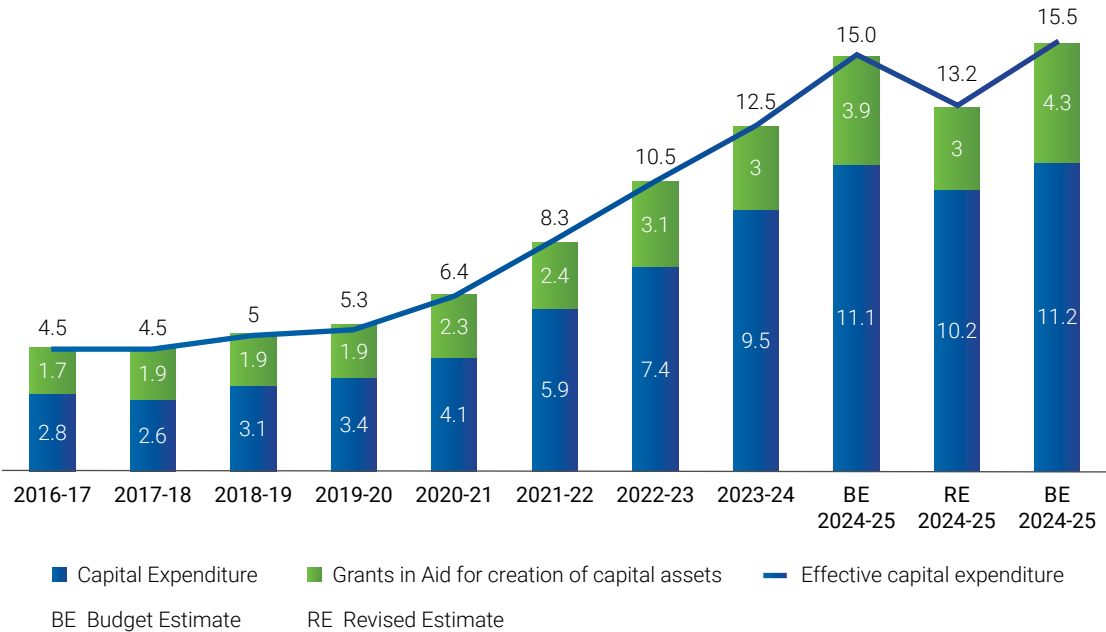
India's economic stature continues its upward climb, with the nation now holding the position of the world's fifth-largest economy by nominal Gross Domestic Product (GDP) and the third-largest when assessed by purchasing power parity (PPP). Ambitious national targets have been set to achieve a US\$ 5 trillion economy by FY 2027-28 and a US\$ 30 trillion economy by 2047. These aims are to be accomplished through substantial infrastructure investments, ongoing governmental reforms, and the widespread adoption of technological advancements. Reflecting this commitment, the capital investment budget for the upcoming financial year (2025-26) has increased to ₹ 11.21 lakh crore, representing 3.1% of GDP.

The outlook for the agricultural sector has improved, supported by a forecast of an above-normal southwest monsoon in 2025, which could boost farm incomes and help stabilise food prices. In March, headline inflation eased to a 67-month low of 3.3%, largely due to a drop in food prices. RBI has also reduced the interest rate by 50 basis points so far and is expected to cut more to support growth. The manufacturing sector has also shown improvement, as indicated by a strong manufacturing PMI of 58.2 in April 2025, which is the highest in 10 months.

Infrastructure development remains a major focus of the Indian government. The National Infrastructure Pipeline (NIP), with investments in roads, railways, airports, and ports, is expected to see substantial funding through 2025 and beyond. As mentioned earlier, the Union Budget for 2025-26 proposed total capital expenditure of ₹ 11.21 lakh crore and an effective capital expenditure of ₹ 15.48 lakh crore. The budget also proposed an outlay of ₹ 1.5 lakh crore for 50-year interest-free loans for states for infrastructure development.

Hence, the IMF forecasted a relatively more stable economic growth of 6.2% in 2025 and 6.3% in 2026, though it is 0.3 and 0.2 percentage points lower, respectively, than its January 2025 outlook update.

Trend in Govt. Capital Expenditure (₹ lakh crore)



Outlook

India's economy is expected to grow at a rate of 6.2% in FY 2025-26. Projections indicate that by 2030, India will likely become the world's third-largest economy, driven by investment in infrastructure, greater private sector capital expenditure, and the expansion of financial services. Ongoing reforms are anticipated to support this long-term economic advancement.

Several factors solidify this positive outlook, including India's favourable demographics, increasing capital investment, proactive government schemes, and strong consumer demand. Improved spending in rural areas, helped by moderating inflation, further reinforces this growth trajectory. The government's focus on capital expenditure, prudent fiscal management, and measures to boost business and consumer confidence are creating a supportive environment for both investment and consumption.

Programmes such as Make in India 2.0, reforms designed to improve the ease of doing business, and the Production-Linked Incentive (PLI) scheme are intended to strengthen infrastructure, manufacturing, and exports, positioning India as a significant player in global manufacturing. With inflation expected to be on target by the end of this year (2025), a more accommodating monetary policy is likely. Infrastructure development and supportive government policies will facilitate capital formation, while rural demand will receive a boost from initiatives like the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY).

(Source: PIB, MoSPI, Economic Survey)







Segment Review

# ALUMINIUM

Market Overview

FY 2024-25 saw significant volatility in LME aluminium prices. Prices stood at ~US\$ 2,250/tonne in March 2024, spiked to US\$ 2,700/tonne in May following sanctions on Russia, and dropped to US\$ 2,200/tonne by July. A reduction in Chinese export rebates in November lifted prices to US\$ 2,600/tonne, stabilising around US\$ 2,500/tonne by December. Trade measures by the United States further supported a stable trading range of US\$ 2,500–2,700/tonne towards year-end.

In CY 2024, global primary aluminium production rose by 3% Y-o-Y to

~73.0 million tonnes. Demand remained broadly aligned, resulting in a marginal surplus of 0.2 million tonnes. Ex-China, both production and consumption remained flat. In India, demand increased by 10% to ~5.5 million tonnes in FY 2024-25, with primary metal comprising 64% of consumption.

Market Outlook

Global aluminium demand is projected to grow at a CAGR of ~3% between 2024 and 2030, supported by decarbonisation trends and the transition to clean energy. Demand from EVs is expected to reach 31.7 million tonnes by 2030, while

increased use of aluminium in solar panels and in replacing copper wiring in power infrastructure will drive further growth.

In China, consumption continues to show strength, though long-term growth will depend on sustained activity in transportation and a gradual recovery in construction. For the Rest of the World, modest demand growth is expected in 2025 as inflation moderates, and investment picks up.

India remains a strong demand centre, with domestic consumption expected to grow over 8% in FY 2025-26. Rising demand from sectors such as electronics, appliances, renewables, defence, and aerospace will continue to support this growth.

Products and Customers

Vedanta remains India's largest primary aluminium producer, with an installed capacity of ~2.4 million tonnes. Its portfolio spans ingots, primary foundry alloys, wire rods, billets, and rolled products, catering to sectors including energy, transportation, construction, packaging, aerospace, and defence. The Company achieved a 48% domestic market share in FY 2024-25, with sales volumes rising ~18% Y-o-Y.

Vedanta continued expanding its value-added product (VAP) share, which accounted for ~53% of total global aluminium sales in FY 2024-25 – an 8% increase Y-o-Y. The Company is targeting a 70% VAP share in FY 2025-26.

# ZINC INDIA

Market Overview

FY 2024-25 witnessed considerable volatility in zinc prices, driven by macroeconomic headwinds and geopolitical developments. The LME zinc price averaged US\$ 2,875 per tonne during the year – marking a 16% rise from FY 2023-24's average of US\$ 2,475 per tonne. Prices peaked at US\$ 3,102.91 per tonne in October 2024 before moderating to US\$ 2,887.83 per tonne by March 2025. LME warehouse inventories declined to 141 kt and SHFE stocks to 72 kt by March 2025, down significantly from the previous year, indicating tightening market conditions.

Global refined zinc production contracted marginally by 3% to

13,237 kt in CY 2024, compared to 13,712 kt in CY 2023. Meanwhile, demand saw moderate growth, with global refined consumption rising by 1.7% to 13,602 kt, up from 13,369 kt in the previous year. This demand-supply imbalance resulted in a market deficit of 436 kt.

Trade conditions remained complex, shaped by new tariff measures under the US administration, which created uncertainty in global trade and applied pressure on industrial activity, particularly in the US. However, infrastructure-led spending in China and Germany partially offset this impact. Notably, Europe's zinc demand grew by 3.8% in CY 2024, surpassing earlier expectations. In India, the zinc market continued to demonstrate resilience, registering a 5% increase in demand during CY 2024.

Market Outlook

The global zinc market is expected to remain balanced but tight. Refined zinc production is projected to rise by 4% to 13,367 kt in CY 2025, while consumption is anticipated to grow 2% to 13,892 kt. Persisting geopolitical tensions, including those in the Middle East, along with elevated tariffs between the US and China – despite ongoing discussions to lower duties to 10-20% – are likely to keep commodity markets volatile. The US Federal Reserve has kept interest rates steady at 4.25–4.50%, amid gradually easing inflation, which stands at 2.4% but remains sticky at 2.8%.

India's zinc demand is expected to grow by 5-6% in FY 2025-26, reaching 867 kt, supported by continued urbanisation, infrastructure investments, and increasing household incomes. Key demand drivers include rail modernisation, renewable energy, and rural electrification.

Business Overview

Hindustan Zinc, the world's largest integrated and India's only primary zinc producer, maintained its leadership with a 77% domestic market share in FY 2024-25. It achieved record-high domestic zinc sales of 603 kt, up 4% Y-o-Y. The Company also recorded its highest-ever Value-Added Product (VAP) sales at 179 kt, growing 11% Y-o-Y. Approximately, 73% of refined zinc production was sold domestically, with the balance exported to South-East Asia, the Middle East, the US, and Europe.





Market Overview

The LME lead price closed FY 2024-25 at US\$ 2,002 per tonne, up 2% from US\$ 1,965 the previous year. The average price for the year was US\$ 2,046 – slightly below FY 2023-24’s US\$ 2,122. Global lead demand remained moderate amid easing inflation, with the IMF forecasting a decline to 4% in 2025, improving real incomes and consumption of lead-intensive goods. However, persistent high interest rates maintained by the Fed and ECB continued to limit investments in key sectors such as automotive.

Industrial activity showed steady recovery: China’s manufacturing expanded by 5% Y-o-Y, US capacity utilisation stabilised at 78%, and Europe saw a rebound in factory output after a mild slowdown. These developments supported lead consumption across batteries, infrastructure, and electronics.

On the supply side, global refined lead production declined 2.1% to 14,205 kt in CY 2024, while consumption fell slightly by 0.7% to 14,151 kt – resulting in a modest surplus of 54 kt.

India’s primary lead demand rose 6-7% during FY 2024-25, supported

by growth in automotive, battery, and infrastructure sectors. The shift toward secondary lead gained momentum, now accounting for over 60% of total supply. This was further driven by the removal of customs duties on lead scrap in the FY 2025-26 Union Budget, encouraging formal recycling infrastructure due to its 15-25% cost advantage over primary metal.

Market Outlook

Global refined lead production is expected to rise 2.0% to 14,486 kt in CY 2025, while consumption is projected to increase 1.5% to 14,369 kt. In India, the lead consumption landscape is evolving, driven by a 140% Y-o-Y surge in electric vehicle (EV) production, signalling reduced reliance on traditional lead-acid batteries. Policy shifts – such as duty exemptions on lithium-ion battery scrap and critical minerals – are accelerating the transition to alternative chemistries. Indirect tax reforms in the FY 2025-26 budget are expected to further support domestic manufacturing and export competitiveness.

Company Overview

Hindustan Zinc expanded its primary lead market share to 74% in FY 2024-25, up from 64% the year prior. The Company sold 166 kt domestically and exported 59 kt. Production continued to focus on 99.99% purity LME-registered lead ingots, with strategic efforts underway to increase domestic offtake and expand customer applications.



Market Overview

FY 2024-25 marked another strong year for silver, with prices reaching a high of US\$ 33.40 per Toz in mid-February – a 16% increase from the December 2024 close of US\$ 29. Despite some profit-booking, silver maintained most of its gains, stabilising above US\$ 32. Price support came from global macroeconomic uncertainty, largely driven by President Trump’s renewed tariff stance, which sparked record silver deliveries into the US. As a result, CME-approved vault holdings surged past 400 Moz, a 30% increase since the US elections.

India, too, recorded its highest January silver imports since 2008, reflecting strong bullion demand. Meanwhile, London vault inventories declined 9% month-on-month, tightening short-term availability and raising silver leasing rates.

Silver’s dual identity – as both a precious and industrial metal – led to mixed performance drivers. On one

hand, gold’s stagflation-fuelled rally pulled silver upwards. On the other, trade war fears weighed on industrial sentiment, tempering investor appetite for base and industrial metals.

Market Trends

Global silver demand is projected to exceed supply for the seventh consecutive year in CY 2025, with demand expected to remain elevated at 1.2 Boz. Supply is forecast to remain flat at 1 Boz, with mine production peaking at 835 Moz, driven by increased base metal activity and new output from US and Canadian mines. However, output is expected to decline beyond 2025 as older mines reach end-of-life, barring new investment decisions.

In CY 2024, silver supply grew by 2% to 1.015 Boz. This was led by a 5% increase in mine production, driven by new mining operations in Mexico and improved yields from Chilean gold mines. Silver recycling added another 200 Moz to the global supply.

Global demand reached a near-record 1.15 Boz, the second highest in history. While jewellery and silverware segments saw modest declines, this was offset by industrial demand, which grew 4% to a record 576 Moz. The rise was driven by increased use in vehicle electrification and EV charging infrastructure.

Market Outlook

The silver market outlook for CY 2025 remains strong, underpinned by robust industrial and investment demand. Industrial use reached a record high of 689 million ounces in 2024, driven largely by the photovoltaics (PV) sector, and is expected to remain a key growth driver despite potential cost-sensitive substitution in PV and electric vehicles (EVs). Traditional industrial applications of silver continue to show stable demand irrespective of price fluctuations.

Investment demand is also on the rise, amid the geopolitical uncertainties and investor preference for tangible assets. Coins, bars, and exchange-traded products (ETPs) are forecasted to grow at high single-digit rates. Meanwhile, India is emerging as a major source of future demand, with industrial usage expected to rise significantly due to expanding applications in EVs, 5G, and other advanced technologies.

Company Overview

Hindustan Zinc (HZL), the world’s 4<sup>th</sup> largest silver producer, continued to play a pivotal role in the global silver market. In FY 2024-25, the Company produced 687 tonnes of silver. Responding to surging global and domestic demand, HZL is actively enhancing its production capabilities to strengthen its position and support the evolving market.





Market Overview

Global oil market experienced moderate growth in both supply and demand during 2024. Non-OPEC countries led supply expansion, with the United States adding 0.7 million barrels per day (Mb/d), followed by Canada (+0.21 Mb/d), China, and Argentina. Concurrently, global oil demand rose by approximately 1.6 Mb/d, driven by increased transportation and industrial fuel consumption across non-OECD countries, as well as new refinery capacities added in China and the Middle East.

India's oil consumption continued its upward trajectory, reaching 5.55 Mb/d in 2024, an increase of 0.21 Mb/d Y-o-Y. While the domestic economy

faced a temporary slowdown, indicators suggest recovery is on track. With heightened government spending and the possibility of interest rate cuts in early 2025, India is expected to maintain a steady growth path through 2025 and 2026, albeit at a slightly moderated pace.

Crude oil prices in 2024 averaged US\$ 80.8 per barrel, marking a 2% decline compared to 2023. Prices fluctuated in a narrow range of US\$ 70-86 per barrel, shaped by several factors: a subdued economic outlook in major economies, steady non-OPEC+ supply, geopolitical tensions in the Middle East, and shipping disruptions in the Red Sea. OPEC+ production cuts helped stabilise the market and prevented prices from falling below the lower end of this band.

Market Drivers and Outlook

Looking ahead, OPEC projects global oil demand to grow by 1.5 Mb/d in 2025, reaching 105.2 Mb/d. This growth will be led by strong aviation fuel demand, increased road transport usage, and sustained industrial and agricultural activity in non-OECD nations. Supply from non-OPEC countries is expected to increase by 1.1 Mb/d, with the United States, Canada, Brazil, and Norway contributing the most.

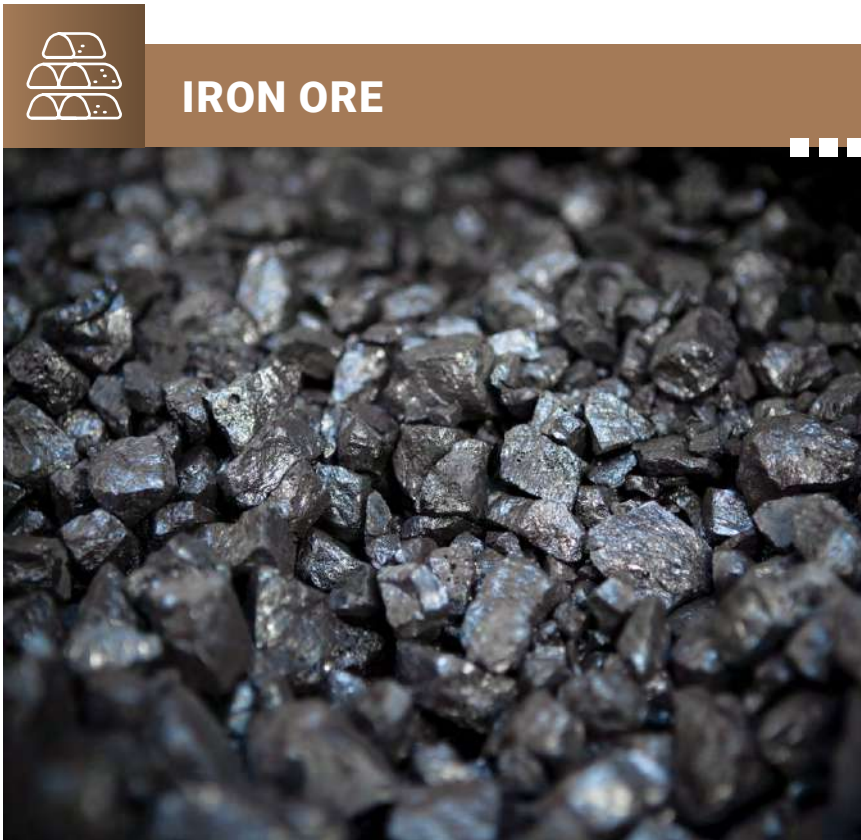
However, several risks remain. The ongoing Russia-Ukraine conflict and intensifying trade tensions could disrupt supply and affect pricing dynamics. According to the US Energy Information Administration (EIA), Brent crude prices are forecast to average US\$ 74/b in 2025, reflecting an easing of OPEC+ cuts and stronger production outside the alliance. In this context, trade friction and geopolitical developments will remain key variables influencing the market.

India is poised to play a larger role in shaping global oil demand, driven by rapid urbanisation, rising disposable incomes, and a growing population. Its oil consumption is forecast to rise to 5.8 Mb/d in 2025, buoyed by increased airline traffic and steady GDP growth.

Products and Customers

Cairn India, one of India's leading private oil and gas exploration and production companies, holds gross proven and probable reserves of 1,430 million barrels of oil equivalent (mmbobe). Its crude oil is supplied to both public and private refineries, while natural gas supports the fertiliser, city gas distribution, and industrial sectors.

In FY 2024-25, 100% of Cairn's crude oil and gas output was sold within India, in alignment with domestic regulatory requirements.



Market Overview

Global steel demand is set for a modest recovery from late 2025, driving increased iron ore consumption. This growth will be led by emerging Asian markets and infrastructure-focussed economies such as India and the Middle East. Global steel demand is projected to grow by 1.2% annually, supported by infrastructure investments and manufacturing expansion across South Asia, Southeast Asia, and North America.

Iron ore prices experienced significant volatility in late 2024, rising nearly 20% to around US\$ 105 per tonne following

policy announcements from China aimed at stimulating growth.

On the demand side,

- **China:** Despite a decline in steel demand, China's iron ore imports have remained resilient, largely due to strategic stockpiling and ongoing infrastructure projects. However, challenges persist, particularly in the property sector, which continues to weigh on steel consumption.
- **India:** India's iron ore exports have declined sharply as domestic demand surges in line with expanding steelmaking capacity. Local miners are prioritising the domestic market to meet this growing need.

Market Outlook

The global steel and iron ore markets are positioned for recovery, driven by infrastructure spending and economic stimulus measures. India emerges as a critical growth engine, with steel demand expected to rise by 8% in 2025, underpinned by strong infrastructure development and supportive government policies. Steel production in India is projected to reach 152 million tonnes by FY 2024-25, pushing domestic iron ore demand up by 9% to 255 million tonnes.

As the world's second-largest steel producer, India's expanding capacity and robust momentum will significantly influence global iron ore dynamics, even as other regions face oversupply and price pressures.

Company Overview

The Company has strengthened its position as a leading producer of iron ore and pig iron. It achieved key production milestones in FY 2024-25, including 5 million tonnes of iron ore from Karnataka, 4.2 million tonnes from Odisha, and 1.3 million tonnes from Goa mines following their reopening. Additionally, over 819 kilo tonnes of pig iron were produced, reinforcing its role in supporting industrial growth and maintaining sector leadership.





POWER

Demand and Supply

India’s power sector made notable progress in 2024, marked by a record power demand reaching 250 GW and continued improvements in energy infrastructure. Electricity generation grew by 4.89% compared to the previous fiscal year, reaching approximately 1,667.6 billion units in FY 2024-25 (tentative figures as of February 2025). Total installed capacity expanded robustly to 470 GW by February 2025.

Significant strides were made in renewable energy, with an additional 129 GW capacity added since 2014, complementing the expansion of thermal power to meet the rising electricity demand. The government’s initiatives, such as universal electrification, enhanced

rural power availability, and energy conservation efforts, reinforce India’s trajectory toward becoming a global energy leader.

Supporting this growth, revised Right of Way (RoW) guidelines have been introduced to facilitate transmission infrastructure aimed at integrating 500 GW of renewable energy by 2030, underscoring the commitment to a sustainable power future.

Market Drivers

India’s power demand is propelled by macroeconomic factors, including a population projected to reach 1.5 billion by 2030 and accelerating urbanisation. Per capita electricity consumption increased to 1,395 kWh in 2024-25, a 45.8% rise since 2013-14, though it remains about one-third

of the global average, indicating significant growth potential.

For FY 2024-25, India targets electricity generation of 1,900 billion units, up 9.3% from 1,738.8 billion units the previous year. The generation mix includes 1,445 billion units from thermal power, 148 billion from hydro, 55 billion from nuclear, 8 billion through imports (mainly Bhutan), and 244 billion from renewable sources excluding large hydro.

Fossil fuel-based plants, primarily coal and lignite, contribute 248 GW (52.6%) of installed capacity, while non-fossil sources such as renewables and nuclear account for 223 GW.

Electricity availability has improved substantially, with rural areas receiving an average of 21.9 hours per day, up from 12.5 hours in 2014. Urban areas average 23.4 hours daily. Round-the-clock tariffs in the Day Ahead Market for FY 2024-25 stand at ₹ 4.435 per kWh, reflecting stable power pricing.

Products and Consumers

Vedanta Group is well-positioned to capitalise on India’s expanding power sector with a diversified portfolio of around 12 GW, spanning both Independent Power Producers (IPP) and Captive Power Plants (CPP). It ranks as the second-largest private power player in India.

Within the IPP segment, Vedanta is the fourth-largest private player with 4,780 MW capacity, including major assets such as Talwandi Sabo Power Limited (1,980 MW) and Jharsuguda plant (600 MW). The Company’s growth pipeline includes the upcoming Meenakshi Energy Limited (1,000 MW) and Vedanta Limited Chhattisgarh Thermal Power Plant (1,200 MW).



STEEL

Sector Overview

India cemented its position as the world’s second-largest steel producer in FY 2024-25, achieving finished steel production of 145.3 million metric tonnes (MMT). This marked a robust Y-o-Y growth of 4.4%, reflecting resilience amid a global economic slowdown, ongoing trade tensions, and subdued demand from China.

A key driver of domestic steel consumption has been the Indian government’s strong focus on infrastructure development. Flagship initiatives such as the National Infrastructure Pipeline (NIP) and the PM Gati Shakti National Master Plan (NMP) have accelerated demand, helping push India’s per capita steel consumption closer to 100 kg. The National Steel Policy aims to elevate this further to around 158 kg by FY 2030-31, signalling significant growth potential.

Despite this positive domestic momentum, global steel prices softened due to weak demand worldwide, surplus steel availability from China, and easing

raw material costs. Consequently, India remained a net importer of finished steel, with imports rising to 9 MMT between April 2024 and March 2025 — a 16% increase compared to the previous year. This surge has placed downward pressure on domestic steel prices. To address rising imports and associated trade tensions, a proposal for a 12% safeguard duty on select steel products for 200 days has been tabled.

Market Drivers

India’s government is steadfast in its commitment to reaching a steel production capacity of 300 MMT by 2030. This ambition is backed by a 10% increase in capital expenditure for FY 2025-26, with a budget allocation of ₹ 11.2 lakh crore.

Driving this growth are the country’s goals to become a US\$ 5 trillion economy through initiatives like “Make in India,” Multi-Modal Corridors, Pradhan Mantri Awas Yojana (housing for all), and Production-Linked Incentive (PLI) schemes. Rising incomes, rapid urbanisation, and ongoing infrastructure

development are expected to sustain strong steel demand.

For FY 2025-26, key sectors including infrastructure, construction, and automotive remain priorities. Plans include building 20 million new houses under PM Awas Yojana over five years, sanctioning three new Economic Corridors under PM Gati Shakti, expanding airport infrastructure through the UDAN scheme, and extending the Jal Jeevan Mission till 2028.

Products and Customers – ESL Steel Limited

ESL Steel Limited offers a broad product range including TMT bars, wire rods, ductile iron pipes, billets, and pig iron. Its strategic presence and diversified portfolio position it well to benefit from rising demand in construction, infrastructure, and manufacturing.

In FY 2024-25, ESL recorded finished sales of approximately 1.34 million tonnes, driven by strong domestic demand and record project sales, leading to its lowest closing stock of TMT bars and wire rods. The Company prioritised value-added products, with 85% of wire rod sales in high carbon and alloy grades, introduced new grades, and doubled sales in the Cold Rolled Steel segment. It also expanded its TMT offering to include 40 mm diameter bars.

Outlook for ESL Steel

ESL Steel Limited aims to capitalise on growth opportunities by focussing on alloy segment sales, optimising its product mix, and broadening wire rod diameter ranges to maximise revenue. Despite global challenges such as price volatility and trade issues, the Company’s focus on innovation, digitalisation, and operational efficiency supports its growth ambitions. ESL remains committed to contributing to India’s steel self-sufficiency as infrastructure development and economic expansion continue to drive the sector forward.





Sector Overview

High Carbon Ferro Chrome (HCFC) plays a critical role in stainless steel manufacturing, where it enhances durability, corrosion resistance, and high-temperature performance. Over 85% of global HCFC production is consumed by the stainless-steel industry, making its demand closely tied to the health of this sector.

Asia, led by China, dominates the global HCFC market, accounting for nearly 85% of consumption and controlling significant chromite ore reserves – HCFC’s primary raw material. While South Africa remains the largest supplier of chromite ore, China’s scale in HCFC production positions it as a key influencer in global pricing and supply trends.

India continues to strengthen its role in this market, emerging as the fourth-largest producer globally with an output of approximately 1.4 million tonnes in CY 2024. India’s HCFC industry is predominantly export-oriented, with around 60% of production shipped overseas.

However, from the second half of FY 2024-25, HCFC prices faced downward pressure due to soft demand in China and Europe, coupled with falling ore prices. Domestic prices in India mirrored this decline but remained slightly higher than Chinese levels. Looking ahead, the trend is expected to reverse from mid-Q4 of FY 2024-25, with prices likely to stabilise and strengthen in early FY 2025-26 as stainless steel demand recovers both globally and within India.

Market Drivers

The near-term outlook for HCFC is positive, supported by a projected 4–5% global increase in stainless-steel production. This growth is expected to be driven by infrastructure development in emerging economies and a demand rebound from China.

India is poised to outpace global trends, with HCFC and stainless-steel production projected to grow at 7–8% in FY 2025-26. This acceleration is underpinned by large-scale infrastructure investments and a rise in per capita stainless-steel consumption, signalling sustained domestic demand for HCFC.

Company Overview – FACOR

Ferro Alloys Corporation (FACOR) is a leading player in India’s HCFC sector, ranked as the fourth-largest domestic supplier. In FY 2024-25, FACOR directed 87% of its HCFC output to serve stainless steel and alloy steel producers in India, underscoring its strategic domestic focus in a predominantly export-led industry.

FACOR is also advancing its Value-Added Products (VAP) portfolio to tap specialised markets in Europe and South Korea. As part of its FY 2025-26 strategy, the Company is targeting higher production volumes and expanded presence across domestic and global markets.

Our Ferroalloy business remains focussed on capacity expansion, deeper domestic market engagement, and scaling our VAP offerings – positioning us strongly to grow in an evolving global HCFC landscape.



Sector Overview

FY 2024-25 was a dynamic year for the copper market. Prices reached record highs in Q1 before softening in the following quarters, only to recover again in Q4, supported by stimulus measures announced by China.

Domestic copper demand continued to grow at a CAGR of 7%, driven by the accelerating electrification of transport, increased construction activity, and industrial growth supported by Production-Linked Incentive (PLI) schemes. Rising sales of consumer durables such as air conditioners and electronics further boosted demand.

A key development during the year was the shift in India’s import mix. Semi-finished copper imports

(e.g., cathodes) declined by 7% as manufacturers increasingly opted for blister copper – supported by the removal of customs duty in the Union Budget 2024 – favouring higher value-added domestic processing.

Market Drivers

India’s copper demand is expected to reach 3 million tonnes by CY 2030, with a projected 7% growth in FY 2025-26. Several trends underpin this trajectory:

- **Infrastructure push:** Continued investment in industrial corridors, highways, housing, and renewable energy systems positions copper as a key enabler of national development

- **Electric mobility:** The rising penetration of Electric Vehicles, which require significantly more copper than internal combustion engine vehicles, is expected to be a major growth lever
- **Economic growth:** India’s expanding economy supports copper-intensive sectors such as construction, manufacturing, and consumer appliances
- **Energy transition:** Copper’s essential role in solar, wind, and battery storage technologies is opening new avenues for demand

Company Overview

The Company remains a leading player in India’s copper industry, supported by its broad product portfolio, customer-focussed approach, and innovation-led strategy. It caters to diverse segments including housing wires, winding wires, cables, transformers, and electrical profiles.

Holding a strong 20% domestic market share, the Company is actively expanding its export footprint, targeting neighbouring countries and Gulf markets. Its ongoing focus on green copper production – incorporating sustainable practices and efficient technologies – reinforces its long-term competitiveness and commitment to responsible growth.

Well-aligned with national priorities and global trends, the Company is poised to capitalise on the sector’s growing potential in FY 2025-26 and beyond.





Finance Review



EXECUTIVE SUMMARY

We delivered strong operational and financial performance in FY 2024-25, driven by our continued focus on controllable factors such as resetting the cost base through diverse optimisation initiatives, disciplined capital allocation, working capital efficiency, marketing strategies, and volume growth — all underpinned by robust safety measures and compliance with corporate and government guidelines.

For FY 2024-25, we reported an EBITDA of ₹ 43,541 crore, up 19% Y-o-Y, with a strong adjusted EBITDA margin<sup>1</sup> of 34% (FY 2023-24: ₹ 36,455 crore, margin 30%). The growth was primarily led by favourable commodity prices, rupee depreciation, cost-saving, and higher premiums, partially offset by the one-time Cairn arbitration gain in FY 2023-24 and input commodity price inflation.

Cost and marketing initiatives contributed ₹ 1,331 crore to EBITDA, primarily driven by Aluminium, HZL, Oil & Gas business. Market factors increased EBITDA to ₹ 11,198 crore, largely driven by stronger commodity prices and currency depreciation.

As of 31 March 2025, gross debt stood at ₹ 73,853 crore, up ₹ 2,094 crore due to increase borrowing at Vedanta Standalone, HZL, ZI, BALCO, partially offset by loan repayments at THLZV. Net debt declined by ₹ 3,088 crore to ₹ 53,250 crore, supported by strong operating cash flows, strategic actions like QIP and the HZL offer for sale, partially offset by capex outflow and shareholder returns. Our balance sheet remains robust, with cash and cash equivalents of ₹ 20,602 crore (up 34% Y-o-Y) and a Net Debt to EBITDA ratio of 1.2x (FY 2023-24: 1.5x).

Consolidated EBITDA	FY 2024-25	FY 2023-24	% Change
Zinc	18,686	14,255	31%
- India	17,365	13,562	28%
- International	1,321	693	91%
Oil and Gas	4,664	9,777	(52%)
Aluminium	17,798	9,657	84%
Power	737	971	(24%)
Iron Ore	1,006	1,676	(40%)
Steel	522	225	-
Copper	(112)	(69)	62%
FACOR	40	115	(65%)
Others	200	(152)	-
Total EBITDA	43,541	36,455	19%

<sup>1</sup> Excluding customs smelting at Copper Business





CONSOLIDATED EBITDA BRIDGE

(₹ crore unless stated)

EBITDA for FY 2023-24	36,455
Market and regulatory: 11,198	
a) Prices, premium / discount	10,683
b) Direct raw material inflation	(1,295)
c) Foreign exchange movement	1,810
Operational: (4,112)	
d) Volume	(1,475)
e) Cost saving and marketing	1,331
Others	(3,968)
EBITDA for FY 2024-25	43,541

a) Prices, premium/discount

Commodity price fluctuations have a significant impact on the Group's business. During FY 2024-25, we saw a net increase of ₹ 10,683 crore on EBITDA.

- Zinc, lead and silver:** Average zinc LME prices during FY 2024-25 increased to US\$ 2,875 per tonne, up 16% Y-o-Y; lead LME prices decreased to US\$ 2,046 per tonne, down 4% Y-o-Y; and silver prices increased to US\$ 30.39 per ounce,

Key exchange rates against the US dollar:

Consolidated EBITDA	Average year ended 31 March 2025	Average year ended 31 March 2024	% change	As at 31 March 2025	As at 31 March 2024
Indian rupee	84.55	82.78	2.14%	85.47	83.34

d) Volumes

Lower volumes led to a net EBITDA decline of ₹ 1,475 crore, with impacts from the following businesses:

- Oil & Gas:** Negative impact of ₹ 1,130 crore due to lower sales volumes (working interest), down from 82.5 kboepd to 67.3 kboepd in FY 2024-25
- Iron Ore:** Negative impact of ₹ 176 crore as sales in Karnataka declined to 19% Y-o-Y to 4.8 million tonnes, and pig iron dropped by 3% Y-o-Y to 808 kt
- HZL:** Negative impact of ₹ 273 crore primarily due to silver sales declining to 687 tonnes from 746 tonnes Y-o-Y

This was partly offset by:

- Aluminium:** Positive impact of ₹ 228 crore, with sales increasing 2% Y-o-Y to 2,414 kt

up 29% Y-o-Y. The cumulative impact of these price fluctuations increased EBITDA by ₹ 4,211 crore.

- Aluminium:** Average aluminium LME prices increased to US\$ 2,525 per tonne in FY 2024-25, up 15% Y-o-Y, this had a positive impact of ₹ 7,115 crore on EBITDA.
- Iron & Steel:** Lower realisations negatively impacted EBITDA at steel by ₹ 216 crore while lower average iron ore prices, 13% Y-o-Y, negatively impacted EBITDA at Iron business by ₹ 674 crore.

b) Direct raw material inflation

Prices of key raw materials such as imported alumina, have increased in FY 2024-25, negatively impacting EBITDA by ₹ 1,295 crore, primarily at Aluminium partially offset by Iron & Steel business.

c) Foreign exchange fluctuation

Rupee depreciated against the US dollar during FY 2024-25. Stronger dollar is favourable to the Group's EBITDA, given the local cost base and predominantly US dollar-linked pricing. The favourable currency movements positively impacted EBITDA by ₹ 1,810 crore.

e) Cost Savings and Marketing

Cost reduction initiatives delivered an EBITDA gain of ₹ 1,331 crore, primarily driven by improved efficiencies in the Aluminium, HZL, Oil & Gas business.

f) Others

This primarily includes one-time Oil & Gas arbitration award by ₹ 4,637 crore partially offset by strategic hedging gain and precious metal sale at ASI, impacting EBITDA negatively by ₹ 3,968 crore.

INCOME STATEMENT

(₹ crore unless stated)

Particulars	FY 2024-25	FY 2023-24	% Change
Net Sales/Income from Operations	1,50,725	1,41,793	6%
Other Operating Income	2,243	1,934	16%
EBITDA	43,541	36,455	19%
EBITDA margin <sup>1</sup> (%)	34%	30%	-
Finance Cost	9,914	9,465	5%
Investment Income	2,983	2,341	27%
Exchange Gain /(Loss)	(47)	(264)	(84%)
Exploration Cost written off	(459)	(785)	(42%)
Profit before Depreciation and Taxes	36,105	28,283	28%
Depreciation and Amortisation	11,096	10,723	3%
Profit before Exceptional items	25,009	17,560	42%
Exceptional items <sup>2</sup> : credit/(expense)	1,868	2,803	(33%)
Taxes <sup>3</sup>	6,342	12,826	-
Profit after taxes <sup>4</sup>	20,535	7,539	-
Profit after taxes (before exceptional items)	19,399	11,254	72%
Minority interest	5,547	3,300	68%
Attributable PAT (after exceptional items)	14,988	4,239	-
Attributable PAT (before exceptional items)	13,854	7,956	74%
Basic earnings per share (₹/share)	38.97	11.42	-
Exchange Rate (₹/US\$) – Average	84.55	82.78	2%
Exchange Rate (₹/US\$) – Closing	85.47	83.34	3%

- Excludes custom smelting at Copper business
- Exceptional Items gross of tax
- Tax includes tax expense on exceptional items of ₹ 732 crore on special items in FY 2024-25 (FY 2023-24: tax expense of ₹ 6,520 crore)
- Includes share in profit/ (loss) of jointly controlled entities and associates
- Previous period figures have been regrouped/rearranged wherever necessary to conform to current period presentation

Revenue

Revenue for FY 2024-25 stood at ₹ 1,50,725 crore, up 6% Y-o-Y (FY 2023-24: ₹ 1,41,793 crore), primarily driven by favourable commodity prices, higher premiums and rupee depreciation. This was partially offset by the one-time Cairn arbitration gain in FY 2023-24 and lower volumes.

EBITDA and EBITDA Margin

EBITDA was ₹ 43,541 crore, 19% higher Y-o-Y (FY 2023-24: ₹ 36,455 crore), supported by stronger commodity prices, rupee depreciation, cost savings, and higher premiums. These gains were partly offset by input commodity price inflation and one-time Cairn arbitration gain in FY 2023-24. We maintained a robust adjusted EBITDA margin of 34% (FY 2023-24: 30%).

Depreciation and Amortisation

Depreciation rose 3% Y-o-Y to ₹ 11,096 crore (FY 2023-24: ₹ 10,723 crore), mainly at Oil & Gas, HZL and Aluminium business.

Net Interest

The blended cost of borrowings increased to 10.2% from 9.6% Y-o-Y. Finance costs stood at ₹ 9,914 crore, up 5% Y-o-Y, due to higher average borrowings and an increase in blended cost of borrowings.

Investment income grew 27% Y-o-Y to ₹ 2,983 crore (FY 2023-24: ₹ 2,341 crore), driven by higher average investments, and one offs.

Exceptional Items

Exceptional items for FY 2024-25 was at ₹ 1,868 crore, mainly due to impairment reversal in the Rajasthan Oil & Gas block, partly offset by provisions for impact of state levies in Zinc and Iron Ore businesses.

Refer Note [36] in the financial statements for further details.

Taxation

Tax expense was ₹ 6,342 crore (FY 2023-24: ₹ 12,826 crore). Normalised effective tax rate reduced to 27% (FY 2023-24: 36%), driven by a change in profit mix and reduction in tax rate of a foreign subsidiary.

Attributable Profit After Tax (Before Exceptional Items)

Attributable PAT before exceptional items was at ₹ 13,854 crore (FY 2023-24: ₹ 7,956 crore).

Earnings Per Share

EPS was ₹ 38.97 (FY 2023-24: ₹ 11.42).

Dividend

The Board declared a total dividend of ₹ 43.50 per share during the year.

Shareholders' Funds

As of 31 March 2025, shareholders' funds stood at ₹ 41,212 crore (31 March 2024: ₹ 30,722 crore), reflecting net profit earned, partially offset by dividend distribution.

Net Fixed Assets

Net fixed assets stood at ₹ 1,33,801 crore, including ₹ 30,939 crore in capital work-in-progress.

Balance Sheet

We continue to maintain a strong financial position with cash and liquid investments of ₹ 20,603 crore, up 34% Y-o-Y.

Debt Position

Gross debt as on 31 March 2025 was ₹ 73,853 crore, up ₹ 2,094 crore Y-o-Y, mainly due to higher borrowings at Vedanta Standalone, HZL, ZI, BALCO, partly offset by repayments at THLZV.

- Composition:** ₹ 70,265 crore term debt, ₹ 421 crore working capital loans, ₹ 3,167 crore short-term borrowings
- Currency Mix:** 83% INR, 17% foreign currency
- Average Maturity:** ~3 years





Operational review

# ZINC INDIA

Zinc India stands as the world’s largest integrated zinc producer and maintains a strong position among the lowest-cost producers globally, consistently operating in the first decile of the global cost curve. This leadership is underpinned by efficient resource management, high-grade ore, and a relentless focus on automation and operational excellence. The business continues to enhance plant availability and recovery rates, driven by process optimisation and continuous improvement.



1,095 kt (↑1% Y-o-Y)  
HIGHEST-EVER MINED METAL PRODUCTION

1,052 kt (↑2% Y-o-Y)  
HIGHEST-EVER REFINED METAL PRODUCTION

687 tonnes  
REFINED SILVER PRODUCTION

## OPERATIONS

### Production

In FY 2024-25, Hindustan Zinc achieved its highest-ever mined metal production at 1,095 kt, up from 1,079 kt in the previous year, driven by improved grades, mill recovery, and operational efficiency. Ore production stood at 16.3 million tonnes, marginally down 1% Y-o-Y due to lower output at Rajpura Dariba, Sindesar Khurd, and Rampura Agucha mines. Refined metal production reached a record 1,052 kt, up 2% Y-o-Y, supported by consistent plant availability and strategic operational focus. This included 827 kt of refined zinc (up 1%) and 225 kt of refined lead (up 4%).

Production (kt)	FY 2024-25	FY 2023-24	% Change
Total mined metal	1,095	1,079	1%
Refinery metal production	1,052	1,033	2%
Refined zinc – integrated	827	817	1%
Refined lead – integrated <sup>1</sup>	225	216	4%
Production – silver (in tonnes) <sup>2</sup>	687	746	(8%)

- 1. Excluding captive consumption of 7,534 tonnes in FY 2024-25 vs. 7,622 tonnes in FY 2023-24
- 2. Excluding captive consumption of 40.3 tonnes in FY 2024-25 vs. 39.0 tonnes in FY 2023-24

### Prices

Particulars	FY 2024-25	FY 2023-24	% Change
Average zinc LME cash settlement prices US\$ per tonne	2,875	2,475	16%
Average lead LME cash settlement prices US\$ per tonne	2,046	2,122	(4%)
Average silver prices US\$/ounce	30.39	23.55	29%

In CY 2024, zinc emerged as the best-performing metal on the London Metal Exchange, driven by macroeconomic factors that led to mine closures and delayed restarts, tightening the concentrate market significantly. This supply deficit pushed spot treatment charges to historic lows in September, impacting smelter profitability and triggering global production cuts, with smelter output falling 4% to 13.2 million tonnes. Despite weak demand in several regions, interest rate cuts in the US and Europe and improved investor sentiment drove a 1.7% rise in global zinc consumption to 13.6 million tonnes. Consequently, zinc prices averaged US\$ 2,875/t in FY 2024-25, up 16% Y-o-Y.

Silver prices also rallied, buoyed by expectations of US interest rate cuts and heightened geopolitical tensions in the Middle East, peaking at a decade high of US\$ 34.51/oz. For FY 2024-25, silver averaged US\$ 30.39/oz, marking a 29% increase Y-o-Y. With limited new supply and rising industrial demand, market sentiment for silver remains strongly bullish.

### Zinc Demand–Supply

Zinc Global Balance In kt	CY2023	CY2024	CY2025(E)
Mine Production	12,338	12,104	12,584
Smelter Production	13,712	13,167	13,637
Consumption	13,369	13,602	13,892

(E) Expected  
Source: Wood Mackenzie

The global refined zinc demand is showing signs of recovery, with significant momentum expected from Asian economies. This is being supported by a rebound in global manufacturing activity and increased investments by Chinese authorities. On the supply side, continued delays in major mining projects could sustain the tightness in the concentrate market, affecting refined metal output. This may be further impacted by smelter suspensions linked to profitability and environmental constraints across key producing regions.

During CY 2024, LME and SHFE warehouse stocks rose 10% (from 243 kt to 268 kt), but the market remained in a strong deficit due to constrained supply. CY 2025 began with LME stocks falling to 180 kt and SHFE stocks dropping to a record low of 20 kt in January. The market is expected to remain in deficit through CY 2025, though successful project commissioning may offer some relief. On the demand side, India has outperformed global trends. The HSBC India Manufacturing PMI rose to 56.4 in December 2024 from 54.9 a year earlier, signalling continued expansion, while the JP Morgan Global Manufacturing PMI increased slightly from 49.0 to 49.6, remaining below the neutral 50 mark. According to the World Steel Association, India’s crude steel



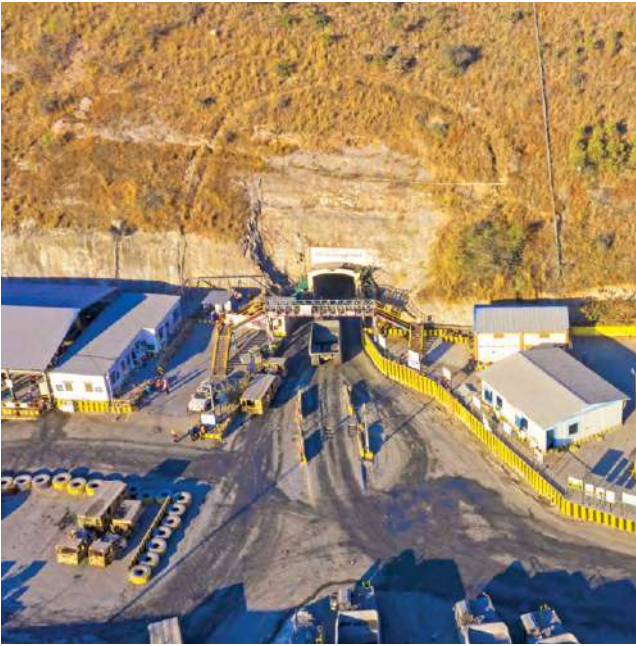
production rose 6.3% to 149.6 million tonnes in CY 2024, even as global output declined marginally. With the Indian economy projected to grow by 6.5% in FY 2024-25, it is expected to lead global steel demand growth, fuelled by infrastructure and construction activity, positioning India as the third-largest zinc consumer globally.

Particulars	FY 2024-25	FY 2023-24	% Change
Unit costs (US\$ per tonne)			
Zinc (including royalty)	1,440	1,450	(1%)
Zinc (excluding royalty)	1,052	1,117	(6%)

For FY 2024-25, Zinc cost of production (COP) excluding royalty stood at US\$ 1,052 per tonne, down 6% Y-o-Y (4% lower in INR terms), driven by record production, improved mined metal grades, higher domestic coal and renewable energy usage, and better acid realisations. This was further supported by softer coal and input commodity prices, along with Y-o-Y operational efficiencies. The Company exited the year with a Zinc COP of US\$ 994 per tonne, the lowest in four years, reflecting strong business fundamentals, continuous cost-saving initiatives, robust operational performance, and increased automation.

Projects

- Advanced several initiatives under the 1.2 MTPA metal expansion roadmap during the year
- Commissioned a 160 KTPA roaster at Debari in May 2025
- Cellhouse debottlenecking to add 21 KTPA capacity underway targeted for completion by the second quarter of FY 2025-26 at Dariba and by the third quarter of FY 2025-26 at Chanderiya
- Ordered a lead-silver recovery plant at Dariba using weak acid leaching technology, enabling recovery of 27 MTPA additional silver; commissioning expected in fourth quarter of FY 2025-26
- Construction of a 510 KTPA fertiliser plant at Chanderiya is progressing; completion targeted for the fourth quarter of FY 2025-26
- Received regulatory approvals for Bamnia Kalan Mine; infrastructure orders placed and portal excavation underway
- Preliminary studies initiated for the next phase of mine and smelter expansion to 2 MTPA



Exploration

Hindustan Zinc’s exploration strategy aims to upgrade resources to reserves and replace every tonne of mined metal to sustain production for over 25 years. The Company continues to pursue an aggressive exploration programme across existing licence areas, supported by technology and innovation. Several new targets have been identified within existing leases, as deposits remain open at depth. Surface drilling has been intensified across sites to support resource addition and reserve conversion.

As in previous years, Mineral Resources are reported exclusively from Ore Reserves, with estimates independently audited by SRK (UK). As of FY 2024-25, Ore Reserves stood at 189.1 million tonnes (net of 16.3 million tonnes depleted during the year), while exclusive Mineral Resources totalled 264.1 million tonnes. Contained metal in the Ore Reserves includes 10.3 million tonnes of zinc, 2.8 million tonnes of lead, and 304.8 million ounces of silver. Mineral Resources contain 11.5 million tonnes of zinc, 5.0 million tonnes of lead, and 503.5 million ounces of silver. These reserves underpin production for more than 25 years at current mining rates.

Beyond its zinc-lead-silver assets in Rajasthan, the Company is expanding its mineral portfolio by participating in auctions for strategic and critical minerals. A dedicated subsidiary, Hindmetal Exploration Services Pvt Limited (HESPL), has been established as a NABET-accredited Category-A exploration agency. HESPL is currently managing 10 exploration projects across seven Indian states, covering commodities such as gold, copper, nickel, PGE, tungsten, cobalt, manganese, vanadium, graphite, and diamond. In FY 2024-25, the Company secured two composite licences for gold in Rajasthan and tungsten and associated minerals in Andhra Pradesh.

FINANCIALS PERFORMANCE

Revenue from operations for FY 2024-25 was ₹ 32,903 crore, an 18% increase Y-o-Y, driven by record metal production, higher zinc and silver prices, a stronger dollar, and strategic hedging gains. EBITDA for the year reached ₹ 17,365 crore, up 28% Y-o-Y, reflecting record metal volumes, lower production costs, higher zinc and silver prices, and a stronger dollar. This was partly offset by lower silver volumes and reduced lead prices.

(₹ crore, unless stated)

Particulars	FY 2024-25	FY 2023-24	% change
Revenue	32,903	27,925	18%
EBITDA	17,365	13,562	28%
EBITDA margin (%)	53%	49%	-

ESG Update

Rooted in sustainability and ESG excellence, Hindustan Zinc has consistently demonstrated its critical role as the forerunner in clean energy transition metals. We have been recognised as global ESG leader in S&P Global Corporate Assessment 2024 with us being ranked 1<sup>st</sup> globally in metals and mining sector for the second consecutive year. With an improvement in overall score to 86, Hindustan Zinc also got featured in Sustainability Yearbook 2024 amongst the top 1% most sustainable organisations globally for the second consecutive year.

Environment

Hindustan Zinc is committed towards environmental conservation. We are committed to reducing our carbon footprint, minimising air emissions, managing water and waste efficiently, and fostering biodiversity. These actions are integral to our broader objective of responsible and sustainable operations.

Our decarbonisation journey has been validated by the Science Based Targets initiative (SBTi), which approved our near-term and net-zero goals aligned with the 1.5°C trajectory. We aim to reduce absolute Scope 1 and 2 GHG emissions by 50%, and Scope 3 emissions by 25% by FY 2029-30, from a FY 2019-20 baseline, with a vision to achieve net-zero emissions across our value chain by FY 2049-50. Additionally, we are the only Indian company shortlisted for setting Science Based Targets for Nature (SBTN), through which we will establish specific targets related to freshwater and land use.

We also became the first company in India’s metals and mining sector to publish a Climate Action Report aligned with the International Financial Reporting Standards (IFRS) S2 – Climate-related Disclosures framework. As part of our clean energy transition, we signed incremental power delivery agreements to enhance renewable energy capacity from 450 MW to 530 MW. In FY 2024-25, approximately 13% of our total power requirement was sourced from renewables. This initiative is expected to significantly reduce our GHG emissions by 3.5 MtCO<sub>2</sub>e annually by 2028. Our



investment in clean energy has further enabled us to launch Asia’s first low-carbon zinc product, EcoZen, with a carbon footprint of less than 1 tCO<sub>2</sub>e per tonne-approximately 75% lower than the global average.

To further reduce Scope 3 emissions, we introduced battery-electric vehicles (BEVs) in underground mining operations at Sindesar Khurd Mine, deployed electric trucks for inter-unit logistics, established EV charging stations, and integrated LNG-powered trucks for transportation. These actions have already contributed to measurable emission reductions.

In alignment with our water stewardship goals, a 4,000 KLD zero liquid discharge (ZLD) plant at Rampura Agucha Mine is nearing commissioning, which will reduce freshwater dependency and support our vision of becoming five times water positive by 2025. Additionally, the dry tailing plant at Rajpura Dariba Mine became operational in September 2024, enhancing water recovery from tailings. This makes it our second operational dry tailings facility after Zawar Mines.

We partnered with the International Union for Conservation of Nature (IUCN) over a three-year period to develop Biodiversity Management Plans (BMPs) across all locations, excluding Pantnagar Metal Plant. These efforts contribute to our goal of achieving no net loss of biodiversity against a 2020 baseline.

As part of our ongoing waste reduction efforts, the commissioning of the first fuming furnace at Chanderiya Lead Zinc Smelter (CLZS) has improved metal recovery while reducing jarosite waste generation. We also secured an Indian patent for a novel method of manufacturing paver blocks and bricks from industrial waste, demonstrating innovation in circularity.

In support of energy storage innovation, we partnered with IIT Madras and JNCASR to develop sustainable battery solutions. A prototype 1 kWh rechargeable Zinc-Air battery is under development, offering a cost-effective and durable alternative to conventional lithium-ion batteries.

We also launched a training initiative titled “Wednesday for Transition” to enhance ESG awareness among our suppliers. The sessions focussed on key topics such as biodiversity, safety, and materiality, reinforcing our sustainability ecosystem.



CO

STATUTORY REPORTS

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Recognition for our environmental initiatives

- Sustainability Report 2023-24 ranked 1<sup>st</sup> globally in the Materials category; received Platinum award at LACP Vision Awards 2023/24
- Rajpura Dariba Complex received the Scope 1 Water Positive Aspiring Company Certificate
- ICC Sustainability Excellence Award in the Manufacturing sector
- ESG Excellence Award 2024 at KPMG ESG Conclave
- Featured in TIME's Top 500 World's Most Sustainable Companies 2024
- BW Business World Sustainability Awards 2024 for leadership in India's Energy and Mining Industry
- Recognised as Green Leader Supplier by Larsen & Toubro
- Inspirational Sustainability Performance Award by Amara Raja

Occupational health and safety

Safety and well-being of our employees and business partners are of paramount importance. We remain steadfast in our commitment to creating a secure working environment, anchored in our 'Zero Harm' philosophy. Despite our unwavering focus on safety, we deeply regret the loss of three business partner colleagues and one employee in work-related incidents during the year. Each incident was thoroughly investigated through root cause analysis, and learnings were systematically integrated into our safety protocols to drive continuous improvement.

In alignment with Vedanta's vision of zero fatalities, we launched the Vihaan–Critical Risk Management (CRM) programme, designed to proactively identify high-risk activities and implement critical controls to prevent fatal incidents. To further reinforce operational safety, we adopted the Infrastructure Inframatrix framework, which systematically assesses, monitors and controls

infrastructure associated with top operational risks. This initiative is complemented by the efforts of the Structural Integrity Management Committee, which prioritises structural risks based on criticality ranking by evaluating the condition and load of key infrastructure assets.

The Suraksha Kavach initiative, which addresses high-risk tasks, was expanded to include 13 smelting operations, in addition to the 25 mining activities already covered. We also continue to build a safety-focussed workforce by facilitating both internal and external training programmes, including nationally and internationally recognised courses aimed at upgrading the technical and behavioural skills of our employees and business partners.

Our commitment to emergency preparedness is reflected in the maintenance of world-class rescue facilities equipped with advanced technology and trained personnel. Notably, in FY 2024-25, 23 women employees were trained in work-at-height and confined space rescue operations, underscoring our emphasis on inclusivity and readiness in emergency response.

Occupational health remains a key focus area. Regular medical examinations and industrial hygiene assessments are carried out to manage exposure to hazardous

substances, noise, and air quality risks. In FY 2024-25, over 1,300 industrial hygiene sample assessments were conducted to monitor and enhance workplace health standards.

Through strategic safety interventions, leadership accountability, and adoption of best-in-class technologies, Hindustan Zinc continues to advance industry benchmarks in operational health and safety.

Recognition for our safety excellence

- Multiple awards at the International Safety Awards 2025 by British Safety Council in areas such as automation and innovation, competency development, and standardisation of safety systems
- India's first all-women rescue team secured 2<sup>nd</sup> position at the 13<sup>th</sup> International Mine Rescue Competition in Colombia
- Zawar Captive Power Plant achieved a 5-star rating in the British Safety Council Five Star Audit
- Platinum award in the 9<sup>th</sup> Apex India Occupational Health & Safety Awards 2024 in the Metal & Mining sector
- First prize at the 53<sup>rd</sup> All India Mine Rescue Competition

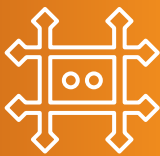
Strategic Priorities and Outlook

**Our focus remains on enhancing output, improving cost efficiency, diversifying our portfolio, maintaining disciplined capital expenditure, and advancing sustainable operations. With a positive global economic outlook, our medium-term goals remain unchanged.**

Key strategic priorities

- Sustain a long-life portfolio of mines by consistently adding mineral resources and upgrading ore reserves through exploration and acquisition of base metal and critical mineral blocks
- Ensure disciplined capital investment for organic and inorganic growth, including ramp-up of underground mines and smelters to their design capacities to boost metal and silver output
- Maintain cost of production within US\$ 1,025–US\$ 1,050 per tonne through improved ore hauling, higher volumes and grades, enhanced productivity, automation, digitisation, and increased renewable energy usage
- Expand and diversify our product portfolio, with a focus on increasing the share of value-added products aligned to evolving customer needs
- Advance sustainability goals by reducing GHG emissions, promoting water stewardship, conserving biodiversity, managing waste responsibly, and embracing circular economy practices.





Operational review

# ZINC INTERNATIONAL

FY 2024-25 recorded a declined production compared to FY 2023-24 marked by operational headwinds across assets. Black Mountain faced a temporary suspension following a fatal incident, along with shaft breakdowns and plant stoppages, which impacted throughput and recovery. Gamsberg operations were constrained by geotechnical issues and equipment availability, leading to ore shortages. Skorpion Zinc remained under care and maintenance since May 2020, with restart efforts continuing. The year was defined by a focus on operational stability and asset recovery across the portfolio.



178 kt

TOTAL  
PRODUCTION

44 kt

BLACK MOUNTAIN  
PRODUCTION

133 kt

GAMSBERG  
PRODUCTION

## OPERATIONS

### Production performance

Vedanta Zinc International (VZI)'s total production stood at 178 kt, down 15% Y-o-Y, primarily due to lower throughput and lead grades, partly offset by improved zinc grades and recoveries.

Production declined at Black Mountain Mine (BMM), by 28% to 44 kt, mainly due to lower tonnes milled, reduced lead grades and recoveries, with partial offset from better zinc grades.

Gamsberg produced 133 kt, 9% lower Y-o-Y, due to reduced tonnes treated. However, higher zinc grades and improved recoveries, along with a 31% increase in waste mined, supported ramp-up efforts.

Skorpion Zinc remained under care and maintenance, with restart options under evaluation.

Production (kt)	FY 2024-25	FY 2023-24	% Change
Total production (kt)	178	208	(15%)
Production – mined metal (kt)			
BMM	44	61	(28%)
Gamsberg	133	147	(9%)

### Unit costs

Gamsberg's cost of production (COP) excluding TcRc decreased by 4% to US\$ 1,135 per tonne, primarily due to lower mining and other costs, partly offset by reduced zinc and lead production and ZAR appreciation against the US\$.

Overall zinc COP including TcRc declined by 13% to US\$ 1,299 per tonne, driven by lower treatment and refining charges and reduced mining costs, partially offset by lower concentrate production and the adverse impact of local currency appreciation on cost.

Particulars	FY 2024-25	FY 2023-24	% Change
Overall Zinc COP including TcRc (US\$/t)	1,299	1,488	(13%)
Gamsberg Zinc COP excluding TcRc (US\$/t)	1,135	1,181	(4%)

## Projects

### Gamsberg Phase 2

Gamsberg Phase 2 involves expanding mining capacity from 4 MTPA to 8 MTPA and constructing a new 4 MTPA concentrator plant. Approved by the Vedanta Board in Q4 FY 2021-22, the project has received major equipment and is at an advanced stage of SMPP installation, with electrical cabling and piping underway since March 2025.

### Project status

- 68.5% overall progress
- Mechanical completion and ramp-up by second half of FY 2025-26
- 99.6% and 97% respective completion of engineering and procurement

### Black Mountain Iron Ore

The project aims to recover magnetite from BMM's fresh tailings. With internal and environmental approvals in place, the project restarted in Q4 FY 2023-24 and has reached 86% overall progress and 83.7% construction completion. Due to financial constraints, the EPC contractor exited, and the process to onboard a new partner is underway, targeting completion in the second half of FY 2025-26.

### Reserve and resource exploration

- 4.4% decline in resources from 27.6 million tonnes to 26.4 million tonnes metal; reserves up 31.9% from 7.2 million tonnes to 9.5 million tonnes
- Total R&R increased from 662 million tonnes to 670 million tonnes ore; metal content up from 34.8 million tonnes to 35.9 million tonnes (3.2% rise)
- Growth driven by reserve conversion of Kloof and North UG at Gamsberg, and East Extension addition to resource base





FINANCIAL PERFORMANCE

Revenue for the year stood at ₹ 3,918 crore, up 10% Y-o-Y, driven primarily by higher zinc grades. EBITDA rose 90% to ₹ 1,321 crore, supported by improved LME prices and rupee depreciation, partially offset by lower volumes.

(₹ crore, unless stated)

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	3,918	3,556	10%
EBITDA	1,321	693	90%
EBITDA margin	34%	19%	

ESG UPDATE

Environment

VZI completed the purchase of the remaining two farms – Remainder of Haramoep 53 and Portion 1 of Koenabib 43-required under Clause 6 of the Biodiversity Offset Agreement. These will be included in the Gamsberg Nature Reserve to support a No Net Loss of Biodiversity. The target of 3,000 trees was met to support urban greening and community initiatives. A purchase order has been raised for the Green Zinc Mark Certification Project with RCS Global, and contract approval with the Green Zinc Mark Institute is in process ahead of the site audit. Gamsberg and BMM retained their ISO 14001:2015 certification through successful recertification.

VZI’s initiatives to advance women in mining and leadership roles have resulted in 20% of women employees in leadership and 22% representation in the total workforce. A new five-year Social Labour Plan has been approved, with projects underway. The ESG Summit featured global experts from the International Zinc Association, ICMM, and the Minerals Council, resulting in updated ESG goal roadmaps, project ownership by COP leads, and renewed commitment to global ESG leadership. The Oncology Clinic in Springbok has been awarded to a local contractor, with construction set to begin in Q1 FY 2025-26.

Occupational Health and Safety

VZI recorded zero fatalities in the last three quarters and achieved two years LTI-free on its projects. There were zero classified occupational diseases, zero blood lead withdrawals, and no Category 3 environmental incidents in Q4. However, injury frequency increased in Q4 with 4 LTIs reported, and frequency rates were: LTIFR 1.78 (vs BP 1.00), TRIFR 4.91 (vs BP 3.10), and AIFR 2.14 (vs BP 1.55). VZI secured ISO 45001 certification and completed the EY Sustainability Assurance Audit with improved efficiency and fewer data integrity findings on Enablon. The VZI Clinic was awarded Best Performing Team in South Africa by Life Health Services, and employees at BMM and Gamsberg donated 529 units of blood over the year.

Strategic Priorities and Outlook

Zinc International remains focussed on improving Y-o-Y production by optimising existing assets, debottlenecking capacities, and progressing growth projects. The immediate priority is to ramp up Gamsberg’s performance while completing the Phase 2 expansion, which will add 190 kt to VZI’s total production. BMM continues to deliver stable output, with efforts to increase ore volumes from 1.5 million tonnes to 2.0 million tonnes. Skorpion remains under Care and Maintenance, as the team evaluates safe mining options for Pit 112. Cost optimisation remains a key focus, with the goal of positioning Gamsberg operations in the first quartile of the global cost curve (COP < US\$ 1,200/tonne including treatment charges).

Core strategic priorities

- Complete construction of Gamsberg Phase 2 in second half of FY 2025-26
- Strengthen the Gamsberg Smelter business case by securing government support and optimising Capex and Opex







Operational review

# OIL AND GAS

During FY 2024-25, Oil & Gas business delivered gross operated production of 103 kboepd, down by 19% Y-o-Y, primarily driven by natural reservoir decline at the MBA fields. The decline was partially offset by addition of volumes through new infill wells brought online and well intervention activities in Mangala, Aishwariya, Tight Oil (ABH) and Raageshwari Deep Gas fields. OALP assets were supported by ramp up of volumes from Jaya discovery.



OPERATIONS

Average gross operated production across our assets was 19% lower Y-o-Y at 1,03,237 boepd. The company's production from the Rajasthan block was 84,276 boepd, 21% lower Y-o-Y and from the offshore assets, was at 15,156 boepd, 23% lower Y-o-Y. The natural decline has been partially offset by infill wells brought online across fields in Rajasthan, well intervention activities across assets and ramp up volume from Jaya discovery.

Particulars		FY 2024-25	FY 2023-24	% Change
Gross operated production	boepd	1,03,237	1,27,549	(19%)
Rajasthan	boepd	84,276	1,06,469	(21%)
Ravva	boepd	10,104	10,807	(7%)
Cambay	boepd	5,052	8,899	(43%)
OALP	boepd	3,805	1,374	-
Oil	bopd	81,757	1,04,046	(21%)
Gas	mmscfd	129	141	(9%)
Net production – working interest*	boepd	67,781	82,450	(18%)
Oil	bopd	52,461	66,772	(21%)
Gas	mmscfd	92	94	(2%)
Gross operated production	mmboe	37.7	46.7	(19%)
Net production – working interest	mmboe	24.7	30.2	(18%)

\* Includes net production of 688 boepd in FY 2024-25 and 556 boepd in FY 2023-24 from KG-ONN block, which is operated by ONGC. Cairn holds a 49% stake.

Block-wise production details

Rajasthan block

Gross production from the Rajasthan block averaged 84,276 boepd, 21% lower Y-o-Y. The natural decline in the MBA fields has been partially offset by infill wells drilling campaigns and well intervention activities in Mangala, Aishwariya, ABH and RDG fields.

Gas production from Raageshwari Deep Gas (RDG) averaged 114 million standard cubic feet per day (mmscfd) in FY 2024-25, with gas sales, post captive consumption, at 100 mmscfd.

The appeal against the Division Bench order (additional 10% profit sharing from 2020 onwards) was filed by us before the Supreme Court in June 2021. The matter was listed on 27 March 2025. However, the matter could not be heard due to paucity of time. We await the next date of hearing.

The Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH), had raised demand up to 14 May 2020 for Government's additional share of Profit oil based on its computation of disallowance of cost incurred over retrospective re-allocation of certain common costs between Development Areas (DAs) of Rajasthan Block and certain other matters aggregating to US\$ 1,162 million applicable interest thereon representing share of Vedanta Limited and its subsidiary.

The Group had disputed the aforesaid demand and invoked arbitration as per the provisions of the Production Sharing Contract. The Group had received the Final Partial Award

dated 22 August 2023 from the Arbitration Tribunal ('the Tribunal') as amended by orders dated 15 November 2023 and 08 December 2023 ('the Award'), dismissing the Government's contention of the additional Profit Petroleum in relation to allocation of common development costs across Development Areas and certain other matters in accordance with terms of the Production Sharing Contract for Rajasthan Block, while allowing some aspects of the objections. Further, the Tribunal had decided that the Group was allowed to claim cost recovery of exploration cost as per terms of the Production Sharing Contract.

Pursuant to the award, the Group had recognised a benefit of ₹ 4,761 crore in Revenue from operations in financial year ended 31 March 2024. The Group has been adjusting the profit petroleum liability against the aforesaid benefit.

GoI had filed interim relief application on 03 February 2024 stating that the Group has unilaterally enforced the award although the quantification of the same is pending. The matter was heard on 26 March 2024 and the Tribunal vide its order dated 29 April 2024 has denied GoI's interim relief application in favour of the Group. GoI has filed an appeal before the Delhi High Court ('Section 37 Appeal'). Hearing has been concluded in the matter and parties have filed written submission on 16 April 2025. Judgement on the matter is reserved. In the interim, vide letter dated 06 May 2024, GoI has submitted its calculation of the quantum, basis the Award. GoI has claimed a sum of US\$ 224 million from the Group. The Group is of the view that the GoI computation is prima-facie contrary to the Award including clarifications issued by the Tribunal. The Tribunal has allowed these costs for cost recovery, but this was not





considered by Gol in their calculation of the quantum. The Group has responded to the Gol with its detailed analysis and is awaiting a response.

Gol had also filed a challenge against the Award on 07 March 2024 in Delhi High Court. Notice has been issued on 01 August 2024 in Section 34 and granted liberty to the Group to file its response. Further, no stay has been granted to Gol against the adjustment of liability by the Group. We await the next date of hearing. The Group believes that the Court may not re-appreciate the evidence in Section 34 appeal as the interpretation by the Tribunal is plausible.

Ravva block

The Ravva block produced at an average rate of 10,104 boepd, lower by 7% Y-o-Y, owing to natural field decline.

Cambay block

The Cambay block produced at an average rate of 5,052 boepd, lower by 43% Y-o-Y, owing to natural field decline.

Prices

Crude oil prices averaged US\$ 78.9 per barrel in FY 2024-25, a decrease from US\$ 83.1 per barrel in FY 2023-24. This decline was mainly driven by geopolitical risks, slowing economic growth in developed economies, potential tariffs by the United States, and rising inventory stocks.

Early in the year, prices increased due to escalating Middle East tensions and OPEC's supply cuts. However, as geopolitical risks eased and global monetary policy uncertainties grew, prices shifted downward, largely due to concerns over slowing economic growth in major economies like the U.S., China, and Europe.

Later in the year, prices briefly spiked due to rising tensions between Israel and Iran, raising fears of disruptions to Iranian oil exports. However, weaker demand, especially from China, a build-up in U.S. petroleum product inventories, a stronger U.S. dollar, and potential tariffs on imports from Canada, Mexico, and China exerted downward pressure.

Crude oil prices were influenced by ongoing geopolitical tensions, economic uncertainties, and potential U.S. sanctions, while supply-side risks and seasonal factors caused occasional price fluctuations. In April, crude prices dropped following announcements of new U.S. tariffs and retaliatory measures from major economies, triggering heavy selling in oil futures and broader financial markets.

Particulars	FY 2024-25	FY 2023-24	% Change
Average Brent prices – US\$/barrel	78.9	83.1	(5%)

Growth Projects Development

The Oil & Gas business has a strong portfolio of infill development and enhanced oil recovery projects to boost near-term volumes and manage natural field decline. Key projects include:

Infill Projects

- Mangala Infills (18 wells):** Based on the success of previous infill campaigns, the project targets 18 wells (15 producers and 3 injectors) in FM1 sands, with 6 wells converted. As of 31 March 2025, 17 wells have been drilled and are online.
- Mangala ASP (Cluster C):** The Alkaline Surfactant Polymer (ASP) project at Mangala aims for incremental recovery. It involves drilling wells and developing infrastructure at Mangala Cluster C, with ASP injection planned in FM1 and FM3 layers by the first half FY 2025-26. Surface facilities construction is ongoing.
- Aishwarya Upper Fatehgarh (25 wells):** Following the success of polymer injection in Lower Fatehgarh sands, production opportunities were identified in Upper Fatehgarh sands. The project involves drilling 25 wells and converting 7 existing wells to polymer injectors. As of March 2025, drilling is complete, and 24 wells are online.
- Aishwarya Lower Fatehgarh (17 wells):** To enhance recovery from Lower Fatehgarh sands, 17 additional wells (9 producers and 8 injectors) and 5 conversions are planned. As of March 2025, 9 wells have been drilled, with 3 online.
- Tight Oil (ABH):** The Aishwariya Barmer Hill infill drilling program has established confidence in the ABH reservoir. Based on success, 14 additional wells are being drilled, with 12 drilled and 9 online as of March 2025.
- Tight Gas (RDG):** To manage natural decline, a campaign of 8 additional infill wells was completed during FY 2023-24. All wells are now online.
- Satellite Fields (Saraswati):** To enhance recovery from Saraswati field, a drilling campaign of 5 infill wells is underway. As of March 2025, 2 wells have been drilled, with 1 online.



Exploration and Appraisal

- Under the Open Acreage Licensing Policy (OALP), revenue-sharing contracts have been signed for 58 blocks located primarily in established basins, including some optimally close to existing infrastructure, of which 5 onshore blocks in the KG region have been relinquished
- During fiscal year 2025, we drilled six exploration wells [4 wells in North-East and 2 wells in Rajasthan]. We have successfully announced first oil discovery from North-East region, Rudra-1 (~6 mmmboe of Contingent Resources added) and monetisation is under planning
- We intend to drill 6-8 exploration prospects during fiscal year 2026. International Rig has been locked in for drilling onshore exploration wells in 2Q FY 2025-26. Controlled Source Electro Magnetic (CSEM) survey for Exploration campaign in KG Deepwater block is under progress and we intend to drill exploration wells to explore the prospects in the blocks for next fiscal year.

FINANCIAL PERFORMANCE

Revenue for FY 2024-25 was ₹ 11,044 crore, a 38% decrease Y-o-Y (after profit petroleum and royalty sharing with the Government of India), primarily due to lower volumes and prices. The previous year included a favourable impact from an order received in the Gol arbitration. EBITDA for FY 2024-25 was ₹ 4,664 crore, down 52% Y-o-Y, reflecting the lower revenue.

The Rajasthan operating cost was US\$ 16.6 per barrel in FY 2024-25, up from US\$ 14.5 per barrel in FY 2023-24, mainly due to reduced production.

(₹ crore, unless stated)			
Particulars	FY 2024-25	FY 2023-24	% change
Revenue	11,044	17,837	(38%)
EBITDA	4,664	9,777	(52%)
EBITDA margin	42%	55%	-

ESG UPDATE

Environment

Our Oil & Gas business is committed to protecting the environment, minimise resource consumption and drive towards our goal of ‘zero harm, zero waste, zero discharge’. Highlights for FY 2024-25 are as under:

- Cairn NET Water Positive Impact (NPWI) index at 1.15
- Produced water re-injection at Raag Oil resulting in savings of 1,15,500 kl of ground water
- Sewage Treatment Plant (STP) commissioned at RDG resulting in savings of 3,600 kl water by utilising treated water for greenbelt development





Biodiversity and wildlife conservation efforts

- Revival of Khejri in Thar ecosystem by distribution & plantation of 5,000 saplings in Govt schools of Barmer
- Cairn has launched Mission Vanraksha in Assam, with Kaziranga National Park & Tiger Reserve, Assam to conserve endangered species (One-Horned Rhinoceros and Bengal Tigers)
- Released Coffee Table Book - 'Nesting Dunes - Wings of the Thar', to cherish the captivating Avifaunal biodiversity of Thar Desert on World Environment Day 2024
- TACO has partnered with Jambeshwar Environment and Wildlife Society to conserve wildlife in Sanchole district, Barmer by providing drinking water facilities and medical care

Reduction in GHG Emissions

- Conversion of steam driven power fluid pump to electric motor at Mangala Processing Terminal (MPT); avoidance of GHG emission 82,550 tCO<sub>2</sub>e/annum
- Installation of 500 KVA Gas Engine Generator at Tukaram to meet the power requirement and reducing gas flaring. Annual GHG reduction potential of 1,100 tCO<sub>2</sub>e
- Completed plantation of approx. 0.76 million trees or mangroves in Rajasthan, Surat and Ravva

- Fugitive Emission monitoring studies conducted across assets to identify and quantify and thereby reduce emissions
- Completed an engineering study to utilize CO<sub>2</sub>-rich gas for power generation and enhanced oil recovery

Occupational Health and Safety

There was one fatality and one lost time injury (LTI) in FY 2024-25. Loss time injury frequency rate stood at 0.03 per million-man hours (FY 2023-24: 0.1 per million-man hours).

Cairn Oil & Gas has taken various initiatives:

- Critical Risk Management Capacity Building workshop by DSS+
- Digital initiatives: Artificial Intelligence based safety surveillance, Digital Mines statutory register, QR Code based incident reporting and Electronic work-permit system in Suvali
- External training on Oil Spill Response and Management at Ravva asset
- State-level mock drill conducted at RJ North for 'Fire in crude storage tank' in coordination with District Administration as per National Disaster Management Authority

Recognitions received

Our focus remains on strengthening our safety philosophy and management systems. We were recognised with awards conferred by external bodies:

- Cairn becomes the 1<sup>st</sup> Indian company to join OGMP 2.0 (Oil & Gas Methane Partnership) program by signing MoU with UNEP for Methane mitigation
- Cairn received "RoSPA (The Royal Society for the Prevention of Accidents) Gold Award 2024 in Occupational Health and Safety Category
- 'Golden Peacock - Eco Innovation Award 2024' for Best Practices in Waste Management
- Cairn has been recognised under various categories for Safety Excellence & Emergency preparedness at 38<sup>th</sup> DGMS Annual Safety Meet at Jodhpur

Strategic Priorities and Outlook

**Vedanta's Oil & Gas business is anchored in a robust portfolio comprising exploration prospects across Indian basins, development opportunities in high-potential producing blocks, and stable operations that continue to generate strong cash flows.**

**The key priority ahead is to deliver our commitments from our world-class resources with 'zero harm, zero waste and zero discharge':**

Strategic focus areas

- Infill projects across producing fields to add volume in near term
- Define new development projects to bring these Resources into production
- Unlock the potential of the exploration portfolio comprising of OALP and PSC blocks
- Continue to operate at a low cost-base and generate free cash flow post-capex







Operational review

# ALUMINIUM

■■■

Our continued focus on operational excellence, enhanced asset reliability across sites, and greater efficiency in procurement enabled us to achieve our highest-ever annual cast metal production of 2.42 million tonnes, marking a 2% Y-o-Y increase. We also recorded a 9% Y-o-Y growth in calcined alumina production, reaching 1,975 kt for the year.



2.42 million tonnes

RECORD CAST METAL  
PRODUCTION IN FY 2024-25

■■■

1.98 million tonnes

CALCINED ALUMINA  
PRODUCTION

■■■

OPERATIONS

Production Performance

Alumina Refinery – Lanjigarh

Calcined alumina production at Lanjigarh reached 1.98 million tonnes in FY 2024-25, reflecting a 9% Y-o-Y increase.

Aluminium Smelters

Our Jharsuguda smelter achieved its highest-ever cast metal production of 1.83 million tonnes, operating at 105% of design capacity, up 3% Y-o-Y. This milestone underscores our continued emphasis on operational excellence and efficiency.

BALCO also delivered record cast metal production of 592 kt in FY 2024-25, a 1% Y-o-Y increase, driven by improved operational efficiency.

Coal Security

We remain focussed on securing long-term coal supply for our thermal power plants at competitive prices.

- Captive coal blocks Radhikapur (West) (6 MTPA) and Kuraloi (A) North (8 MTPA) are planned for commissioning in FY 2025-26, followed by Ghogharpalli (20 MTPA) at end of FY 2025-26/early FY 2026-27
- Exploration is underway at the Barra coal block
- These, along with 16.7 million tonnes of long-term linkage coal, will ensure 100% coal security for our Aluminium operations
- Participating in linkage coal auctions to further strengthen supply security

Particulars	FY 2024-25	FY 2023-24	% Change
Calcined Alumina Production (kt)			
Alumina – Lanjigarh	1,975	1,813	9%
Cast Aluminium Production (kt)	2,422	2,370	2%
Jharsuguda	1,830	1,784	3%
BALCO	592	586	1%

Prices

LME aluminium prices saw notable volatility in FY 2024-25. Prices rose from US\$ 2,250 per tonne in March 2024 to US\$ 2,700/tonne in May following sanctions on Russia, before falling to US\$ 2,200/tonne in July. A cut in China's export rebates in November pushed prices to US\$ 2,600/tonne, stabilising around US\$ 2,500/tonne by December. Fuelled by US tariff announcements and the EU's ban on Russian primary imports prices rose by 3.3% MoM in February. On 12 March, the US imposed a 25% tariff on all aluminium imports, causing the LME to spike to US\$ 2,737/tonne. By 13 March, the price was US\$ 2,518/tonne.

Global aluminium demand is expected to grow at a CAGR of ~3% from 2024 to 2030, driven by decarbonisation and the shift away from fossil fuels. Electric vehicle production is projected to reach 31.7 million tonnes by 2030, increasing aluminium usage. Demand will also rise from renewable energy sectors, particularly solar panel manufacturing and the replacement of copper with aluminium in power distribution.

Urbanisation, especially in Asia (excluding China), will drive growth in the construction sector. Meanwhile, aluminium packaging demand is expected to reach 10.5 million tonnes by 2030, fuelled by rising consumption of canned beverages in North America, Europe, and China, alongside a broader shift toward sustainable packaging solutions.

Particulars	FY 2024-25	FY 2023-24	% Change
Average LME cash settlement prices (US\$ per tonne)	2,525	2,200	15%

Unit costs

- Alumina CoP stood at US\$ 355 per tonne, up 9% Y-o-Y, primarily due to a lower mix of domestic bauxite
- Molten aluminium CoP was US\$ 1,835 per tonne, up 2% Y-o-Y, mainly driven by a higher Alumina Price Index

Particulars	FY 2024-25	FY 2023-24	% Change
Alumina - Lanjigarh	355	325	9%
Aluminium Total	1,835	1,796	2%
- Jharsuguda	1,761	1,761	0%
- BALCO	2,063	1,904	8%





Project updates

Lanjigarh

The project has progressed smoothly in FY 2024-25. The first 1.5 MTPA train was commissioned in March 2024 and is fully operational. Additionally, five systems were commissioned, including a Calciner unit, Power Plant second unit, Red Mud Filtration Unit (five filters), MOL Phase 1, and Alumina Handling Phase 1. The remaining systems of Train 2 are mechanically completed and under commissioning, with first alumina production expected in the first quarter of FY 2025-26.

On the railway and bauxite handling front, the MVAA station has been inaugurated. Stacking, reclaiming machines, and bauxite feeding conveyors are under commissioning, with full operations anticipated in first quarter of FY 2025-26. Wagon Tipplers, along with other critical systems, are on track for completion by the second quarter of FY 2025-26.

Jharsuguda

A new Cast House-4 is being established to enhance the VAP mix, with additional 1x180 KTPA PFA Line and 2x125 KTPA Billet Lines. The Cast House workshop is complete, and the Pre foundry alloy (PFA) line was commissioned in February 2025. Billet line construction is ongoing, with commissioning targeted for June 2025.

A new Green Anode Plant-5 (35 TPH) and Anode Rodding Shop-3 (40 RPH) are being set up for carbon adequacy to support 2 MTPA of aluminium production. The Anode rodding shop (ARS) was commissioned in February 2025, while the Green Anode Plant is expected to commission in July 2025.

Coal Mines

Strategically located coal mines provide a competitive advantage.

- Jamkhani Coal Mine (2.6 MTPA) – First-ever private coal mine operationalised in Odisha, steadily increasing production since November 2022
- Kuraloi (A) North Coal Block (8 MTPA) – 73% project completion, located closest to the Jharsuguda plant
- Ghogharpalli Coal Block (20 MTPA) – High-volume, low-cost supply to Vedanta's operations

Balco

Smelter (435 KTPA, 525 KA technology)

BALCO is establishing the first ever 525 kA Smelter of the Nation abetting the Plant expansion from 0.58 MTPA to 1 MTPA Club. With VAP of >100% and added facilities of Integrated Alumina Handling System, CP Coke Handling systems aiming for reducing carbon footprint. Our target is to produce first metal in H1'26 with full ramp up in FY 2026.

Cast House (420 KTPA)

For the first time, Balco is setting up a 420 KTPA Billet Plant to cater to 1 MTPA of hot metal. The plant is set to be commissioned in the second quarter of FY 2025-26, with full ramp-up in the third quarter of FY 2025-26.

Rolled Product (129 KTPA)

The existing rolled product capacity is being debottlenecked from 51 KTPA to 180 KTPA. The first slab was cast in the fourth quarter of FY 2024-25, with the facility expected to be fully completed and ramped up by the first quarter of FY 2025-26.

FINANCIAL PERFORMANCE

Revenue for the year stood at ₹ 58,522 crore, up 21% Y-o-Y, driven by higher LME prices, improved net effective premiums, and increased volumes. EBITDA rose 84% Y-o-Y to ₹ 17,798 crore, supported by higher realisations, partially offset by a marginal rise in costs.

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	58,522	48,371	21%
EBITDA	17,798	9,657	84%
EBITDA margin	30%	20%	

ESG UPDATE

Environment

Lanjigarh recycled 52.52% of its water consumption, while Jharsuguda and BALCO achieved 12.17% and 12.48% respectively. Freshwater consumption stood at 57.41 million m³ at Jharsuguda, 30.96 million m³ at BALCO, and 3.70 million m³ at Lanjigarh.

In line with Vedanta's decarbonisation roadmap, BALCO began biomass co-firing in its power boilers, while Jharsuguda has deployed 59 Electric forklifts while BALCO deployed 6 forklifts, we have planned to shift to 75 % EV light motor vehicles by FY 2029-30.

Under our Green product initiative, this year, we generated a revenue of approx. US\$ 190 million from sale of low carbon Aluminium under the Restora brand name. Our Restora Ultra brand, derived from aluminium dross, features one of the industry's lowest carbon footprints.

GHG intensity at Jharsuguda reduced by 13.26% over FY 2020-21 baseline, with 152 MW of green power procured and 109% fly ash utilisation achieved. BALCO achieved 15.93 tCO<sub>2</sub>/t against 16.43 tCO<sub>2</sub>/t in FY 2020-21, procured 25 MW green power, and co-fired 2,365 tonnes of biomass. At Lanjigarh, GHG intensity stood at 1.12 tCO<sub>2</sub>/T of alumina compared to 1.09 in FY 2020-21.

Key Highlights

- Biodiversity and Carbon Reduction Partnership:** Jharsuguda partnered with PwC for three major projects focussed on achieving No Net Loss, community-based carbon reduction, and invasive species management
- Natural Gas Partnership:** Jharsuguda collaborated with GAIL Gas Limited to fuel its upcoming 430 KTPA cast house via a 7.5 km pipeline, reducing emissions by 62%
- 500<sup>th</sup> Fly Ash Rake Dispatched:** In December 2024, we marked a milestone in sustainable ash utilisation with the dispatch of our 500<sup>th</sup> fly ash rake
- Multi-Effect Evaporator Commissioned:** At Jharsuguda, our ETP with RO and MEE systems ensures water recycling and salt recovery, strengthening our water stewardship
- Ash Control Tower at BALCO:** This digital platform enables real-time monitoring and compliance for ash disposal, enhancing operational and environmental governance

In FY2024-25, we produced 66 kt of Green Aluminium, generating ₹ 1,584 crore of Revenue.

Awards and accolades

- Recognised as a "Champion" at the People First HR Excellence Awards 2024 in the category of "Leading Practices in Talent Management"
- Awarded the "Energy Efficient Unit" title at the CII National Award for Energy Management
- Honoured with the CSR Times Award 2024 in the category of Skill Development for Vedanta Lanjigarh
- Received the "Skilling Excellence" award at the 3<sup>rd</sup> Edition of the BCC&I Social Leadership & Conclave Awards 2024 for Vedanta Skill School
- Secured 2<sup>nd</sup> place in the S&P Global Sustainability Assessment for the Aluminium sector, earning a spot in the Yearbook for the first time
- Commended with an award from the British Safety Council for Vedanta Jharsuguda
- Achieved a remarkable score of 77 in the S&P Global Corporate Sustainability Assessment (CSA) for FY 2023-24, maintaining a position as one of the top 2 global leaders in sustainability for the aluminium industry for the fourth consecutive year





Occupational Health and Safety

We are pleased to report zero fatalities in our Aluminium operations in FY 2024-25. A total of 29 Lost Time Injuries (LTIs) were recorded, with an LTIFR of 0.27 and TRIFR of 0.70.

In pursuit of our Zero Harm goal, we undertook comprehensive safety improvements across units, focussing on site infrastructure, systems, and safety culture. Significant progress includes safer pedestrian pathways, a Driver Management Centre, speed detectors, vehicle simulators, and upgraded rest areas for drivers. An Integrated Traffic Management System has also been implemented at critical sites such as Jharsuguda.

We continued advancing digital safety measures, including interlock systems for electrical panels and conveyors, AI-enabled fatigue monitoring cameras, GPS vehicle tracking, remote operations for electrical systems, and digital dashboards. Safety parameters are tracked through the Enablon platform.

Monthly “Sankalp Day” themes, leadership-led safety stand-downs, and a systematic Critical Risk Management framework continue to embed safety ownership. Visible felt leadership and third-party safety trainings remain key enablers. BALCO earned a Four-Star rating from the British Safety Council. Vedanta Aluminium secured 2<sup>nd</sup> position globally in the S&P Global Corporate Sustainability Assessment (CSA) for FY 2023-24, reaffirming our industry leadership in sustainability.

On the occupational health front, numerous awareness initiatives were conducted including seasonal health campaigns, screening camps (BP, hepatitis, diabetes, thyroid, cardiac), and wellness activities like yoga, voluntary blood donations, and fitness challenges. Monthly training sessions cover Occupational Health, Ergonomics, CPR, and First Aid (certified by NSC). We also launched Mo Sarathi, a comprehensive mental and emotional wellbeing programme in partnership with YourDost.



Strategic Priorities and Outlook

Our strategic focus remains on:

- increasing production volume of aluminium,
- reducing and delinking production cost from external volatility through achieving full backwards vertical integration, and
- maximizing share of value-added products (VAP) in our mix

Aluminium Volume:

BALCO is set to add 0.435 MTPA smelter capacity, taking total capacity to 1 MTPA, with first metal expected by end of second quarter of FY 2025-26. We continue to drive performance through debottlenecking and planning future capacity additions.

Backward Integration:

Lanjigarh’s expansion is progressing well, with Train-2 expected to deliver first alumina in the first quarter of FY 2025-26. At Sijimali Bauxite Mines, land acquisition, approvals, and infrastructure development are underway, targeting first production by the second quarter of FY 2025-26. This ramp-up will support our 5 MTPA refinery operations with domestic bauxite.

VAP Expansion:

Both Jharsuguda and BALCO are enhancing VAP capacity to improve margins through higher realisation.

Sustainability:

We are focussed on stakeholder safety, carbon footprint reduction, scaling up production of low-carbon aluminium (Restora, Restora Ultra), enhancing workforce diversity, and promoting a circular economy.

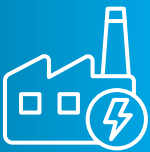
Operational Excellence & Asset Optimisation:

We aim to maximise operational efficiency and >100% asset utilisation through structured reliability and asset management programmes.

Quality & Product Portfolio:

Our goal is zero product defects and enhanced customer satisfaction, while strengthening our VAP portfolio to meet evolving customer needs.





Operational review

# POWER

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FY 2024-25 marks a pivotal year for Vedanta Power as we advance our strategy to scale operational capacity and reinforce energy security through key thermal power expansions. Two major projects are at the forefront of this growth:



Meenakshi Energy Limited (MEL),  
Andhra Pradesh – 1,000 MW

Phase-1 (300 MW) is already operational, while Phase-2 (700 MW) is on track for commissioning in the first quarter of FY 2025-26.

Vedanta Limited Chhattisgarh Thermal Power  
Plant (formerly Athena Chhattisgarh Power  
Limited) – 1,200 MW

Unit 1 (600 MW) is also scheduled to commence operations in the first quarter of FY 2025-26

These additions will raise our total installed capacity to 4,780 MW, which includes our existing operational assets: Talwandi Sabo Power Limited (TSPL, 1,980 MW) in Punjab and Jharsuguda Independent Power Plant (IPP, 600 MW) in Odisha. By the first quarter of FY 2025-26, 4,180 MW of capacity will be operational.

This capacity expansion strengthens our base of self-reliant, cost-effective power generation, enhancing margin stability and securing steady cash flows. The integration of these new assets is expected to provide long-term support to Vedanta's operations, while positioning the Power business as a robust contributor to the Group's overall growth trajectory.

12,822 million units

TOTAL POWER SALES REGISTERED

...

OPERATIONS

Power sales for FY 2024-25 stood at 12,822 million units, reflecting a 5% decline Y-o-Y, primarily due to plant-specific operational constraints.

At TSPL, power sales totalled 10,230 million units, with a plant availability of 81%. TSPL operates under a long-term Power Purchase Agreement (PPA) with the Punjab State Electricity Board, under which revenue is primarily linked to plant availability, ensuring stable returns.

MEL continues to sell power through the electricity exchange, offering revenue flexibility by enabling price optimisation in response to market dynamics.

At the Jharsuguda Independent Power Plant (600 MW), the Plant Load Factor (PLF) was 47% in FY 2024-25, impacted by temporary ash evacuation challenges and scheduled repair and maintenance activities.

Production	FY 2024-25	FY 2023-24	% Change
Total Power	12,822	13,443	(5%)
HZL wind power	348	394	(12%)
Jharsuguda 600MW	2,244	2,771	(19%)
TSPL	10,230	10,278	(0.5%)
TSPL – availability	81%	82%	

Unit sales and costs

- Average power realisation (excluding TSPL) stood at ₹ 3.15/kWh, up 12% Y-o-Y, while generation cost rose 19% Y-o-Y to ₹ 3.07/kWh
- TSPL's average sales price was ₹ per 4.06 kWh, 1% down Y-o-Y, and power generation cost was ₹ 3.23 per kWh, 1% down Y-o-Y.

Particulars	FY 2024-25	FY 2023-24	% Change
Average sales realisation (₹/kWh) <sup>1</sup>	3.15	2.82	12%
Average cost of production (₹/kWh) <sup>1</sup>	3.07	2.57	19%
TSPL sales realisation (₹/kWh) <sup>2</sup>	4.06	4.10	(1%)
TSPL cost of production (₹/kWh) <sup>2</sup>	3.23	3.26	(1%)

1. Power generation excluding TSPL  
2. TSPL sales realisation and cost of production is considered above, based on Normative availability declared during the respective period

FINANCIAL PERFORMANCE

Revenue for the year was ₹ 6,159 crore whereas EBITDA for the year was ₹ 737 crore, down by 24%.

(₹ crore, unless stated)

Production (kt)	FY 2024-25	FY 2023-24	% Change
Revenue	6,159	6,153	-
EBITDA	737	971	(24%)
EBITDA margin	12%	16%	





ESG UPDATE

Occupational Health and Safety

Aligned with our Group’s Zero Harm philosophy, we identified key safety risks and formed cross-functional risk committees to integrate safety into daily operations. In FY 2024-25, our focus was on strengthening Critical Risk Management (CRM) to proactively address high-potential risks. TSPL undertook a comprehensive HAZOP study, developed CRM champions, and conducted advanced risk assessment workshops. At MEL, HAZOP and LOPA studies were conducted to evaluate potential process and equipment hazards. Both plants recorded zero fatalities, reflecting the effectiveness of our safety interventions. The emphasis on ‘Visible Felt Leadership’, increased use of digital safety platforms, and ongoing training programmes for employees and partners further reinforced our safety culture.

Environment

Environmental responsibility remains a core tenet of our operations. TSPL, Athena and MEL together maintain over 1,230 acres of green cover, with continuous efforts to expand plantation in and around plant premises. TSPL achieved 118% fly ash utilisation, with applications in road construction, brickmaking, and cement production. MEL attained zero legacy ash status by fully utilising accumulated fly ash for infrastructure development, supporting our circular economy agenda. In water management, TSPL recycled 24% of water used, while MEL operated entirely on saline water, demonstrating a strong commitment to water stewardship and eliminating reliance on freshwater sources.

Community and Climate Impact

Under its CSR initiative Navi Disha, TSPL addressed stubble burning in Punjab by partnering with local vendors to manage 20,000 acres of farmland. The project collected 8 lakh tonnes of crop residue, redirecting it for use in manure and biofuel, thereby avoiding an estimated 1.168 million metric tonnes of CO<sub>2</sub> emissions.

Strategic Priorities and Outlook

Our focus will remain on maximising plant availability and driving operational excellence, while adhering to the committed commissioning timelines for our upcoming power assets.

Strategic priorities

- Ensuring the successful and timely commissioning of MEL and Athena units, critical to expanding our generation capacity
- Targeting best-in-class operational performance by benchmarking against industry leaders and driving continuous improvement across all parameters
- Strengthening our topline by recovering outstanding dues from disputed debtors through focussed resolution and engagement
- Enhancing financial performance through optimisation of coal procurement costs, aimed at improving EBITDA margins and sustaining profitability







Operational review

IRON ORE

Our Iron Ore business, led by Sesa Goa, is one of India’s largest private iron ore exporters. In FY 2024-25, we achieved a 12% Y-o-Y increase in saleable production, reaching 6.2 million DMT. Our pig iron output also reached 817 kt. Noteworthy operational improvements include the commissioning of a 1.2 MTPA debottlenecking project, a new ESP for the sinter plant, a PCI mill, and a coke drying system, all aimed at enhancing production rates and reducing costs. Additionally, WCL secured an EPC contract for a 3 MTPA concentrator and power plant, alongside completing feasibility studies for infrastructure development.



OPERATIONS

Production

At Karnataka, we closed the year with saleable ore production of 5.3 million dmt and sales of 4.8 million dmt.

At VAB, we achieved the second highest ever annual production of pig iron, with 817 kt, reflecting a 2% decline compared to the previous year.

At Bicholim mines, we successfully conducted the first-ever dispatch of iron ore during the monsoon season. Over the year, we produced 0.9 million dmt of saleable iron ore and sold 0.6 million dmt, marking a significant milestone for the operation.

Particulars	FY 2024-25	FY 2023-24	% Change
Production (mn dmt)			
Saleable ore	6.2	5.6	12%
Goa	0.9	0.0	-
Karnataka	5.3	5.6	(5%)
Pig iron (kt)	817	831	(2%)
Sales (mn dmt)			
Iron ore	5.4	6.2	(13%)
Goa	0.6	0.3	-
Karnataka	4.8	5.9	(19%)
Pig iron (kt)	808	836	(3%)

Projects

Ductile Iron Pipe Plant (VAB): The Ductile Iron Pipe plant is being set up at the Pig Iron Division II location of Value Added Business. Civil works related to the plant building have been completed, and delivery of structural materials for building erection and cranes has started. Equipment foundation work and equipment manufacturing are currently in progress.

Dedicated Corridor (IOG): The dedicated corridor project has commenced to develop a dedicated route for the movement of mine trucks, thereby increasing the capacity for ore transportation. The project is scheduled for completion by FY 2025-26.

Dry Screening Plant (IOK): Plant installation, along with mechanical completion, has been completed. Trials are currently in progress.

Wet Beneficiation Plant (IOK): A 4 MTPA capacity Wet Beneficiation Plant is proposed. Partner locking is expected by May 2025, and the project is set to be completed within 20 months.

FINANCIAL PERFORMANCE

Revenue for the year was ₹ 6,086 crore, 33% down Y-o-Y, mainly due to lower volume at Karnataka and lower export sales. EBITDA for the year was ₹ 1,006 crore, 40% down Y-o-Y, particularly due to fall in iron ore index and lower production of volume.

(₹ crore, unless stated)

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	6,086	9,069	(33%)
EBITDA	1,006	1,676	(40%)
EBITDA margin	17%	18%	

Awards & Accolades

- Received the 3<sup>rd</sup> prize for Best Environmental Practices from the Goa State Pollution Control Board, presented by the Honourable Chief Minister of Goa in the first quarter of FY 2024-25
- Honoured with the National Level CSR Times Award for the 'GRAM NIRMAAN' project in the 'Livelihood' category, presented by the Honourable Chief Minister of Goa in the second quarter of FY 2024-25
- Awarded the Finest India Skills & Talent (FIST) Award 2024 in the Safe and Secure Manufacturing Industry category for its commitment to safety and security standards
- Recognised with the TB Free Workplace Award by the TB Cell Directorate of Health Services, Govt of Goa, in association with the Indian Association of Occupational Health in November 2024
- Awarded the prestigious “Security Team of the Year” award at the IFSEC Awards 2024 in New Delhi on 12 December 2024
- Honoured with the 'Mahatma Gandhi Award for CSR Excellence 2024' by Aditya Birla Group & Mahatma Foundation for Sesa Goa's CSR initiatives
- Received 8 awards at the LinkedIn Talent Awards 2024, including 5 SABRE Asia Pacific Awards and 3 Fulcrum Awards for the campaigns “IronLadiesIndia2.0” and “Garv Se Vedanta for India”
- Awarded the Abheraj Baldota Environmental Award from FIMI for excellence in Environmental Protection and Management
- Won the Sesa Goa HR-LinkedIn Champion Award for Learning & Development Interventions at the LinkedIn Talent Awards'24





ESG UPDATE

Environment

Value Added Business (VAB) has improved air pollution control with a new Electrostatic Precipitator (ESP) at the Sinter Plant and received environmental clearance to expand production capacity. VAB also aids wildlife conservation by providing a rescue van to the state forest department.

At Iron Ore Karnataka, 38 check dams, 7 settling ponds, and 6 gully plugs were constructed, and 6,000m³ of desilting was completed to enhance rainwater harvesting. A hydrogeology study was also conducted for improved water management.

Sesa Goa, targeting net-zero emissions by 2050, has adopted EV wheel loaders and installed a 100 KW solar power plant. VAB’s EV fast charging station has benefited over 1,000 users, while over 20 kl of biodiesel replaced HSD across units.

Occupational Health and Safety

We are committed to achieving Zero Harm, aiming for no fatalities in our Iron Ore Business. Our focus on improving CRM verifications, work permit systems, and Contractor HSE Management remains unchanged. In FY 2024-25, our Lost Time Injury Frequency Rate (LTIFR) was 0.84, slightly up from 0.83 in FY 2023-24. We are targeting 100% compliance with Infra-matrices over the next three years.

To further enhance safety, we have integrated digital and engineering controls, such as fatigue monitoring, AI surveillance, and slope stability radars. We also conduct monthly safety programmes for over 1,200 employees to raise awareness on Vedanta Safety Standards. Our health initiatives include a mental health program, ambulance upgrades, and increased IH studies and PME tests. Additionally, we’ve rolled out safety governance structures, safety scorecards, and online safety assessments to improve communication and compliance.

Strategic Priorities and Outlook

- Commissioning of the Ductile Iron Pipe Plant Project at VAB
- Approval of the 7.2 MTPA Mine Plan at IOK and commissioning of the Wet Beneficiation Plant
- Construction of the dedicated corridor at IOG and commencement of mining operations at Cudnem mines
- Focus on green mining, leveraging digitalisation, and enhancing the use of renewable energy







Operational review

STEEL

ESL Steel Limited (ESL), located in Bokaro, Jharkhand, is an integrated steel plant with a design hot metal capacity of 3.5 MTPA and an operating capacity of 1.5 MTPA. It offers a diverse product portfolio including wire rods, rebars, ductile iron pipes, and pig iron, serving sectors such as construction, infrastructure, transport, and energy.

During FY 2024-25, ESL produced 1,427 kt of hot metal and 1,337 kt of saleable steel, down 3% and 4% Y-o-Y, respectively, due to planned shutdowns for debottlenecking and maintenance. During the year, ESL enhanced its billet production capacity from 1.2 MTPA to 1.4 MTPA by debottlenecking BOF converter heat size from 60 to 65 tonnes, supporting future growth and operational efficiency.



1,337 kt

SALEABLE STEEL PRODUCTION  
DURING FY 2024-25

OPERATIONS

Production

ESL Steel Limited recorded saleable production of 1,337 kt, down 4% Y-o-Y, aligned with the decline in hot metal output due to a planned plant shutdown for debottlenecking of the steel melting shop and major maintenance at the oxygen plant. Despite pressures on realisations and sales volumes, improved operational efficiencies and a decline in raw material costs – particularly coking coal – contributed to a reduction in cost of sales.

Our operational focus remains on enhancing the production mix towards high-margin, value-added products such as rebars, wire rods, and ductile iron pipes to strengthen profitability and market competitiveness.

On the regulatory front, the renewal of the Consent to Operate (CTO) for the Bokaro steel plant is under review. The Ministry of Environment, Forest and Climate Change (MoEF&CC) has requested the Jharkhand Forest Department to provide complete compliance details. In response, the state submitted a compliance report on 17 November 2023, highlighting progress and requesting reconsideration of the Stage I Forest Clearance revocation, seeking additional time to meet pending conditions – primarily related to Compensatory Afforestation (CA) land. ESL has completed the mandated 1:2 CA land transfer to the Forest Department. Subsequently, the State Government requested reconsideration through a letter dated 6 November 2024. However, MoEF&CC, in its letter dated 9 December 2024, informed the State Government of the revocation and advised appropriate action. The matter is currently sub judice in the Jharkhand High Court, which, considering ongoing discussions among the stakeholders, has adjourned the hearing to 11 April 2025.

For detailed information, please refer to 'Note 3(c) Significant accounting estimates and judgements' of the consolidated financial statements.

Particulars	FY 2024-25	FY 2023-24	% Change
Production (kt)	1,337	1,386	(4%)
Pig iron	221	203	9%
Billet	43	30	64%
TMT bar	489	505	(3%)
Wire rod	413	436	(5%)
Ductile iron pipes	171	212	(19%)

Prices

Average sales realisation for the year stood at US\$ 586, down 4% Y-o-Y, primarily due to lower production of value-added products following the steel melting shop shutdown for debottlenecking.

Particulars	FY 2024-25	FY 2023-24	% Change
Average steel price (US\$ per tonne)	586	610	(4%)

Unit costs

Cost for the year was US\$ 540 per tonne, down 8% Y-o-Y, driven by lower coking coal prices, improved operational efficiencies, and reduced losses from iron ore mines.

Particulars	FY 2024-25	FY 2023-24	% Change
Steel (US\$ per tonne)	540	588	(8%)

FINANCIAL PERFORMANCE

Revenue for the year stood at ₹ 7,928 crore, down 4% Y-o-Y, primarily due to lower volumes and realisations. EBITDA increased to ₹ 522 crore in FY 2024-25 from ₹ 225 crore in FY 2023-24, driven by a decline in coking coal prices, improved operational performance, reduction in losses from mines and a gain from the monetisation of the oxygen plant in the first quarter of FY 2024-25.

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	7,928	8,300	(4%)
EBITDA	522	225	-
EBITDA margin	7%	3%	-





ESG UPDATE

Energy Efficiency and GHG Emissions

We made steady progress in reducing our carbon footprint. GHG emission intensity improved marginally from 2.78 tCO<sub>2</sub>/tcs to 2.77 tCO<sub>2</sub>/tcs. Through the successful execution of key projects – including CFBC#2 burner modification, lateral fitting of HT capacitor banks, thermal insulation, and optimised idle running of equipment – we achieved total energy savings of 2.9 lakh GJ. The addition of five electric vehicles to our fleet further contributed to our decarbonisation efforts.

Climate Action

Our sustainability journey includes the commissioning of a 1.5 MW solar power plant, generating 1.75 million units of green energy annually and offsetting 1,500 tonnes of CO<sub>2</sub> emissions. In total, over 40 energy-saving projects were implemented this year, resulting in a reduction of 60,000 tonnes of CO<sub>2</sub> emissions.

Water Management

We commissioned five Sewage Treatment Plants, increasing recycling capacity by 575 kl/day. We also revamped 4.5 km of firefighting pipelines to curb water loss and increased stormwater collection capacity from 3,400 to 4,000 m<sup>3</sup>/day.

Biodiversity

As part of our commitment to environmental stewardship, we planted over 2,23,000 trees, enhancing local biodiversity, improving air quality, and contributing to a greener ecosystem.

Waste Management

We achieved 92% utilisation of high-volume, low-toxicity waste through better processing, innovative reuse strategies, and partnerships, reinforcing our focus on sustainable and responsible waste practices.

Occupational Health and Safety

Safety remains a top priority, deeply embedded across all levels of operation. We are committed to creating a zero-harm workplace, ensuring the safety of our employees, business partners, and surrounding communities. This year, we strengthened our safety culture through targeted initiatives including the installation of tarpaulin stations, illuminated annunciation systems in hot metal handling cranes, traffic blinkers at intersections, and AI-based fatigue detection systems. We also implemented a health surveillance programme tailored to specific illness groups such as diabetes, hypertension, and obesity, enabling focussed and preventative care.



Strategic Priorities and Outlook

India's steel demand remains strong, driven by robust growth in construction, housing, automotive, and power sectors, alongside the government's sustained infrastructure push. Against this backdrop, our strategic goal is to scale up hot metal production capacity from 1.5 MTPA to 3.5 MTPA by FY 2025-26 and emerge as a high-grade, low-cost steel producer with top-tier Environment, Health and Safety standards.

Core strategic priorities

- Securing clean 'Consent to Operate' and necessary environmental clearances
- Driving innovation for sustainable and efficient steel production
- Developing low-capex products such as alloy steel, flat products, and a new DI plant
- Reducing logistics costs through dedicated railway siding
- Embedding zero harm and zero discharge practices across operations





Operational review

# FERROCHROME

Ferro Alloys Corporation Limited (FACOR) is a key player in the Ferro Alloys industry, with a 140 KTPA Ferrochrome plant, an operational chrome mine, and a 100 MW captive power plant. In FY 2024-25, ore production reached 250 kt, ferrochrome production rose to 83 kt, and power generation touched 439 MU – all marking their highest level ever.



83 kt

RECORD FERROCHROME PRODUCTION

## OPERATIONS

### Production

**Mining Division:** ROM production from the Ostapal Mine reached 100% of the EC limit, i.e., 250 kt. EC for enhanced production of 1.5 MTPA was received in July 2024, and the CTO limit was increased to 300 kt in March 2025. Production at the Kalarangiatta mine has been temporarily halted due to pending statutory clearances; however, Stage - 1 clearance (CGWA NOC) has been obtained, with full-scale production expected to resume in FY 2025-26.

**Charge Chrome Plant (CCP):** We recorded a ferrochrome metal volume of 83 kt in FY 2024-25, with the highest-ever monthly production of 10,070 MT in June 2024.

**Power Plant:** We achieved full-capacity operations at 100 MW and the highest-ever annual power generation of 438 MU in FY 2024-25.

Production (kt)	FY 2024-25	FY 2023-24	% Change
Ore Production (kt)	250	240	4%
Ferrochrome Production (kt)	83	80	4%
Ferrochrome Sales (kt)	84	78	8%
Power Generation (MU)	438	291	51%

### Projects Update

#### Expansion of Mines Project (1.5 MTPA)

The Underground Mines Project, with a capacity of 1.5 MTPA, is 23% complete. Development of two portals has been finalised, with 250 m of decline development completed, bringing the total underground development to 340 m.

#### Establishment of 600 KTPA Concentrator Plant

Progress on the 600 KTPA Concentrator Plant stands at 18%. Basic engineering is complete, and detailed engineering is 25% finished by the technology partner. Equipment manufacturing by the partner is 35% complete.

#### Expansion of Growth Capex Project (300 KTPA Ferrochrome Production)

The 300 KTPA Ferrochrome production project is 41% complete. Basic engineering has been finalised, and detailed engineering is 46% complete. Equipment manufacturing from the technology partner is 86% finished, with two lots of capital equipment from Metso already delivered to site. Civil construction for the furnace 1 structure erection is ongoing.

### Awards and Accolades

- Recognised by HRAI for Employee Engagement & Experience
- Honoured with the Odisha Best Employer Award for Excellence in HR through Technology and Strategy
- Conferred with the People First HR Excellence Award
- Won the FAME Award in the "Environment Management" Diamond category
- Received the BSC International Safety Award in the Distinction Category for Power Plant safety
- Honoured with the CII EHS Excellence Award for HSE Best Practices at Power Plant
- Recognised with 5 awards for Systematic Development, Environment Monitoring, Mineral Beneficiation, Resettlement and Rehabilitation, and Overall Performance at MEMC Week Final Day Celebration
- Awarded the FAME National Award for Excellence in Best CSR Practices

## FINANCIAL PERFORMANCE

Revenue for the year was ₹ 921 crore, up 14% Y-o-Y, driven by higher sales volume and power generation, partly offset by lower realisation. EBITDA stood at ₹ 40 crore, a 65% Y-o-Y decline, mainly due to increased production costs from purchasing ore externally, delays in statutory clearances for Kalarangiatta Mines, and lower realisation as steel prices dropped, especially in the Chinese market, impacting ferrochrome demand.

(₹ crore, unless stated)

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	921	809	14%
EBITDA	40	115	(65%)
EBITDA margin	4%	14%	





ESG UPDATE

Environment

- Completed installation of CAAQMS & CO sensor at CCP
- Commissioned CEMS at 33 MVA GCP Stack
- Deployed truck-mounted mist cannon system for dust suppression inside the plant
- Installed 50 KLD STP at CCP colony and 14 KV Solar Panel at Ostapal Mines
- Distributed 23,378 saplings and conducted plantation drives across the plant and mines

Occupational Health and Safety

- Deployed Remote Racking Vehicle at 45 MVA Furnace
- Introduced BLS Ambulance at the plant
- Installed and commissioned two Safety Training kiosks at Power Plant and Mines
- Organised state-level mock drill simulating a chemical disaster at CPP
- Conducted onsite Mock Drill on Liquid Oxygen Leakage and Transformer Fire at CCP & Power Plant in the presence of government officials
- Celebrated the 42<sup>nd</sup> Metalliferous Annual Safety Week at Ostapal Mines
- Launched Specialised Visiting Doctors and Lady Doctor initiative (Gynaecologist, Paediatrician, Cardiologist, Orthopaedics) at OHC Plant & Mines
- Conducted MEMC Week Flag Off ceremony and inspection at Mines

Strategic Priorities and Outlook

- Revival of Kalarangiatta and Kathpal Mines
- Expansion of Mines project of 1.5 MTPA
- Establishment of 600 KTPA concentrator plant
- Expansion of Growth Capex project of 300 KTPA Ferrochrome Production







Operational review

# COPPER – India / Australia

Our Silvassa operations sustained growth in cathode production volumes, despite temporary raw material-related disruptions in the first half of the year. The Tuticorin copper smelter remained under shutdown throughout FY 2024-25. The Company's review petition, including a request for an open court hearing, was dismissed by the Honourable Supreme Court. We are currently evaluating all available legal remedies, including the option of filing a curative petition before the Honourable Supreme Court.



149 kt

RECORD PRODUCTION  
POST TUTICORIN CLOSURE

## OPERATIONS

### Production

Copper production at Silvassa facility increased by 6% Y-o-Y to 149 kt – the highest level since the closure of the Tuticorin unit. This growth was driven by improved operational efficiencies, debottlenecking initiatives, and better raw material availability in the second half of FY 2024-25. However, sales volumes declined by 3% to 192 kt, primarily due to a planned shutdown in April 2025.

Regarding the restart of operations at Tuticorin, the Company's review petition, including a request for an open court hearing, was dismissed by the Honourable Supreme Court. For further details, refer to Note 3(c) of Significant Accounting Estimates and Judgements. Our Australian copper mine remains under care and maintenance, though we continue to assess its viable restart amid supportive market conditions.

Particulars	FY 2024-25	FY 2023-24	% Change
Production (kt)			
India – cathode	149	141	6%
Sales (kt)	192	198	(3%)

### Prices

Average LME copper prices increased by 12% compared with FY 2023-24 primarily driven by a combination of strong demand, particularly from the green energy sector, supply constraints and volatility in commodity market due to geopolitical sentiments.

Particulars	FY 2024-25	FY 2023-24	% Change
Average LME cash settlement prices (US\$ per tonne)	9,371	8,353	12%

## FIRST-OF-ITS-KIND DIGITAL INITIATIVE

### Digital Twin Model

#### Objective

Improve current efficiency

#### Details

Created a virtual replica of the tank house to simulate and optimise operations

Enabled real-time monitoring and predictive maintenance, driving notable efficiency gains

### Fuel Optimisation Model

#### Objective

Reduce PNG (Piped Natural Gas) consumption

#### Details

Deployed a model to optimise fuel usage by analysing molten metal level and identifying inefficiencies thus reducing overall fuel consumption.

### Integrated Quality Management

#### Objective

Reduce internal rejection rates of finished goods

#### Details

Streamlined quality processes across the copper business through central coordination

Applied RCA and CAPA to minimise deviations and ensure consistent product quality





Projects

Vedanta Copper International (VCI), a subsidiary of Vedanta Limited, signed an MoU with the Saudi Ministry of Investment and Ministry of Industry & Mineral Resources to invest US\$ 2 billion in copper projects at Ras Al Khair Industrial City. The investment covers a copper smelter, refinery, and rod mill, aligned with Saudi Arabia's Vision 2030 to boost self-reliance, job creation, and GDP contribution. VCI has also secured exploration rights over 1,038 sq. km in the Jabal Sayid 1 copper-ore area.

FINANCIAL PERFORMANCE

Revenue for the year stood at ₹ 23,051 crore, reflecting a 17% Y-o-Y increase, primarily driven by higher LME prices, rupee depreciation, and precious metal prices, partially offset by lower volumes. EBITDA for the year was ₹ (112) crore.

(₹ crore, unless stated)

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	23,051	19,730	17%
EBITDA	(112)	(69)	-
EBITDA margin	-	-	-

ESG UPDATE

Occupational Health and Safety

We reinforced our commitment to workplace safety by achieving 100% implementation of Critical Risk Management (CRM) and conducting a comprehensive capacity-building programme for relevant stakeholders. Our advanced safety measures included the expansion of AI-based remote surveillance cameras (15 units) for Unsafe Acts/Unsafe Conditions (UA/UC) detection, covering electrical panel rooms and critical plant areas. We also conducted rigorous safety assessments, including HAZOP, SIL, and LOPA studies across all plants. Health safeguards remained a top priority, with 100% compliance in pre-employment and periodic medical examinations, along with specialised 2D Echo TMT tests for employees and partners aged 40 and above.

Environment

Aligned with our sustainability goals, we reduced our carbon footprint by replacing diesel trucks in outbound logistics with two LNG-powered alternatives. By consuming secondary

copper scrap, we offset 54,251 tCO<sub>2</sub>e, reinforcing our commitment to circular economy principles. We strengthened our water stewardship through new 5 KLD ETP and STP systems and expanded rainwater harvesting infrastructure, making significant progress towards net water positivity. Our energy efficiency initiatives included replacing 12 IE2 motors with IE4 motors, achieving 90–95% efficiency and estimated yearly savings of 5,14,645 kWh.

Copper Mines of Tasmania

Our Copper Mines of Tasmania site remained in care and maintenance, with no significant safety or environmental incidents. We retained ISO accreditation in safety, environment, and quality management systems, using this production lull to review and further improve these systems.

Awards and Accolades

- Secured SAP ACE Award 2024 in the category “The Disruptor – Finance Digital Transformation” for automation initiatives in Treasury and Risk Management
- Achieved CII Digital Transformation Award 2024 under “Most Innovative – Best Practices in Digital Transformation” for the paperless initiative Project Nidhi – Finance
- Earned PR First HR Excellence Award 2024, CII HR Excellence Award 2025, Great Place to Work Award, and W.E. Global Employee's Choice Award for leading practices in the HR domain
- Received CCQC & ICCQC Gold Awards for Operational Excellence in Kaizen, Current Efficiency Improvement, and AI & ML implementation
- Honoured with the Asia Customer Engagement Award and Asian Business Leaders Award for excellence in CSR and communication

Strategic Priorities and Outlook

- Enhancing operational efficiencies, improving sales margins, and reducing our cost profile
- Upgrading technology and digitalisation to ensure the delivery of high-quality products and services, sustaining market leadership, and exceeding customer expectations
- Continuously debottlenecking and upgrading processing capacities to increase throughput



Operational review

NICOMET

The Indian market for nickel metal and nickel sulphate is primarily driven by stainless steel and electroplating industries, with growing demand from the electric vehicle (EV) sector. The domestic market currently stands at 48 KTPA for primary nickel metal and 2 KTPA for nickel sulphate. Globally, Nickel market is expected to grow at the CAGR of ~6%. 80% of our metal production was sold in the domestic market while 20% in the international market. Our market share in the domestic nickel cathode market is currently close to 5%. We have also captured 40% of total Nickel sulphate domestic market. Further, Nickel sulphate is exported to the EV battery makers in South Korea.







OPERATIONS

Production

The volume decline was driven by a fall in LME nickel prices, leading to the closure of several global nickel mines. This resulted in reduced raw material availability, impacting volumes compared to the previous year.

Particulars	FY 2024-25	FY 2023-24	% Change
Production (tonnes)			
Nickel	2,493	2,702	(8%)
Sales (tonnes)	2,470	2,911	(15%)

Prices

Nickel CSP for the year stood at US\$ 16,559 per tonne, a decline of 13.23%, primarily due to global market rebalancing.

Particulars	FY 2024-25	FY 2023-24	% Change
Average LME CSP (\$ per tonne)	16,559	19,083	(13%)

FINANCIAL PERFORMANCE

Revenue for the year stood at ₹ 370 crore, marking a 19% Y-o-Y decline. EBITDA was ₹ (52) crore.

(₹ crore, unless stated)

Particulars	FY 2024-25	FY 2023-24	% Change
Revenue	370	455	(19%)
EBITDA	(52)	(32)	-
EBITDA margin	-	-	-

ESG UPDATE

Environment

We commissioned a new rectifier to improve power efficiency, which is expected to reduce energy consumption and deliver annual savings of ₹ 4 million. As part of our environmental commitment, we achieved 44% green belt coverage, aligning with regulatory requirements and our sustainability goals.

Occupational Health & Safety

We firmly believe that every incident is preventable. Our Lost Time Injury Frequency Rate (LTIFR) significantly improved to 1.63 in FY 2024-25 from 6.92 in the previous year. We promote a culture of felt leadership, with senior leaders actively involved in strengthening safety systems. Safety stand-downs and regular engagement help reinforce a behaviour-based safety culture on the ground.

Strategic Priorities and Outlook

- With growing demand from the EV battery market, the outlook for global nickel remains strong. We are progressing with our planned capacity enhancement as follows:
- Phase I: Ongoing debottlenecking of the existing plant to reach 10 KTPA, supported by automation, modernisation, and optimal asset utilisation
  - Phase II: Setting up an additional 1.8 KTPA facility to produce value added products and its intermediate forms such as Nickel Hydroxide, Nickel Carbonate, and Nickel Oxide



Operational review

Port Business - Vizag  
General Cargo Berth (VGCB)

During FY 2024-25, we handled 6.69 million tonnes cargo volumes compared to 6.48 million tonnes in FY 2023-24. This included 2.29 million tonnes of other compatible cargo and 4.40 million tonnes of coal. We have also managed the largest manganese ore vessel, with a volume of 2,00,000 tonne at the terminal.



Awards & Accolades

- VGCB has been Honoured with Platinum Award in Breakthrough category, Gold Award in Restoration Category and Silver Award in Innovation Category as well as Renovative Category by Confederation of Indian Industry.
- Honoured with the ET HR Employee Experience Award by The Economic Times.
- Received CSR Journal Excellence Award and Health Impact Award by IHW Council.