Industry Report for DRHP

on

Industrial Operations & Maintenance (O&M), Metal Fabrication and Project Execution Services

March 12, 2026

Monomark Engineering India Ltd.

Disclaimer

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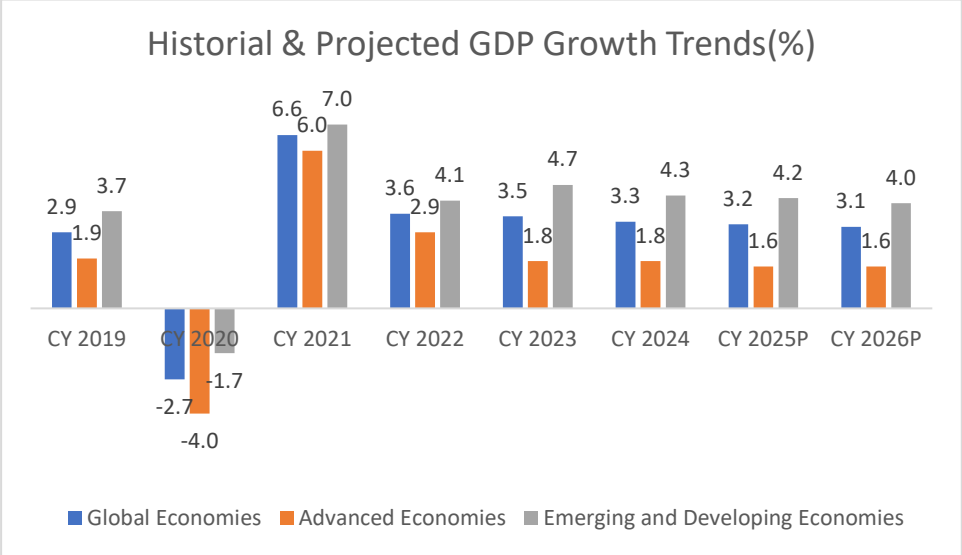
Global Macroeconomic Scenario

Global Economic Overview

The global economy, which recorded GDP growth at 3.3% in CY 2024, is expected to show resilience at 3.2% in CY 2025. This marks the slowest expansion since 2020 and reflects a -0.1%point downgrade from January 2025 forecast. Moreover, the projection for CY 2026 has also reduced to 3.1%. This slowdown is majorly attributed due to numerous factors such as high inflation in many economies despite central bank efforts to curb inflation, continuing energy market volatility driven by geopolitical tensions, and the extended uncertainty around the trade policies. High inflation and rising borrowing costs affected the private consumption on one hand while fiscal consolidation impacted the government consumption on the other hand. As a result, global GDP growth is projected to slow down from 3.3% in CY 2024 to 3.2% in CY 2025.

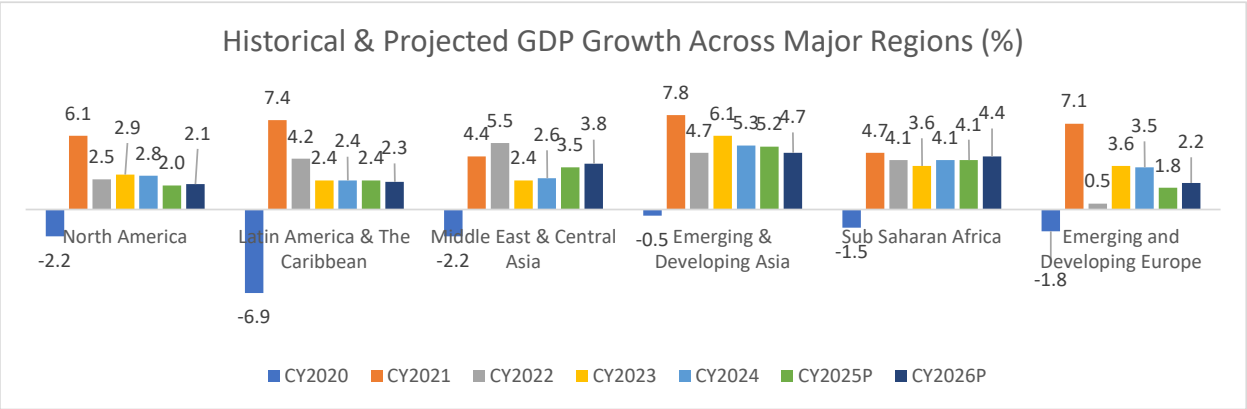


Source – IMF Global GDP Forecast Release October 2025

Note: Advanced Economies and Emerging & Developing Economies are as per the classification of the World Economic Outlook (WEO). This classification is not based on strict criteria, economic or otherwise, and it has evolved over time. It comprises of 40 countries under the Advanced Economies including the G7 (the United States, Japan, Germany, France, Italy, the United Kingdom, and Canada) and selected countries from the Euro Zone (Germany, Italy, France etc.). The group of emerging market and developing economies (156) includes all those that are not classified as Advanced Economies (India, China, Brazil, Malaysia etc.)

Historical and Projected GDP Growth

GDP growth across major regions exhibited a mixed trend between 2022-23, with GDP growth in many regions including North America, Emerging and Developing Asia, and Emerging and Developing Europe slowing further in 2024. In 2025, GDP growth rate in Emerging and Developing Asia (India, China, Indonesia, Malaysia, etc.) is expected to moderate further to 5.2% from 5.3% in the previous year, while in the North America, it is expected to moderate to 2.0% in CY 2025 from 2.8% in CY 2024. Similarly in Emerging and Developing Europe is expected to moderate further to 1.8% from 3.5% in the previous year.



Source-IMF World Economic Outlook October 2025 update.

Except Middle East & Central Asia, all other regions like Emerging and Developing Asia, Emerging and Developing Europe, Latin America & The Caribbean, Sub Saharan Africa and North America, are expected to record a moderation in GDP growth rate in CY 2025 as compared to CY 2024. Further, growth in the United States is expected to come down at 2.0% in CY 2025 from 2.8% in CY 2024 due to lagged effects of monetary policy tightening, gradual fiscal tightening, and a softening in labor markets slowing aggregate demand.

Global Economic Outlook

The global economy is cautiously moving into a transitional phase, characterized by resilience amid uncertainty. Growth remains generally positive but varies across regions, influenced by changes in consumer demand, trade policy, and monetary and fiscal conditions. In advanced economies, household consumption and services continue to support activity, while manufacturing and export-driven sectors face challenges due to a weaker external environment.

The U.S. economy showed strong growth in Q2 2025 and is expected to benefit from lower interest rates starting in September. Australia also performed well, while Europe is dealing with stagnation. Canada's economy is slowing, and Germany's industrial sector remains under strain; Japan, however, is beginning to recover modestly. Among emerging markets, the Chinese Mainland maintains steady growth, supported by fiscal and credit stimulus, while India is accelerating due to strong domestic demand and investment inflows. Southeast Asian countries like Indonesia and Thailand, attractive for natural resources and semiconductors, are showing resilience amid supply chain diversifications. Several Latin American economies, such as Chile, are benefiting from improved commodity terms of trade, especially after raising copper price forecasts.

Global businesses are revising strategies as economic growth varies across regions and macro conditions shift. Multinationals are rebalancing geographic exposure—focusing on markets with strong domestic demand, stable policies, and clear regulations—while reassessing operations in slower or volatile economies.

Supply chain diversification, once a defensive move, is now a structural strategy to access new consumers and reduce single-market risks. Investment is flowing to regions with predictable trade rules, critical inputs, and proximity to end-markets; for example, Mexico has seen increased FDI due to its U.S. proximity and trade clarity. A subtle global shift is emerging despite ongoing risks, businesses are planning with the view that trade disruptions and tariff shocks may be managed through negotiation and gradual recalibration. Recent U.S.-Vietnam and EU-Indonesia trade talks emphasize phased tariff changes and cooperation over punitive actions. This tentative shift suggests a move from high volatility toward a more predictable, data-driven environment.

Trade tensions continue to affect global growth, especially in export-driven economies. However, signs suggest a shift toward a more managed phase of trade policy. Recent product-specific tariffs have been scoped and calibrated, often targeting manufacturers not investing in the U.S. The average U.S. tariff rate declined from 28% in April to around 17% by late 2025 (According to The Budget Lab at Yale).

This reflects two developments:

1. A wave of new trade deal announcements in September that have facilitated a concessional reduction in tariffs from the U.S., for example, the establishment of the 'US-EU Framework on an Agreement on Reciprocal, Fair, and Balanced Trade', the U.S.- Japan trade framework, and a 'Technology Prosperity Deal' memorandum of understanding signed with the U.K.

2. Recalibration by the U.S. of the products subject to tariffs as referred to in Annex II. In early September, the U.S. adjusted its trade framework, linking tariff exemptions more explicitly to security partnerships. Critical minerals were added to Annex II, granting them exemption from tariffs, while materials such as silicone and aluminum hydroxide lost exemption status. A new mechanism allows zero tariffs for countries signing both trade and security agreements with the U.S.

Businesses look increasingly willing to accept that tariffs are unlikely to be rolled back quickly. Instead, they are adapting their strategies – from diversifying sourcing to reconfiguring supply chains – to absorb, manage, or negotiate the impact of tariffs. We expect businesses operating in jurisdictions with clear trade frameworks and supportive domestic policies to begin showing stronger sentiment and investment intentions than those in more uncertain environments. Businesses are increasingly relying on domestic demand to counter tariff-driven export challenges.

Effective September 1, Canada removed many tariffs on U.S. goods imports that are compliant under the U.S.-Mexico-Canada Agreement (USMCA). Bilateral tariffs on autos, aluminum, and steel remain in place, though they are subject to ongoing discussions. The Canadian government has shown willingness to support sectors under pressure from the U.S., providing CAD1.2bn in loans and guarantees to the softwood and lumber industry (currently facing 32.5% U.S. tariffs). Asia Pacific countries are expanding trade partnerships beyond the U.S. Indonesia signed a landmark FTA with the EU, expected to double bilateral trade and

eliminate tariffs on 98% of goods. India concluded a major trade deal with the U.K. and is in advanced negotiations with the EU.

Eastern Europe enters Q4 2025 in a fragile but stabilizing economic state. Poland and the Baltic states expect modest growth, supported by resilient consumption and easing inflation. Romania remains an outlier, facing the EU's highest inflation amid fiscal austerity. Regional exports are subdued due to weak German demand and global trade tensions. Ukraine shows resilience through reconstruction and aid, while Russia and Belarus face slowing growth under sanctions.

In Central Asia, Uzbekistan and Kazakhstan continue steady expansion through industrial diversification and regional trade. Kazakhstan's expansionary fiscal stance is backed by oil revenues and reform plans. The Kyrgyz Republic and Tajikistan lead in growth, driven by remittances and domestic demand, though inflation persists. Turkmenistan's outlook remains muted due to hydrocarbon dependence.

Middle East & North Africa enters Q4 2025 with optimism as non-oil sector growth supports sustainable prospects. Governments focus on technology, tourism, manufacturing, financial services, and renewable energy. The UAE grew 3.9% y/y in Q1 2025, with non-oil contribution at 77%. Egypt launched its Narrative for Economic Development, a five-year plan for tourism, ICT, energy, and manufacturing. OPEC+ continues raising oil output to regain market share, but supply is expected to dip to 137,000 barrels/day in October. A cautious approach may firm crude prices, though subdued global demand remains a downside risk.

Global Growth Projection

At broader level, the global economy is expected to experience a slowdown in 2025, with GDP growth projected to decline to 3.2%, down from 3.3% in 2024. This deceleration reflects persistent inflationary pressure, geopolitical uncertainties and tightened monetary policies. However, a sightly recovery is anticipated in 2026, with growth projected to improve to 3.1%. In the United Kingdom, headline inflation, which began rising in 2024, is expected to continue increasing in 2025, partly due to changes in regulated prices. This rise is projected to be temporary, with a loosening labor market and moderating wage growth helping inflation return to target by end-2026. In the United States, inflation is expected to rise in the second half of 2025, as the impact of tariffs is no longer absorbed within supply chains and is instead passed on to consumers. Inflation is then expected to return to the Federal Reserve's 2 percent target in 2027. This forecast assumes modest second-round effects, implying upside risks to U.S. inflation and downside risks to employment.

Among emerging market and developing economies, inflation forecasts for Brazil and Mexico are revised upward. For Brazil, the revision is more pronounced and partly reflects the stabilization of inflation expectations above target, due to fiscal policy credibility challenges in the previous year, although currency appreciation is expected to provide relief in late 2025 and 2026. For Mexico, the upward revision is driven by volatile categories such as food and more persistent-than-expected services inflation. For several other economies, inflation forecasts are revised downward compared with the October 2024 WEO. In much of emerging and developing Asia, this is the case. The revision largely reflects lower-than-expected outturns, with food, energy, and administrative prices playing a significant role—particularly in China, India, and Thailand.

In the United States, growth is projected to slow to 2.0 percent in 2025 and remain steady at 2.1 percent in 2026, broadly consistent with July projections and improved from April due to lower effective tariff rates, a fiscal boost from the OBBBA, and easing financial conditions. This reflects a significant slowdown from 2024 and a cumulative downward revision of 0.1 percentage point from the October 2024 WEO and 0.7 percentage point from the January 2025 WEO Update. The revision is primarily driven by greater policy uncertainty, higher trade barriers, and slower labor force and employment growth.

Growth in the euro area is expected to increase modestly to 1.2 percent in 2025 and to 1.1 percent in 2026. While this marks an improvement from April and July, it represents a cumulative downward revision of 0.4 percentage point compared to the October 2024 WEO. The main contributing factors are elevated uncertainty and higher tariffs. Recovering private consumption from higher real wages and fiscal easing in Germany in 2026 provide only a partial offset, while strong performance in Ireland supports growth in 2025. The euro area economy is expected to grow at potential in 2026.

For emerging market and developing economies, growth is projected to moderate from 4.3 percent in 2024 to 4.2 percent in 2025, and further to 4.0 percent in 2026. This is virtually unchanged from the July WEO Update and reflects a cumulative upward revision of 0.6 percentage point from the April 2025 WEO, but remains 0.2 percentage point lower than the October 2024 forecast, with low-income developing countries facing a larger downward revision than middle-income economies.

Growth in emerging and developing Asia is expected to decline from 5.3 percent in 2024 to 5.2 percent in 2025, and further to 4.7 percent in 2026. In several countries—particularly in ASEAN, among the most affected—growth forecasts closely followed changes in effective tariff rates. In China, the 2025 GDP growth forecast was revised downward by 0.6 percentage point in the April 2025 WEO due to escalating trade tensions with the United States and then revised upward by 0.8 percentage point in the July WEO Update following the pause on higher tariffs in May.

In Latin America and the Caribbean, growth is projected to remain stable at 2.4 percent in 2025 and decline slightly to 2.3 percent in 2026. The 2025 forecast is revised upward by 0.4 percentage point relative to April, driven by lower tariff rates for most countries in the region and stronger-than-expected incoming data. The

revision is largely attributed to Mexico, which is expected to grow at 1.0 percent in 2025, 1.3 percentage points higher than forecast in the April 2025 WEO. For Brazil, the 2025 projection is revised upward, while the 2026 forecast is revised downward, partly due to the higher tariff rate on exports to the United States. For the region overall, the 2025–2026 forecast is cumulatively 0.5 percentage point lower than the October 2024 WEO, reflecting trade policy changes and uncertainty.

In emerging and developing Europe, growth is projected to decline significantly from 3.5 percent in 2024 to 1.8 percent in 2025, followed by a modest recovery to 2.2 percent in 2026. This decline is primarily driven by a sharp drop in Russia's growth forecast, from 4.3 percent in 2024 to 0.6 percent in 2025, and 1.0 percent in 2026. The 2025 growth forecast is 0.9 percentage point lower than in the April 2025 WEO, largely due to recent data showing a concentration of fiscal expenditures in Q4 2024, which raised the 2024 GDP estimate from 4.1 percent to 4.3 percent. The payback effect is reflected in the 2025 projection.

India Macroeconomic Analysis

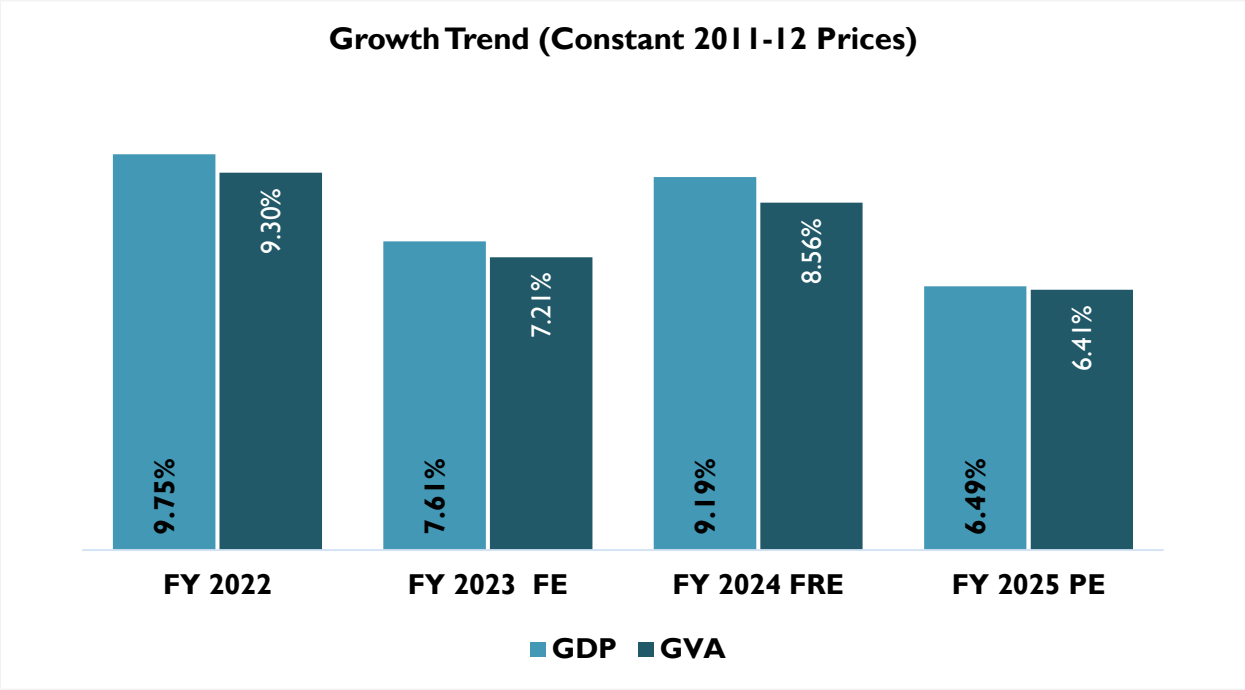
The International Monetary Fund (IMF), in its latest World Economic Outlook, has projected India's economy to grow at 6.6% in CY 2025, marking a 20-basis point upward revision from its previous estimate. This boost is largely credited to a strong first quarter performance in FY26, which helped offset the negative impact of increased U.S. tariffs on Indian exports. With this projection, India is set to remain one of the fastest growing emerging market and developing economies, outpacing China's expected growth of 4.8%. Despite global trade policy shifts and economic uncertainties, India's growth continues to be driven by resilient domestic demand and strong economic fundamentals. However, the IMF slightly lowered its forecast for CY 2026 to 6.2%, anticipating a natural moderation as the early momentum fades

Country	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025 P	CY 2026 P
India	–5.8%	9.7%	7.6%	9.2%	6.5%	6.6%	6.2%
China	2.3%	8.6%	3.1%	5.4%	5.0%	4.8%	4.2%
United States	-2.2%	6.1%	2.5%	2.9%	2.8%	2.0%	2.1%
Japan	-4.2%	2.7%	0.9%	1.4%	0.1%	1.1%	0.6%
United Kingdom	-10.3%	8.6%	4.8%	0.4%	1.1%	1.3%	1.3%
Russia	-2.7%	5.9%	-1.4%	4.1%	4.3%	0.6%	1.0%

Source: World Economic Outlook, October 2025

Historical GDP and GVA Growth trend

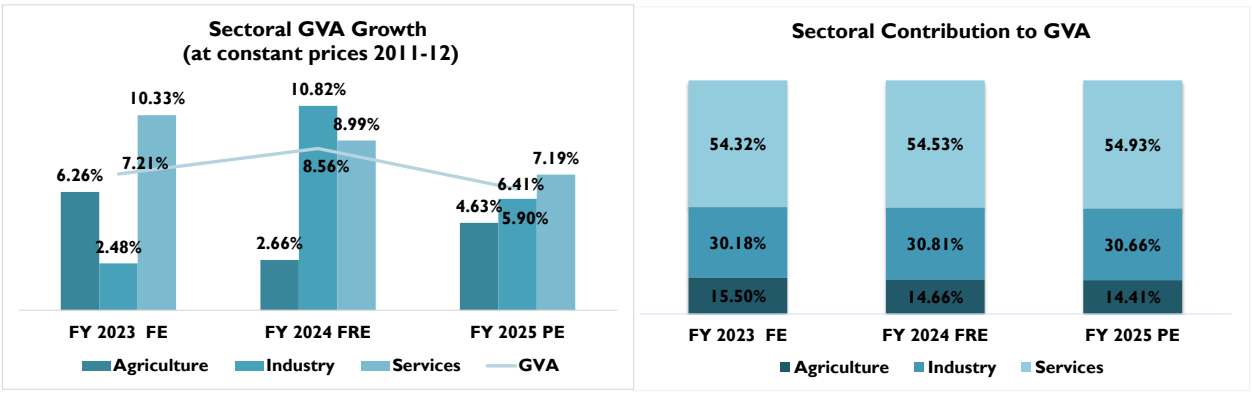
As per the latest estimates, India's GDP at constant prices is estimated to grow to INR 187.96 trillion in FY 2025 (Provisional Estimates) with the real GDP growth rates estimated to be 6.5% for FY 2025. Similarly, real Gross Value Added (GVA) growth stood is estimated to have moderated to 6.4% in FY 2025. Even amidst global economic uncertainties, India's economy exhibited resilience supported by robust consumption and government spending.



Source: Ministry of Statistics & Programme Implementation (MOSPI), National Account Statistics: FY2025.

FE is Final Estimates, FRE is First Revised Estimate and PE is Provisional Estimates

Sectoral Contribution to GVA and annual growth trend



Source: Ministry of Statistics & Programme Implementation (MOSPI)

FE is Final Estimates, FRE is First Revised Estimate and PE is Provisional Estimates

Sectoral analysis of GVA reveals that the industrial sector experienced a moderation in FY 2025, recording a 5.90% y-o-y growth against 10.82% year-on-year growth in FY 2024. Within the industrial sector, growth moderated across sub sector with mining, manufacturing, and construction activities growing by 2.69%, 4.52%, and 9.35% respectively in FY 2025, compared to 3.21%, 12.30%, and 10.41% in FY 2024. Growth in the utilities sector too moderated to 6.03% in FY 2025 from 8.64% in the previous year. The industrial sector's contribution to GVA moderated marginally from 30.81% in FY 2024 to 30.66% in FY 2025.

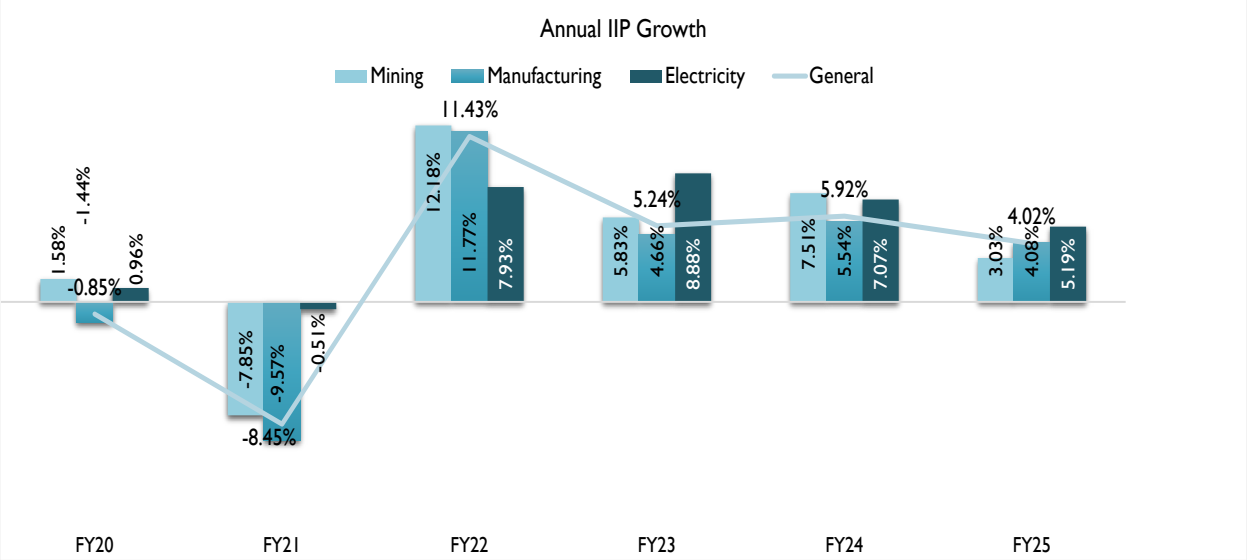
The services sector continued to be the main driver of economic growth, although its pace moderated. It expanded by 7.19% in FY 2025 from 8.99% in FY 2024. The services sector retained its position as the largest

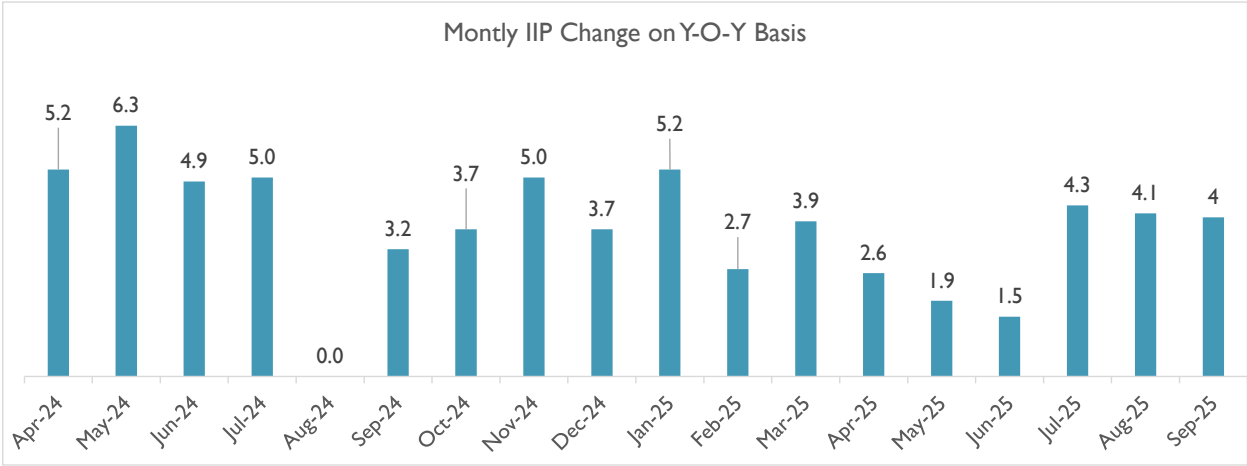
contributor to GVA, rising from 54.32% in FY 2023 to 54.53% in FY 2024, with a further increase to 54.93% in FY 2025.

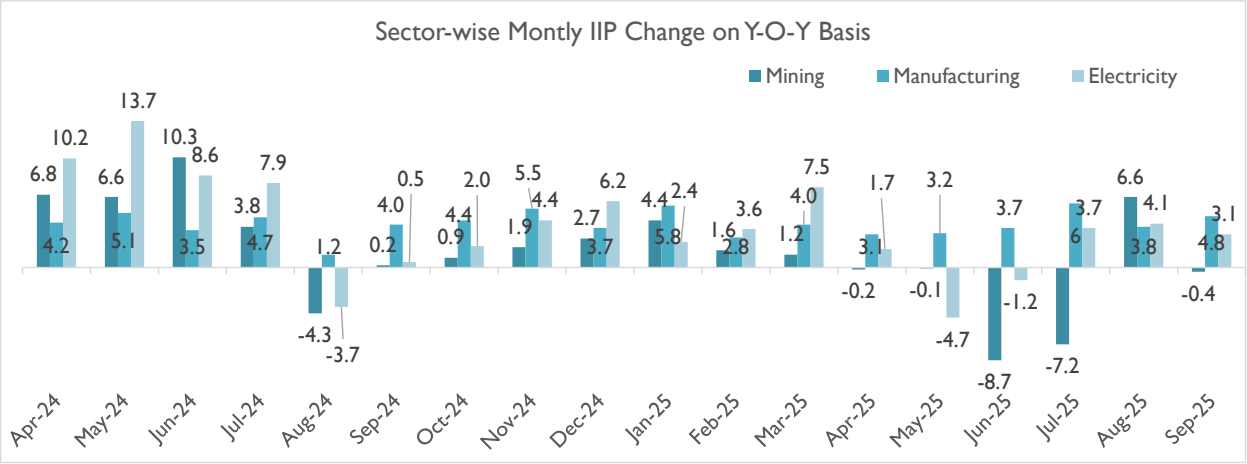
The agriculture sector saw an acceleration, with growth increasing from 2.66% in FY 2024 to 4.63% in FY 2025. However, its contribution to GVA declined marginally from 14.66% in FY 2024 to 14.41% in FY 2025. Overall, Gross Value Added (GVA) growth moderated to 6.41% in FY 2025 from 8.56% in FY 2024

Annual & Monthly IIP Growth

Industrial sector performance as measured by IIP index exhibited moderation in FY 2025, recording a 4.02% y-o-y growth against 5.92% increase in the previous year. The manufacturing index showed moderation and grew by 4.08% in FY 2025 against 5.54% in FY 2024. Mining sector index too moderated and exhibited a growth of 3.03% in FY 2025 against 7.51% in the previous years while the Electricity sector Index, also witnessed moderation of 5.19% in FY 2025 against 7.07% in the previous year.





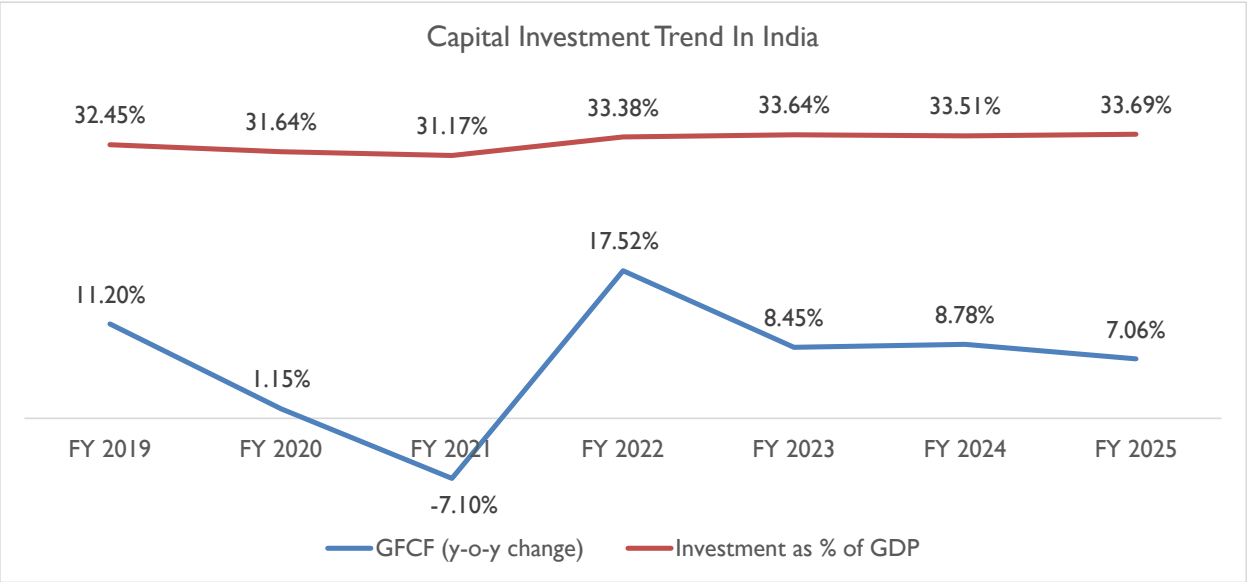


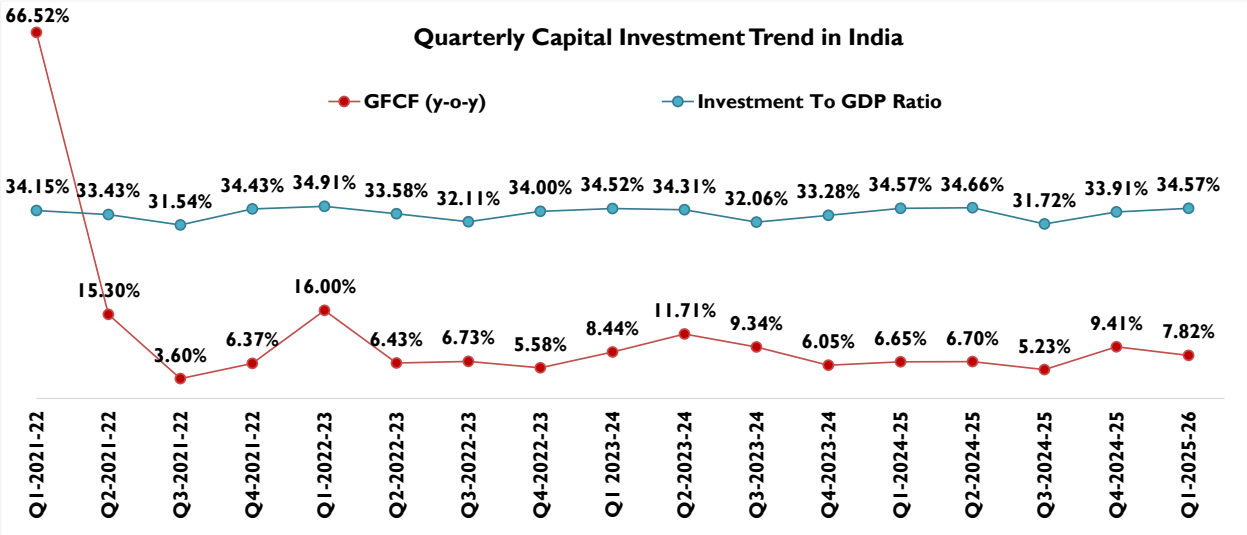
Source: Ministry of Statistics & Programme Implementation (MOSPI)

The IIP growth rate for the month of September 2025 is 4.0% which was 4.1% in the month of August 2025. The growth rates of the three sectors, Mining, Manufacturing and Electricity for the month of May 2025 are (-)0.4%, 4.8% and 3.1% respectively.

Annual and Quarterly: Investment & Consumption Scenario

Other major indicators such as Gross fixed capital formation (GFCF), a measure of investments, has shown fluctuation during FY 2025 as it registered 7.06% year-on-year growth against 8.78% yearly growth in FY 2024, taking the GFCF to GDP ratio measured to 33.69%.

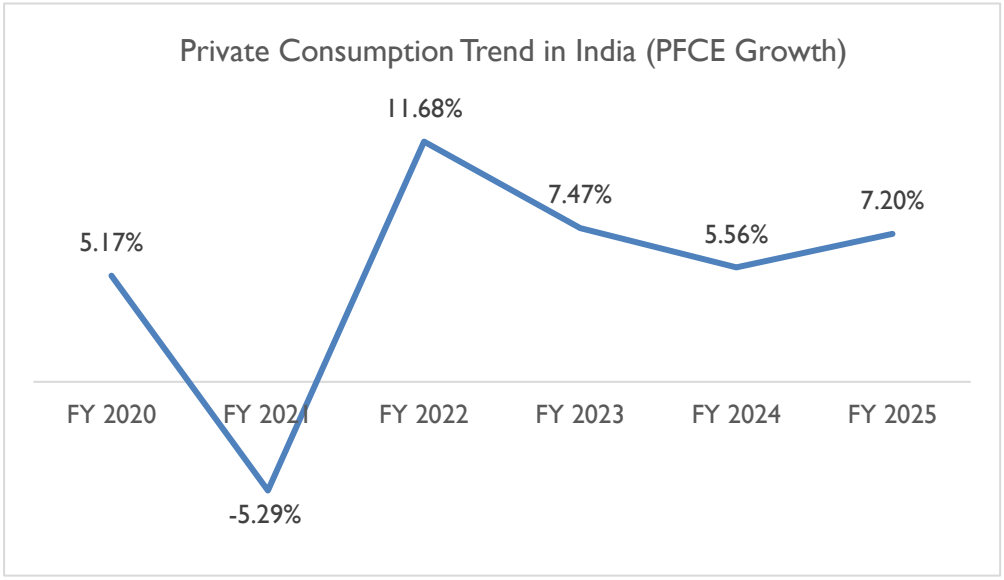


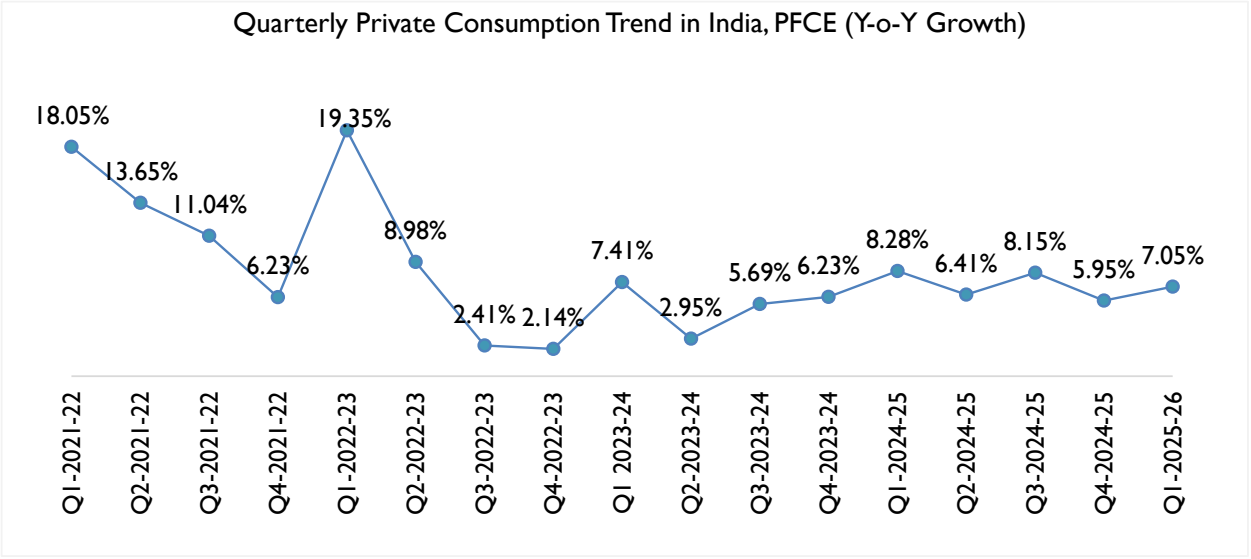


Source: Ministry of Statistics & Programme Implementation (MOSPI)

On a quarterly basis, GFCF showed a fluctuating trend in year-on-year growth. After a sharp spike of 66.52% in Q1 FY 2021-22, growth moderated significantly and remained volatile across subsequent quarters. In FY 2024, the growth rate eased to 6.05% in Q3 (Dec quarter) compared to 9.34% in Q2, as government capital spending slowed ahead of the 2024 general election. It improved slightly to 6.65% in Q1 FY 2024-25 but moderated again to 6.70% in Q2 and 5.23% in Q3, before rebounding to 9.41% in Q4. In Q1 FY 2025-26, growth stood at 7.82%, lower than the previous quarter.The GFCF to GDP ratio measured 34.57% in Q1 FY 2025-2026.

Private Consumption Scenario





Sources: MOSPI

Private Final Expenditure (PFCE) a realistic proxy to gauge household spending, observed growth in FY 2025 as compared to FY 2024. Quarterly Private Final Consumption Expenditure (PFCE) has reported 7.05% growth rate during Q1 of FY 2025-26 as compared to the 8.28% growth rate in the corresponding period of previous financial year.

Inflation Scenario

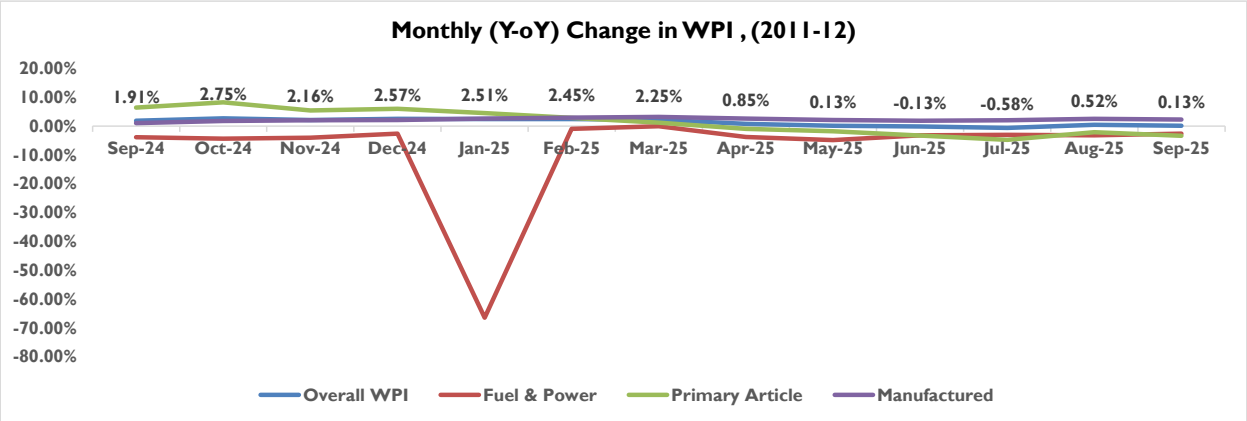
The inflation rate based on India's Wholesale Price Index (WPI) exhibited significant fluctuations across different sectors from September 2024 to September 2025. The annual rate of inflation based on All India

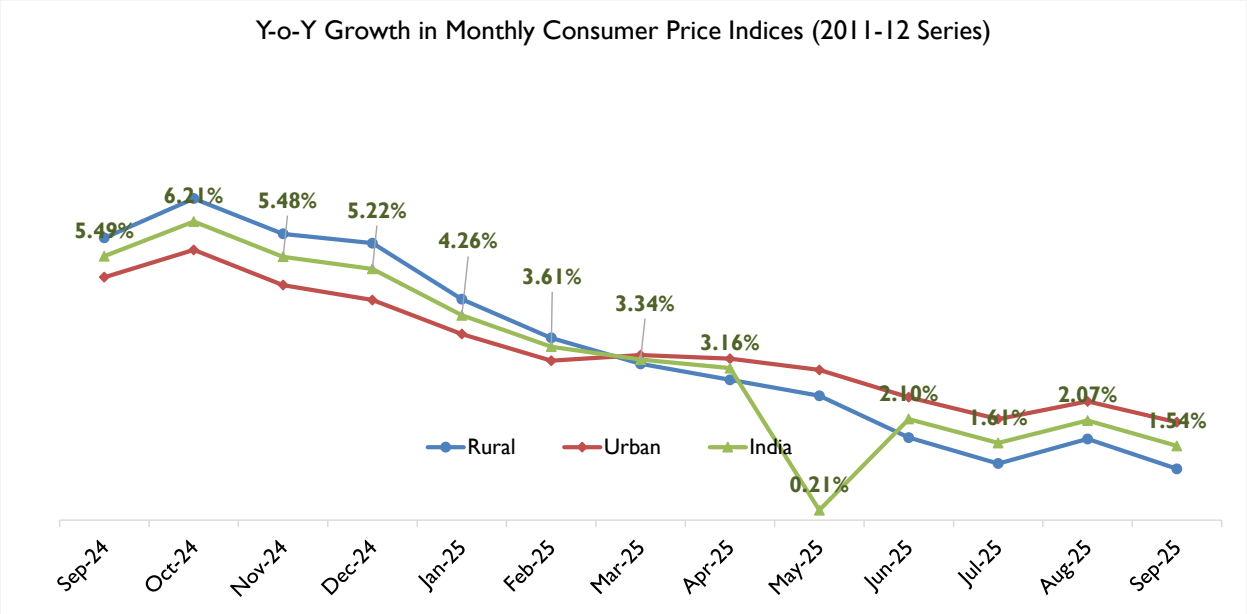
Wholesale Price Index (WPI) number is 0.13% (provisional) for the month of September 2025 (over September, 2024). Positive rate of inflation in September 2025 is primarily due to increase in prices of manufacture of food products, other manufacturing, non-food articles, other transport equipment and textiles etc.

By September 2025, Primary Articles (Weight 22.62%): - The index for this major group decreased by 1.05 % from 191.0 (provisional) for the month of August 2025 to 189.0 (provisional) in September 2025. Price of food articles (-1.38%) and non-food articles (-1.06%) decreased in September 2025 as compared to August 2025. The price of minerals (1.36%) and Crude Petroleum & Natural Gas (0.64%) increased in September 2025 as compared to August, 2025.

Moreover, Fuel & Power (Weight 13.15%): - The index for this major group decreased by 0.14% from 143.6 (provisional) for the month of August 2025 to 143.4 (provisional) in September 2025. The price of and mineral oils (-0.54%) and coal (-0.15%) decreased in September 2025 as compared to August 2025. The price of electricity (1.20%) increased in September 2025 as compared to August 2025.

Furthermore, Manufactured Products (Weight 64.23%): - The index for this major group increased by 0.21% from 144.9 (provisional) for the month of August 2025 to 145.2 (provisional) in September 2025. Out of the 22 NIC two-digit groups for manufactured products, 10 groups witnessed an increase in prices, 6 groups witnessed a decrease in prices and 6 groups witnessed no change in prices. Some of the important groups that showed month-overmonth increase in prices were other manufacturing; food products; electrical equipment; textiles and other non-metallic mineral products etc. Some of the groups that witnessed a decrease in prices were manufacture of rubber and plastics products; motor vehicles, trailers and semi-trailers; pharmaceuticals, medicinal chemical and botanical products; leather and related products and printing and reproduction of recorded media etc. in September, 2025 as compared to August 2025.

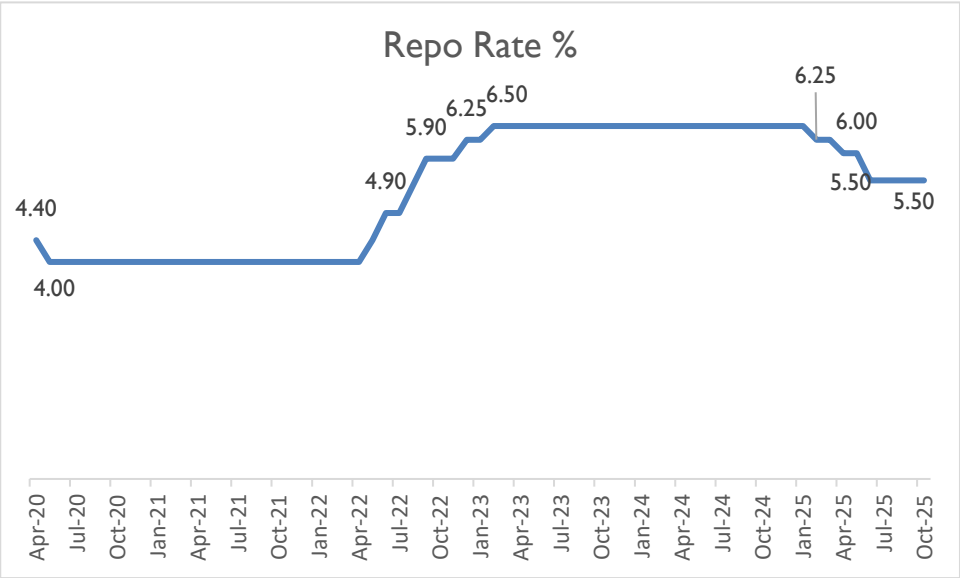




Source: MOSPI, Office of Economic Advisor

Retail inflation rate (as measured by the Consumer Price Index) in India showed notable fluctuations between September 2024 and September2025. Year-on-year inflation rate based on All India Consumer Price Index (CPI) for the month of September 2025 over September 2024 is 1.54% (Provisional). There is decrease of 53 basis points in headline inflation of September 2025 in comparison to August 2025. It is the lowest year-on-year inflation after June 2017.

Rural Inflation: A decrease in headline and food inflation in rural sector was observed in September 2025. The headline inflation is 1.07% (Provisional) in September 2025 while it was 1.69% in August 2025. While in Urban inflation, a decrease from 2.47% in August 2025 to 2.04% (Provisional) in September 2025was observed in headline inflation. The decline in headline inflation and food inflation during the month of September 2025 is mainly attributed to favorable base effect and to decline in inflation of Vegetables, Oil and fats, Fruits, Pulses and products, Cereal and products, Egg, Fuel and light etc. As part of its anti-inflationary stance, the Reserve Bank of India (RBI) hiked the repo rate by 250 basis points between May 2022 and 8 February 2023, holding it steady at 6.50% until January 2025. On 6 June 2025, the RBI reduced the repo rate by 50 basis points, bringing it to 5.50%, where it currently stands as per the October 2025 monetary policy review.



Sources: CMIE Economic Outlook

Growth Outlook

The Union Budget 2025-26 has laid the foundation for sustained growth by balancing demand stimulation, investment promotion and inclusive development. Inflation level is reaching within the central bank's target; the RBI may pursue further monetary easing that will support growth. The medium-term outlook is bright, fueled by the emphasis on physical and digital infrastructure spending. With a focus on stimulating demand, driving investment and ensuring inclusive development, the budget introduces measures such as tax relief, increased infrastructure spending and incentives for manufacturing and clean energy. These initiatives aim to accelerate growth while maintaining fiscal discipline, reinforcing India's long-term economic resilience. The expansion of tax relief i.e zero tax liability for individuals earning up to INR 12 lacs annually under the new tax regime is expected to strengthen household finances and, consequently, boost consumption.

The external sector remains resilient, and key external vulnerability indicators continue to improve. However, tariff-related uncertainty is likely to weigh on exports and investment, prompting us to cut our CY26 GDP growth forecast to 6.2%.

Industrial Operations &Maintenance Services

Overview

Industrial Operations & Maintenance (O&M) services form a critical backbone for ensuring the smooth functioning of plants, equipment, and infrastructure across diverse industries. These services encompass a wide spectrum of activities aimed at sustaining operational efficiency, reducing downtime, and extending the lifecycle of industrial assets. Under the broad umbrella of O&M, providers deliver a mix of planned, preventive, and emergency-based solutions tailored to the unique needs of each industry.

The nature of O&M services ranges from routine upkeep and inspections to highly specialized technical interventions in niche sectors. By combining preventive maintenance strategies, real-time monitoring, and rapid response mechanisms, O&M ensures business continuity and operational safety. In addition, facility management and specialized technical services further strengthen the reliability of industrial processes, enabling companies to focus on their core operations while ensuring compliance, efficiency, and cost-effectiveness.

- **Routine Maintenance:** Scheduled servicing of machinery and systems, including lubrication, cleaning, calibration, and minor component replacement, to prevent breakdowns, improve efficiency, and extend asset life.
- **Preventive & Predictive Maintenance:** Anticipates failures using schedules or real-time data and analytics to minimize downtime, reduce repair costs, and maintain consistent operations.
- **Inspection & Monitoring:** Regular checks of machinery, structures, and safety systems using visual, ultrasonic, thermal, or vibration analysis to detect risks, inefficiencies, and ensure regulatory compliance.
- **Emergency Support & Breakdown Maintenance:** Rapid-response services to restore operations during equipment failures, minimizing downtime and productivity loss.
- **Facility Management Services:** Comprehensive upkeep of industrial facilities, including utilities, HVAC, water, electrical systems, housekeeping, and waste management, ensuring operational continuity, safety, and energy efficiency.

- **Specialized Technical Services:** Industry-specific services for sectors like oil & gas, power, pharma, and chemicals, involving hazardous material handling, advanced automation, and regulatory compliance by skilled professionals.

Key Services Provided

Industrial Operations & Maintenance (O&M) services are diverse in scope and can be categorized into specific segments based on the type of support offered. This segmentation helps industries identify the right mix of services depending on their operational requirements, technical complexities, and compliance obligations. Broadly, O&M services are classified into facility management, engineering & mechanical O&M, and specialized maintenance services that cater to niche industries with unique demands.

Facility Management Services

Facility management under O&M covers the comprehensive upkeep of industrial infrastructure, utilities, and support systems required for day-to-day operations. This includes maintenance of HVAC systems, electrical and water supply, lighting, safety equipment, and waste management systems. A strong focus is placed on energy efficiency, cost optimization, and ensuring compliance with health and safety standards.

Beyond technical upkeep, facility management may also include housekeeping, landscaping, and environmental management functions that contribute to a safe and productive work environment. In industries where workplace safety and reliability are paramount, facility management services play a crucial role in avoiding operational disruptions.

These services are increasingly integrated with digital monitoring tools and automated systems to improve efficiency and reliability. By addressing both technical and non-technical aspects, facility management ensures seamless support for core industrial operations, allowing organizations to focus on production and growth.

Engineering & Mechanical O&M Services

Engineering and mechanical O&M services focus on the technical operation and maintenance of industrial machinery, mechanical systems, and critical engineering assets. These services include equipment installation, calibration, performance testing, repair, and continuous monitoring of mechanical systems.

Skilled engineers and technicians are deployed to handle complex plant operations, troubleshoot failures, and enhance equipment performance. Such services are particularly relevant in industries like power generation, oil & gas, heavy manufacturing, and process industries, where precision and uninterrupted functioning of machinery are critical. Engineering O&M ensures minimal downtime, improved asset utilization, and optimized production capacity.

The scope also extends to process optimization, energy conservation, and automation integration to achieve operational excellence. By leveraging technical expertise and real-time diagnostic tools, engineering O&M services help industries improve reliability and safety while maintaining cost efficiency.

Specialized Maintenance Services to Niche Industries

Specialized maintenance services cater to industries with unique operational requirements, stringent safety standards, and specialized equipment. These include sectors such as pharmaceuticals, aerospace, nuclear power, petrochemicals, and high-tech manufacturing, where precision, compliance, and safety cannot be compromised.

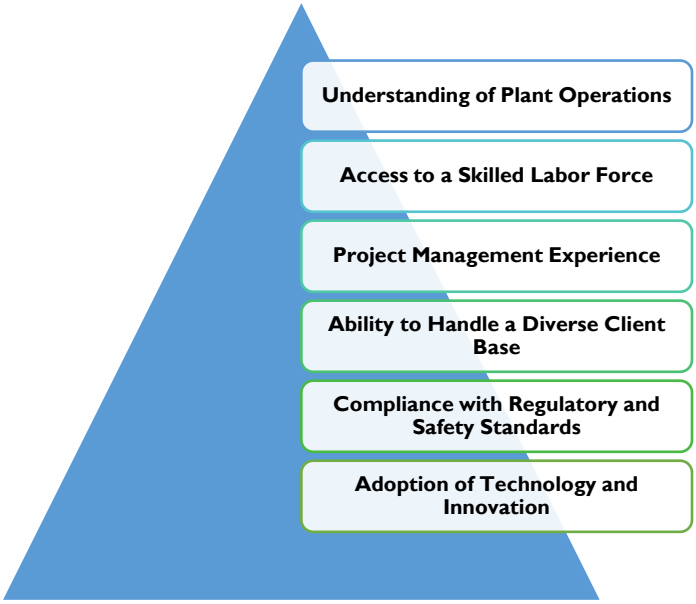
Services involve advanced condition monitoring, predictive diagnostics, and highly technical interventions to manage critical assets. For example, in pharmaceuticals, O&M ensures strict adherence to cleanroom standards and regulatory compliance, while in petrochemicals, it involves safe handling of hazardous systems and equipment. These services demand niche expertise, specialized training, and access to cutting-edge technologies.

With growing emphasis on automation, robotics, and AI-enabled monitoring, specialized O&M is evolving into a highly data-driven and efficiency-oriented function. By providing tailored solutions for high-risk and high-value industries, specialized maintenance not only minimizes operational risks but also ensures uninterrupted and safe business operations.

Key Success Factors

Operating successfully in the industrial Operations & Maintenance (O&M) segment requires a strong foundation of technical expertise, resource availability, and effective management capabilities. Unlike routine services, industrial O&M demands a deep understanding of plant processes, operational workflows, and industry-specific requirements to ensure seamless performance.

Key factors such as access to a skilled labor force, domain knowledge of complex equipment, and proven project management practices are crucial for handling the varied needs of clients across sectors. Additionally, adaptability, safety compliance, and the ability to integrate innovative technologies further strengthen the effectiveness of O&M providers, making them reliable partners in sustaining long-term industrial efficiency.



Understanding of Plant Operations

A strong grasp of plant processes, machinery functioning, and production cycles is essential to deliver effective O&M services. This knowledge helps service providers align maintenance strategies with operational needs, ensuring minimal disruption. Familiarity with industrial workflows also supports quick troubleshooting and preventive care. By integrating maintenance with plant operations, companies can maximize efficiency and asset performance.

Access to a Skilled Labor Force

Industrial O&M requires technicians, engineers, and operators with specialized technical expertise. Skilled manpower is critical for handling complex equipment, advanced automation systems, and safety protocols. The availability of trained staff also determines how quickly and efficiently issues can be resolved. Regular training and upskilling of the workforce enhance service quality and reduce dependency on external expertise.

Project Management Experience

Effective project management ensures that O&M activities are planned, scheduled, and executed without affecting production timelines. Experience in managing diverse client projects helps providers adapt to different operational environments. Strong project management also involves cost control, resource allocation, and risk mitigation. By applying systematic approaches, providers can deliver services within agreed timelines and budgets while maintaining quality.

Ability to Handle a Diverse Client Base

Industrial O&M providers often serve clients across sectors such as power, oil & gas, manufacturing, and pharmaceuticals. Each industry has unique requirements, regulatory frameworks, and operational challenges. The ability to customize services for different industries demonstrates flexibility and competence. Providers who can effectively manage a varied client portfolio build long-term trust and gain a competitive edge.

Compliance with Regulatory and Safety Standards

Adherence to safety norms, environmental regulations, and industry-specific compliance requirements is non-negotiable in O&M. Compliance ensures not only operational safety but also protects organizations from legal and financial penalties. Regular audits, certifications, and alignment with global standards strengthen credibility. O&M providers must maintain strong systems to ensure safety and compliance across all service areas.

Adoption of Technology and Innovation

The use of digital tools such as IoT-based monitoring, predictive analytics, and automation significantly enhances O&M efficiency. Technology-driven insights allow for proactive decision-making and improved asset management. Innovations such as AI-powered diagnostics, drones for inspection, and cloud-based reporting streamline processes. Providers leveraging technology can deliver more reliable, cost-effective, and sustainable O&M solutions.

Brief Insight on the Business Model

The Industrial Operation & Maintenance (O&M) services business model focuses on delivering cost-effective solutions by deeply understanding and optimizing industrial processes. The key aspects of this model are:

Mapping & Understanding Industrial Processes: A detailed study and mapping of existing processes are fundamental to grasp the operational flow, maintenance needs, bottlenecks, and critical control points in an industrial setup. This includes equipment analysis, workflow examination, and productivity metrics evaluation.

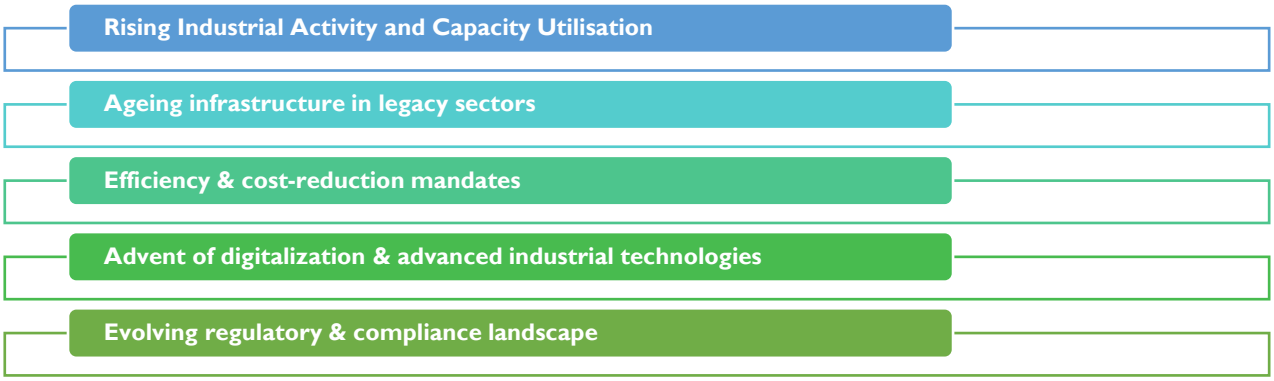
Identifying Operational Synergies: By analyzing interdependencies across various functions—such as production, quality control, logistics, and maintenance—the model uncovers potential synergies. This integration helps reduce redundancy, improve resource utilization, and streamline communication paths, ultimately enhancing overall operational efficiency.

Designing Optimum Solutions: Leveraging process insights and synergy identification, tailored O&M strategies are developed. These solutions aim to reduce downtime, optimize energy use, enhance asset life, and ensure compliance with safety and environmental standards. Continuous improvement frameworks and predictive maintenance techniques are often incorporated.

Cost-Effectiveness: The ultimate goal is to deliver the most economically viable O&M services without compromising quality or safety. This includes evaluating lifecycle costs, choosing scalable technology solutions, and implementing performance monitoring systems to track efficiency gains and cost savings.

Key Demand Drivers

The Industrial O&M sector in India is becoming vital for productivity, efficiency, and safety amid rising output and ageing infrastructure. Growing demand for life-extension, retrofits, and cost optimisation is driving industries to outsource O&M to specialists offering uptime guarantees and performance-linked services. Government push for renewables, digital adoption, and stricter safety and environmental regulations are further transforming O&M into a predictive, tech-driven function. These factors collectively highlight its critical role in sustaining India's industrial growth.



Rapid Utilisation & Higher Capacity Utilisation

Rapid industrial utilisation in India has resulted in factories and utilities operating assets for longer hours and closer to their design limits, leading to higher equipment wear, shorter maintenance windows, and increased risk of unplanned downtime. This is reflected in the Reserve Bank of India's Order Books, Inventories and Capacity Utilisation Survey (OBICUS), which reported capacity utilisation at 74.7% in Q3 FY 2024, rising further to 76.8% in Q4 FY 2024, indicating sustained demand pressures on industries. Such elevated utilisation levels make systematic O&M practices including preventive maintenance, spares planning, and predictive diagnostics critical for ensuring reliability, minimizing downtime, and protecting revenue streams.

Ageing Infrastructure in Legacy Industries

Many of India's legacy industrial assets such as thermal power plants, older cement and steel units, and chemical process facilities are operating beyond mid-life, facing issues like mechanical fatigue, outdated control systems, and reduced availability of OEM spare parts, which significantly increases the demand for specialized O&M services focused on retrofits, life-extension, and revamps. Government and sectoral reports have repeatedly stressed the need for modernization and retrofitting to maintain efficiency and safety standards; for example, the Ministry of Housing and Urban Affairs (MoHUA) highlights the importance of structured O&M frameworks in metro rail projects to manage ageing infrastructure and ensure long-term serviceability. This scenario creates strong opportunities for O&M providers offering modular revamp solutions, brownfield automation upgrades, predictive refurbishment schedules, and reverse-engineering of critical spares to extend asset life and maintain operational reliability.

Efficiency & Cost Reduction Strategies

Indian industry is under escalating pressure to cut energy, water, and material consumption—not only to lower costs but also to meet regulatory efficiency mandates. The Perform, Achieve & Trade (PAT) scheme, administered by the Bureau of Energy Efficiency (BEE), has been a key driver of this shift, mandating measurable improvements across energy-intensive sectors. PAT has already delivered significant results, with Cycle I (2012–15) achieving 8.67 MTOE savings—30% above target—while Cycle II (2016–19) added 14.08 MTOE, and later cycles expanded coverage to more sectors and designated consumers (DCs). The ongoing PAT VII (2022–25), involving 509 DCs with a savings target of 6.627 MTOE, highlights the growing scale and ambition of such initiatives, reinforcing the need for professional, technology-driven O&M practices.

In response, industries are adopting efficiency and cost-reduction strategies that go beyond compliance to deliver sustained competitiveness. These include technology upgrades, retrofits, water and resource optimisation, lifecycle extension of assets, and sustainability measures such as emissions control and renewable integration. To implement these effectively, firms are increasingly relying on specialised O&M services like energy audits, real-time monitoring, precision calibration, and utility system optimisation, often through performance-linked or guaranteed-savings contracts. This positions O&M providers as strategic partners—enabling asset reliability, regulatory compliance, and measurable efficiency gains—making the O&M sector an essential enabler of India's industrial productivity, cost competitiveness, and sustainable growth.

Advent of Digitalization & other Advanced Industrial Technologies

The Indian manufacturing sector is rapidly embracing Industry 4.0 technologies such as AI, ML, IoT sensors, edge computing, and cloud analytics, driving the rise of smart factories. NASSCOM projects that digital technologies will account for 40% of total manufacturing expenditure by 2025, up from 20% in 2021. This transformation spans the entire value chain—from raw material sourcing to product dispatch—enhancing efficiency, precision, and reducing unplanned downtime. The automotive sector leverages AI-powered robotics and analytics for assembly and quality control, while India's industrial automation market is projected to reach $29.43 Bn by FY2029, with AI & analytics adoption exceeding 50%.

Electronics manufacturing benefits from AI-driven machine vision for quality assurance, ensuring precise assembly of complex components, while chemicals and pharmaceuticals use AI to optimise processes from drug discovery to large-scale production, improving productivity and regulatory compliance. The textile sector, contributing 2.3% of India's GDP, applies CAD/CAM technologies to streamline fabric cutting, stitching, and quality inspection, highlighting the wide-ranging impact of digitalisation across industries. India's electronics manufacturing is also poised to reach $300 Bn by 2026 due to these advancements.

These technological shifts are transforming the O&M sector. Predictive maintenance, real-time monitoring, anomaly detection, digital twins, and analytics-driven asset management are shifting operations from reactive to prescriptive models. The Telecom Engineering Centre (TEC) supports IoT/M2M frameworks, while O&M

providers are deploying 24×7 monitoring centres, performance-linked SLAs, sensor retrofits, and subscription-based solutions. This positions O&M providers as strategic partners, enabling industries to maximise uptime, optimise performance, ensure compliance, and capitalise on India's Industry 4.0 growth.

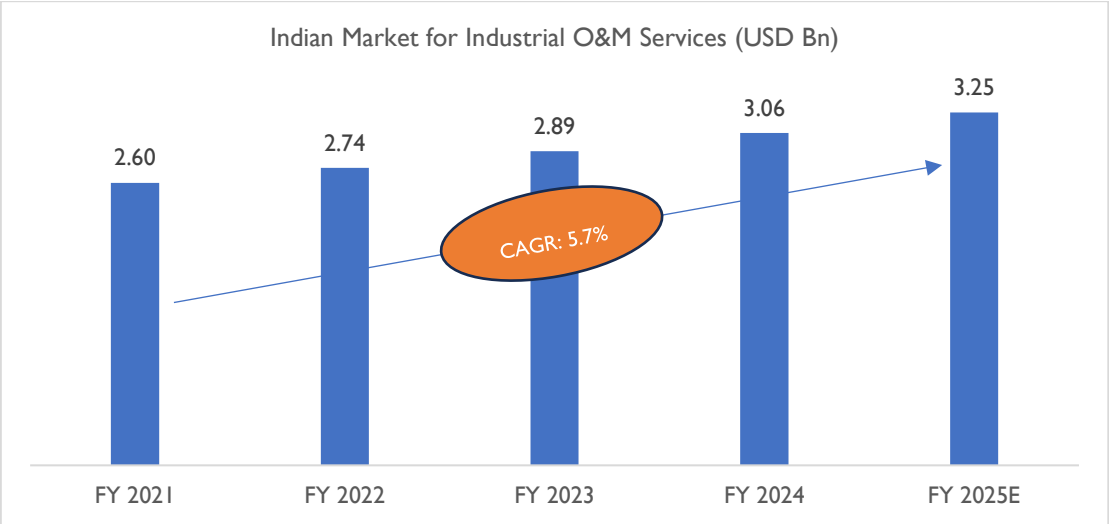
Evolving Regulatory & Compliance Landscape

India's tightening regulatory and compliance landscape is driving industries to professionalize O&M functions, as stricter environmental norms, workplace safety regulations, and sustainability reporting requirements on energy, emissions, effluents, and waste place greater operational and compliance burdens on companies. Regulatory frameworks such as the Bureau of Energy Efficiency's (BEE) energy efficiency rules, sector-specific pollution norms, and emerging market-based mechanisms like the Indian Carbon Market (ICAP) require continuous monitoring, verification, and audit-ready reporting, making O&M teams critical enablers of compliance. In response, O&M providers are expanding into integrated compliance services covering environmental monitoring, emissions reporting, permit renewals, and digital recordkeeping while offering audit-ready maintenance logs and specialist compliance engineers on retainer, helping industries avoid penalties and ensure uninterrupted operations.

Indian O&M Industry Scenario

Market Size & Historical Growth Trend

The Indian Industrial O&M services market is witnessing steady evolution as industries increasingly prioritise operational efficiency, equipment reliability, and compliance with regulatory standards. Beyond traditional maintenance, companies are adopting integrated lifecycle solutions that combine predictive maintenance, energy optimisation, and reliability engineering. In sectors such as power, pharmaceuticals, and petrochemicals, regulatory authorities mandate AMC compliance for critical equipment to ensure operational safety, prevent environmental hazards, and maintain quality standards. These requirements provide a consistent baseline demand for professional O&M providers.



Source: D&B Primary Research

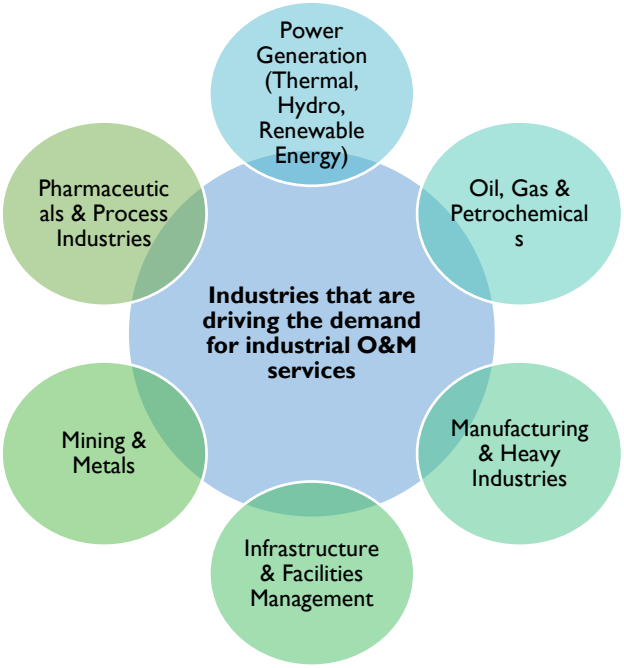
In terms of scale, the market is projected to grow from USD 2.60 Bn in FY 2021 to USD 3.25 Bn by FY 2025, reflecting a CAGR of 5.7%. This growth is further driven by the adoption of IoT-enabled sensors, AI-driven analytics, and condition-based monitoring, which help minimise downtime, optimise maintenance schedules, and reduce operational costs. The expansion of renewable energy assets—particularly solar and wind—also creates specialised O&M opportunities, as performance monitoring and long-term technical support are critical for these installations.

Sector-specific dynamics further support the market trajectory. Chemical, pharmaceutical, and power plants are increasingly outsourcing O&M due to stringent compliance norms and mandatory AMC contracts, while metals, cement, and mining industries leverage remote monitoring for geographically dispersed operations. EPC contractors are bundling O&M with project execution, helping penetrate smaller industrial clusters. Moreover, ESG-focused industrial strategies are pushing firms to adopt proactive O&M solutions that enhance energy efficiency, reduce emissions, and improve sustainability reporting. Collectively, regulatory mandates, technology adoption, and sector-specific requirements underscore a market evolution where compliance, digitalisation, and sustainability drive robust growth through FY 2025.

Key Industries Driving Demand

The demand for industrial Operations & Maintenance (O&M) services in India is being driven by rapid industrial growth, infrastructure expansion, and the increasing adoption of advanced technologies across sectors. Industries that operate with heavy machinery, complex systems, or safety-critical processes rely on O&M to minimize downtime, improve efficiency, and ensure regulatory compliance.

From energy generation and oil & gas to manufacturing, mining, and infrastructure, each sector depends on specialized O&M support tailored to its operational needs. This rising dependence highlights O&M as a critical enabler of productivity, safety, and cost optimization in India's industrial ecosystem.



Power Generation (Thermal, Hydro, Renewable Energy):

Over the past decade, India's power sector has experienced robust expansion, with electricity generation rising from **1,168 billion units (BU) in FY 2016 to an estimated 1,824 BU in FY 2025, and total installed capacity growing from 305 GW to a projected 476 GW during the same period**. As one of the largest consumers of industrial O&M services, power plants require continuous monitoring, maintenance, and upgrades to ensure uninterrupted supply.

The rapid growth of renewable energy installations—particularly solar and wind—has created specialized O&M needs, including panel cleaning, turbine maintenance, and grid integration. Government policies and renewable energy capacity targets are further fueling demand, as reliable O&M ensures reduced downtime, improved energy efficiency, and sustained operational performance across generation assets.

Oil, Gas & Petrochemicals:

This sector is a major driver of industrial O&M demand in India due to its complex and hazardous operations, which require highly skilled maintenance for pipelines, refineries, storage, and distribution infrastructure. Maintaining safety systems, corrosion control, and equipment reliability is critical to prevent accidents and production losses.

India's substantial recoverable crude oil reserves (651.8 million metric tons) and natural gas reserves (1,138.6 billion cubic meters), coupled with refining capacity exceeding 258 MMTPA as of April 2025, highlight the scale of operations and export-oriented growth. The country's push for refining capacity expansion and increased natural gas usage is further boosting the need for specialized O&M services, requiring providers to have advanced technical capabilities and strict compliance with safety standards.

Manufacturing & Heavy Industries

Steel, cement, automotive, and chemical plants rely heavily on O&M to keep their production lines running efficiently. Equipment such as boilers, furnaces, conveyors, and assembly lines need preventive and predictive maintenance to minimize breakdowns. With India's "Make in India" initiative and rising industrial automation, the demand for professional O&M services is expanding. Skilled labor and real-time monitoring tools are becoming key enablers in this sector.

Infrastructure & Facilities Management

India's infrastructure sector has expanded rapidly over the past decade, driving demand for integrated O&M services. **The number of operational airports has doubled from 74 in 2014 to 157 in 2024**, with plans to reach **350–400 by 2047**, while domestic air passengers have more than doubled, prompting airlines to expand their fleets. **Metro networks have grown from 248 km in 2014 to 1,013 km in 2025**, backed by investments of **₹2.5 lakh crore (US$ 28.86 billion)** and over **2,000 domestically built metro coaches**.

The industrial park sector is also booming, with **over 4,000 operational parks** and the emergence of new-generation logistics and industrial facilities featuring advanced infrastructure and sustainability initiatives. Airports, metro systems, industrial parks, and large commercial complexes require O&M services for utilities, HVAC systems, electrical systems, and facility safety. O&M providers in this segment focus not only on routine maintenance but also on energy efficiency, smart facility management, and the adoption of digital and IoT-based monitoring solutions, making this a rapidly growing area of industrial O&M demand.

Mining & Metals:

Mining equipment, mineral processing plants, and heavy earth-moving machinery are highly dependent on systematic O&M services. Given the harsh working conditions and the scale of operations, predictive

maintenance and timely repair are critical to ensure worker safety and minimize downtime. India's mining sector expansion, along with increased focus on coal and iron ore output, is driving higher demand for O&M. Specialized providers with mechanical and electrical expertise are crucial in this segment.

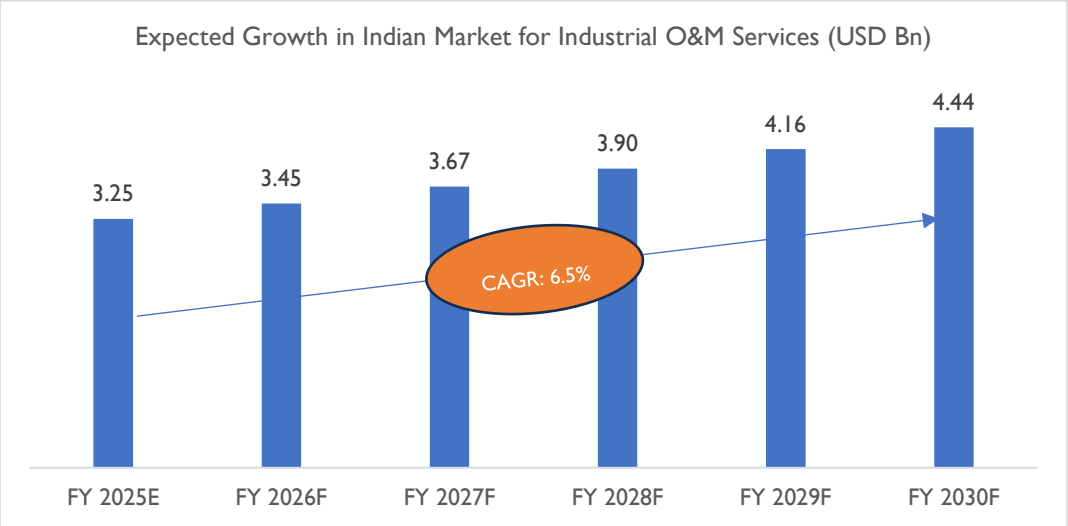
Pharmaceuticals & Process Industries:

India's pharmaceutical sector has rapidly transformed over the past decade into a global leader in affordable, innovative, and inclusive healthcare. **The country ranks 3rd in volume and 14th in value globally**, supplying **20% of the world's generic medicines** and emerging as a key player in vaccines. In **FY 2024, sector turnover reached ₹4,17,345 crore**, with consistent growth of **over 10% annually**, and revenue is projected to grow **7.8% year-on-year by April 2025**.

This expansion, driven by strong domestic demand and increasing exports, is creating heightened requirements for high-quality O&M services. In pharmaceuticals, food processing, and specialty chemicals, equipment such as **reactors, cleanrooms, and automated lines** demand precision maintenance and strict regulatory compliance. O&M providers are therefore tasked with delivering **specialized, high-precision solutions** to ensure operational efficiency, compliance, and uninterrupted production.

Market Growth Forecast

The Indian Industrial O&M services market is poised for steady growth over the next several years, driven by evolving operational strategies and a greater focus on asset resilience. Companies across sectors are increasingly prioritizing predictive and condition-based maintenance not only to reduce downtime but also to enhance process efficiency and extend equipment lifecycles. Rising complexity of industrial operations, including adoption of advanced machinery, automation, and high-capacity production systems, is encouraging businesses to outsource specialized O&M services with technical expertise and advanced monitoring capabilities.



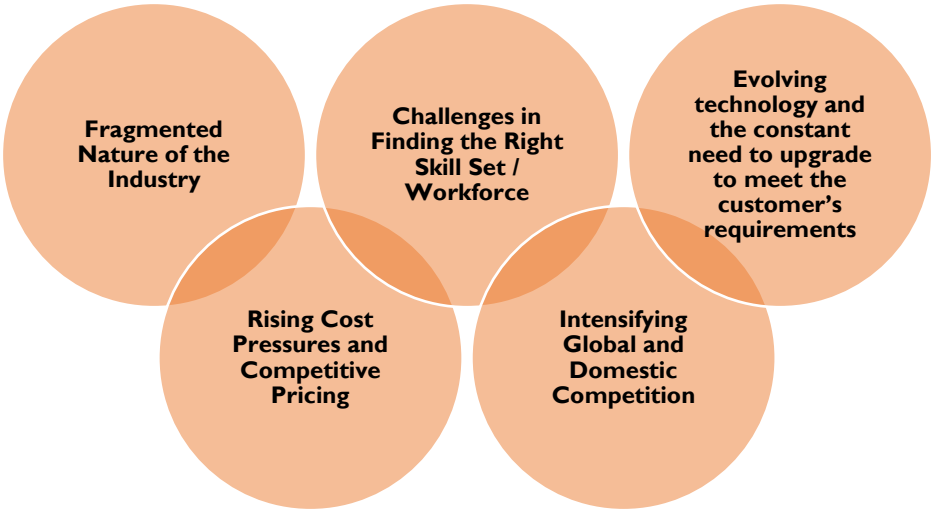
Source: Source: D&B Primary Research

The integration of technology is transforming O&M practices across industries, with IoT-enabled sensors, AI-powered analytics, and digital twins enabling real-time monitoring of equipment health, predictive fault detection, and optimized maintenance schedules. Cloud-based platforms and mobile-enabled service dashboards further support seamless coordination, faster response times, and data-driven decision-making, enhancing both operational reliability and cost efficiency. At the same time, regulatory compliance and sustainability remain significant growth drivers, as stricter safety, environmental, and operational standards, along with corporate targets for energy efficiency and carbon reduction, make professional O&M services indispensable. Emerging sectors such as renewables, high-tech manufacturing, and digitalized industrial parks present new operational challenges and opportunities, collectively driving demand for technologically advanced O&M solutions and supporting sustained market growth in the coming years.

Key Growth Drivers in Coming Years

Rapid Industrial Expansion	• With India pushing ahead under initiatives like Make in India and Production Linked Incentive (PLI) schemes, new manufacturing facilities and plants are coming up across the country. Each of these facilities requires dedicated O&M services to ensure smooth functioning, which will significantly expand demand.
Rising Renewable Energy Capacity	• India's ambitious renewable energy targets, particularly in solar and wind, are creating strong demand for specialized O&M services. With the country aiming for 500 GW of non-fossil fuel electricity capacity by 2030, solar farms, wind turbines, and hybrid energy systems require regular inspection, cleaning, and predictive maintenance, driving growth in this niche segment.
Adoption of Digital & Smart Technologies	• The use of IoT, AI, and predictive analytics in O&M is transforming the way industries manage assets. Predictive maintenance powered by real-time data reduces downtime and cuts costs. Growing adoption of these technologies is expected to expand the O&M market substantially.
Focus on Safety & Compliance	• Increasingly strict government regulations on worker safety, environmental protection, and industrial compliance are pushing companies to adopt professional O&M services. Regular inspections and compliance-driven maintenance will remain key demand drivers.
Government & Infrastructure Push	• Large-scale public infrastructure projects airports, metro systems, highways, industrial corridors are being developed across India. All of these projects demand robust long-term O&M frameworks, making infrastructure O&M one of the fastest-growing areas in the country.

Key Threats & Challenges



Fragmented Nature of the Industry

The industrial O&M market in India remains highly fragmented, with numerous small and mid-sized players competing alongside large domestic and international firms. This fragmentation creates pricing pressure, as companies often undercut one another to secure contracts. Smaller firms may lack the financial and technical capacity to deliver high-quality services consistently, which lowers industry-wide standards. The lack of consolidation also leads to uneven adoption of modern practices and technologies, reducing overall efficiency. For clients, this makes it difficult to identify reliable partners, while for service providers, fragmentation limits scalability and margins.

Challenges in Finding the Right Skill Set / Workforce

Skilled manpower is central to effective O&M services, but finding and retaining technically proficient workers is a persistent challenge in India. Mechanical engineers, technicians, safety supervisors, and specialists in modern automated systems are in high demand but short supply. Many workers require continuous training to adapt to new systems, which adds to operational costs. High attrition in the workforce also disrupts service continuity, particularly in long-term maintenance contracts. Companies unable to ensure a steady pipeline of skilled manpower face service delays, safety risks, and reputational damage, making this one of the sector's biggest challenges.

Evolving technology and the constant need to upgrade to meet the customer's requirements

The rapid evolution of technology has become a defining factor in the industrial O&M services landscape. From IoT-enabled equipment monitoring to predictive analytics, automation, and remote operation systems, clients are increasingly expecting providers to adopt advanced solutions that improve efficiency and reduce downtime. This creates constant pressure on O&M firms to invest in new technologies, upgrade existing systems, and train their workforce to handle these modern tools. For smaller players, the high cost of

adopting cutting-edge technologies often becomes a barrier, while larger firms must ensure their global capabilities align with local project requirements. At the same time, customer expectations are evolving at a faster pace than ever before. Industries such as power, oil & gas, manufacturing, and infrastructure demand solutions that are not only reliable but also cost-effective and digitally integrated. Providers unable to keep pace with these expectations risk losing their competitive edge and missing out on high-value, long-term contracts. As a result, continuous innovation and upgradation have become essential to remain relevant, making technology adoption both a challenge and a necessity in sustaining growth in the O&M services sector.

Rising Cost Pressures and Competitive Pricing

Clients in industries such as power, oil & gas, and manufacturing are highly cost-sensitive, pushing O&M providers to reduce service charges while maintaining quality. Inflationary pressures, rising input costs, and the expense of adopting advanced technologies add to the challenge. As a result, many companies struggle to balance profitability with competitive pricing. This race to the bottom often compromises long-term investments in innovation, training, and quality improvement. Firms that cannot sustain efficient cost structures risk losing ground to larger players or technologically advanced global entrants.

Intensifying Global and Domestic Competition

The O&M sector in India is not only competitive domestically but also faces pressure from global service providers with advanced capabilities and established reputations. International firms often bring sophisticated technology, project management expertise, and global best practices, raising client expectations. Domestic firms compete largely on cost and localized service delivery, but this advantage is shrinking as clients increasingly prioritize efficiency and reliability over pricing. The presence of both global majors and agile local players intensifies competition, making differentiation critical for survival in the long run.

Industrial EPC

Overview on Mechanical Construction and Project Execution Segment

The mechanical construction and Project Execution services segment forms the backbone of the industrial Engineering, Procurement, and Construction, (EPC) value chain, covering the installation, assembly, and commissioning of critical plant and machinery. It involves the transformation of engineering designs and procured components into fully functional industrial systems through precise construction practices. The scope spans across heavy machinery erection, piping, structural steel assembly, equipment installation, and integration with civil and electrical works.

In India, mechanical construction and project execution services within EPC has gained momentum due to rapid industrialization, infrastructure growth, and large-scale investments in sectors like power, oil & gas, steel, and renewable energy. This segment plays a vital role in ensuring that projects are delivered on time, within budget, and according to technical specifications. Since industrial facilities depend heavily on mechanical systems for core operations, mechanical construction acts as a critical enabler of efficiency, reliability, and productivity in EPC projects.

Project phases within industrial EPC segment:

Engineering & Design Phase: This phase involves preparing detailed engineering designs, 3D models, and technical drawings for the project. Mechanical engineers focus on the specifications of equipment, piping layouts, pressure systems, and structural designs. It ensures feasibility, safety, and compliance with regulatory standards before moving into procurement and construction.

Procurement Phase: Once designs are finalized, the procurement team sources mechanical equipment, raw materials, piping systems, and fabrication components. Vendor selection, quality checks, and logistics management form an essential part of this stage. Timely and cost-effective procurement ensures uninterrupted flow to the construction phase.

Construction & Erection Phase: The construction stage translates designs into reality with the assembly of heavy machinery, piping systems, tanks, boilers, compressors, and structural steel frameworks. Mechanical construction teams manage welding, alignment, pressure testing, and installation activities. This phase demands high technical precision and safety adherence.

Testing & Commissioning Phase: After installation, all mechanical systems undergo rigorous testing, calibration, and trial runs. This includes hydrotesting of pipelines, performance evaluation of rotating

equipment, and load testing of structures. The goal is to ensure reliability and operational readiness before handing over the project.

Integration & Handover Phase: The final phase involves integrating mechanical systems with electrical, instrumentation, and civil works to create a fully functional facility. Documentation, training of client personnel, and smooth handover are carried out here. This phase ensures that the project is not just mechanically complete but operationally efficient.

Mechanical construction services cover a wide spectrum of activities including equipment erection, pipeline fabrication, pressure vessel installation, structural steel assembly, and specialized welding services. They also involve installation of rotating equipment such as turbines, compressors, pumps, and conveyor systems, which are central to plant operations. These services require skilled labor, specialized tools, and strict adherence to international quality standards.

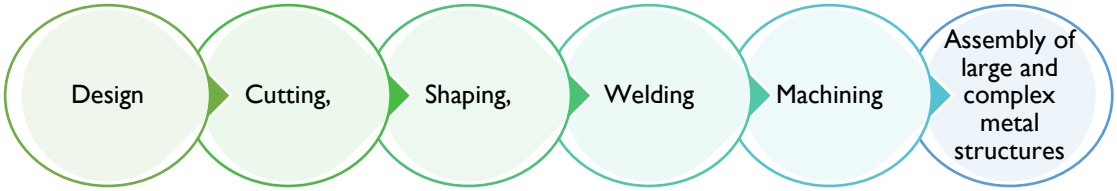
A critical element of the scope is ensuring safety and compliance during construction activities. Mechanical systems often handle high-pressure fluids, hazardous gases, or heavy loads, making safety protocols and inspection systems non-negotiable. Ongoing monitoring, third-party inspections, and adherence to ISO/ASME codes form part of the service scope. This focus reduces risks and ensures long-term operational reliability.

Integration with other EPC disciplines such as civil, electrical, and instrumentation is another vital aspect. Mechanical systems cannot function in isolation and must be seamlessly aligned with foundations, electrical power supply, and control systems. For example, piping systems must be connected to electrical-driven pumps and monitored via control instrumentation. This collaborative integration ensures smooth commissioning and efficient plant operation.

Finally, modern EPC mechanical construction is increasingly leveraging digital tools such as BIM (Building Information Modelling), digital twin technology, and predictive project management software. These innovations enhance accuracy, coordination, and efficiency, while reducing delays and rework. The integration of digital practices with traditional mechanical construction services is positioning EPC companies to deliver cost-effective, timely, and high-quality projects.

Metal Fabrication

Overview



Metal fabrication forms the backbone of large-scale industrial EPC projects, providing the critical structural and mechanical components required for diverse industries such as power, oil & gas, petrochemicals, steel, cement, and infrastructure. The services under this ambit primarily focus on design, cutting, shaping, welding, machining, and assembly of large and complex metal structures that must withstand rigorous operating conditions. This segment requires specialized skills, advanced technologies, and adherence to strict quality and safety standards to ensure the long-term reliability of industrial plants and infrastructure.

The scope of activities under metal fabrication is wide-ranging, covering steel structure fabrication, pressure vessel and boiler manufacturing, heavy machinery components, piping systems, heat exchangers, and storage tanks. Metal fabrication services also extend to custom-built equipment and modular units tailored to the specifications of industrial projects. These services involve not just cutting, welding, machining, and assembling but also surface treatment, quality inspection, and certification to meet regulatory and client requirements.

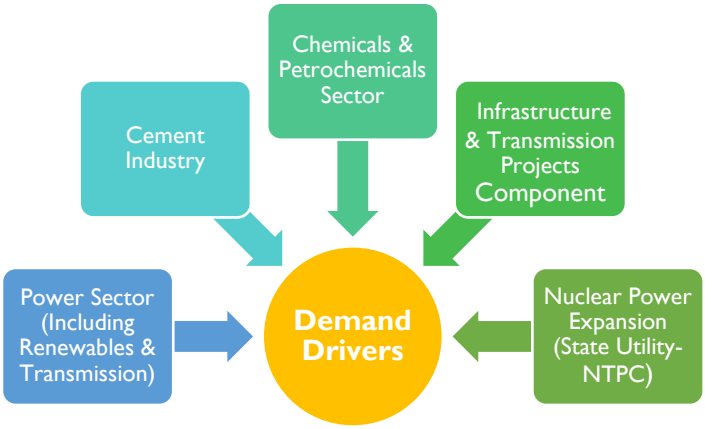
In terms of the type of equipment, plants, and materials constructed, Metal Fabrication typically deals with large-scale and complex assets like reactors, turbines, industrial furnaces, conveyors, cranes, and structural steel frameworks. Materials such as carbon steel, stainless steel, and high-alloy metals are commonly used, depending on the application and environmental conditions. The complexity of these tasks demands specialized fabrication facilities, heavy-lift machinery, and precision engineering capabilities.

Within the larger industrial EPC landscape, Metal fabrication plays a pivotal role by ensuring that all critical mechanical and structural elements are manufactured to specification and integrated seamlessly into the project. It bridges the engineering design phase and the on-site construction phase, translating design blueprints into tangible, functional equipment and structures. Without this link, industrial EPC projects would lack the physical backbone necessary to bring large-scale plants and facilities to operational status.

Demand Drivers

India's industrial sector is undergoing a strong investment-led expansion, supported by both government infrastructure push and rising private sector confidence. Capital expenditure (CAPEX) has seen a significant upswing in recent years, with large allocations directed toward machinery, equipment, and industrial projects that directly fuel demand for EPC (Engineering, Procurement & Construction) and Metal fabrication services. This trend reflects not only greenfield expansions but also modernization and capacity upgrades across core industries. The evolving CAPEX patterns highlight a steady pipeline of projects across manufacturing, infrastructure, and utilities, ensuring sustained opportunities for EPC contractors and fabrication specialists.

Brief analysis of the evolving capital expenditure pattern in Indian industrial sector:



Power Sector (Including Renewables & Transmission):

India's power sector is undergoing significant expansion to meet the growing energy demand. As of June 2025, the country's total installed power capacity reached 476 GW, with non-fossil fuel sources contributing 235.7 GW (49%) of the total capacity, including 226.9 GW from renewables and 8.8 GW from nuclear power. Electricity consumption has been rising steadily, driven by industrial growth and increased electrification. In August 2025, India experienced its fastest rise in power output in five months, driven by a surge in manufacturing activity due to strong demand.

Supporting this growth, the National Electricity Plan (NEP) estimates a capital expenditure requirement of about INR 4.2 lakh crore during FY 2022- 2027 for transmission infrastructure, with significant allocations towards interstate and intra-state networks to integrate rising generation and renewable capacities. This large-scale investment covering generation, grid modernization, and renewable energy integration creates substantial demand for mechanical EPC and Metal fabrication services, including substation construction, turbine installation, transmission line works, and solar capacity rollout.

Cement Industry:

India's cement sector is on a strong expansion path, with cement makers collectively planning around INR 1.25 lakh crore in CAPEX between FY 2025 and FY 2027, aimed at adding close to 130 million tonnes of grinding capacity, according to industry reports.

Leading the domestic expansion, UltraTech Cement has earmarked INR 10,000 crore in CAPEX for FY 2026 alone to enhance capacity, energy efficiency, and operational capabilities. This surge in investment is underpinned by healthy demand outlooks, favourable infrastructure growth, and housing activity, and is set to generate robust demand for heavy civil works, machinery installation, and mechanical EPC services across the sector.

Chemicals & Petrochemicals Sector:

India's chemicals and petrochemicals industry is on a robust expansion path backed by substantial government-led initiatives and investments. The sector's production capacity is projected to increase sharply from approximately 29.62 million tonnes today to 46 million tonnes by 2030 according to the Ministry of Petroleum & Natural Gas.

Additionally, under the Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR) Policy (2020-35), combined investments worth INR 10 lakh crore (approximately USD 142 billion) are targeted by 2025 to develop integrated chemical manufacturing clusters. Such large-scale initiatives involve heavy requirements for piping, reactor modules, structural steel fabrication, and complex mechanical systems making EPC and Metalindispensable to sector growth.

Infrastructure & Transmission Projects Component:

India's infrastructure and transmission sector is witnessing strong project activity, particularly in power and green energy. States are also actively driving investments for example, Bihar recently signed MoUs worth INR 5,000 crore for green energy projects, including battery storage and solar capacity, highlighting regional commitments to sustainable infrastructure.

At the national level, continued government focus on rural electrification, national highways, railway modernization, and renewable energy corridors is creating steady demand for large-scale mechanical construction, structural steel works, and metal fabrication. These projects provide significant opportunities for EPC contractors and service providers engaged in delivering complex infrastructure assets.

Nuclear Power Expansion (State Utility- NTPC):

India's push into nuclear power represents a burgeoning area of CAPEX in the energy sector. State utility NTPC plans to invest USD 62 billion (~INR 5 lakh crore) over the coming decades to develop 30 GW of nuclear capacity. To meet national goals of non-fossil fuel generation, this massive investment will involve

heavy engineering nuclear-grade structural fabrication, containment construction, and complex mechanical systems offering significant long-term demand for EPC and metal fabrication services.

Competitive Landscape in Indian Industrial O&M Space

The competitive landscape of India's industrial operations and maintenance (O&M) services market is characterized by a mix of specialized service providers and diversified engineering firms. Companies such as Aarvi Encon, Voltech O&M Services, and ENMAS India have established strong capabilities across sectors like power, oil & gas, and renewable energy, offering tailored O&M solutions that ensure efficiency, reliability, and compliance.

Alongside them, niche firms in the power and utilities space such as BNK Power Solution, CR3 India, and Sorigin RE Services are building credibility by offering cost-effective and high-quality O&M services. At the same time, global players like Honeywell are entering aggressively with digital-first solutions, leveraging AI, automation, and data analytics to differentiate themselves in predictive and preventive maintenance, signaling a shift towards technology-driven O&M practices.

In the industrial EPC landscape, particularly mechanical construction, the competitive environment is dominated by large engineering conglomerates with broad portfolios and execution capabilities. Larsen & Toubro (L&T) leads the field, backed by its reputation for handling complex projects in power, hydrocarbon, and industrial infrastructure. Tata Projects has emerged as another strong contender, with a growing focus on sustainable and technologically advanced project execution.

Other major players such as Hindustan Construction Company, Gammon India, Afcons Infrastructure, and Punj Lloyd bring decades of experience in delivering large-scale industrial, structural, and civil-mechanical EPC assignments. Public sector firms like Engineers India Limited (EIL) further strengthen the competitive fabric, with particular strengths in refinery and hydrocarbon projects, as well as new focus areas like green hydrogen and biofuels.

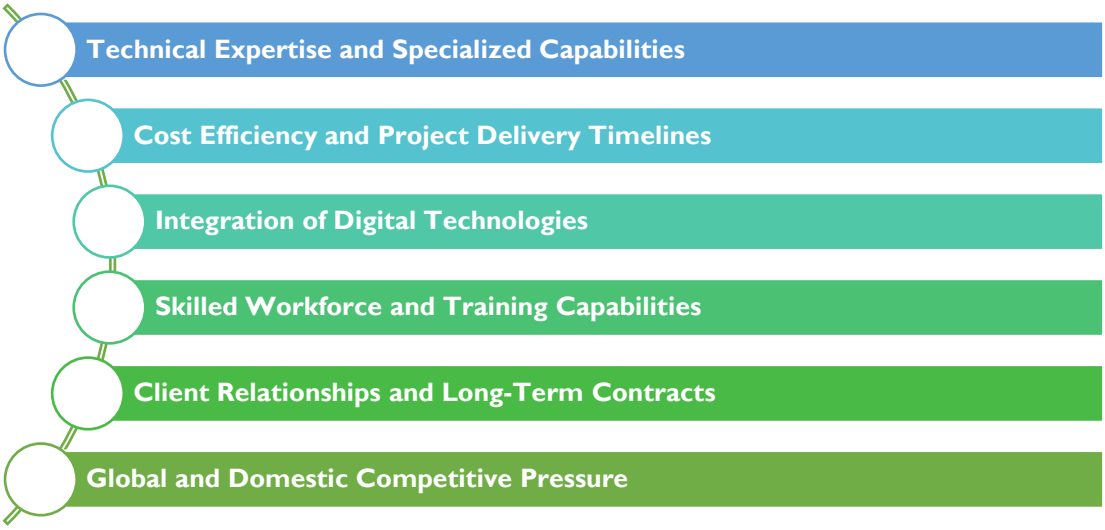
The metal fabrication segment is more specialized, with firms concentrating on precision manufacturing of critical equipment and components. Companies like ISGEC play a leading role with a wide range of offerings including boilers, heat exchangers, and emission control equipment, supported by international collaborations.

KRR Heavy Engineering, meanwhile, caters to industries like petrochemicals, cement, and fertilizers with heavy-duty components such as pressure vessels and rotary kilns, while KEC International has developed strong capabilities in steel fabrication, particularly for transmission towers and infrastructure. These players form the backbone of India's EPC ecosystem, ensuring availability of high-quality, reliable, and customized fabrication services that integrate seamlessly into large-scale industrial projects.

What ties these three segments together is the growing importance of technological integration, scale, and specialization. O&M service providers are leveraging IoT and predictive maintenance tools to maximize

efficiency and uptime, EPC firms are embedding sustainability and digital engineering into large project delivery, while fabrication players are aligning with global standards to meet rising demand from domestic and international markets. Government-led infrastructure growth, energy transition projects, and an increasing focus on industrial automation are further driving competition across all fronts. The result is a dynamic ecosystem where large conglomerates dominate through scale and resources, while niche players carve out opportunities by focusing on specialized expertise, flexibility, and innovation.

Key Factor Shaping Competition



Technical Expertise and Specialized Capabilities

Companies with advanced technical expertise, strong engineering teams, and specialized fabrication capabilities hold a competitive edge. In O&M, predictive maintenance, process optimization, and compliance-driven services are increasingly sought after. For EPC and metal fabrication, expertise in complex mechanical systems, welding standards, and pressure vessel design determines market leadership. Competitors are differentiating themselves by investing in domain-specific certifications and advanced technology adoption.

Cost Efficiency and Project Delivery Timelines

In both O&M and EPC projects, the ability to deliver within budget and on schedule significantly influences competitiveness. Clients prefer providers who can reduce downtime, optimize resource allocation, and maintain operational continuity. Metal fabrication projects, in particular, require tight control over costs related to raw materials, logistics, and skilled labor. Players who can maintain cost leadership without compromising quality are better positioned to secure contracts.

Integration of Digital Technologies

Adoption of digital tools such as IoT, AI, BIM (Building Information Modelling), and digital twin technologies is reshaping competition. In O&M, predictive analytics and real-time monitoring are helping reduce failures and improve efficiency. In EPC and fabrication, 3D modelling and automated project management software

ensure higher precision and reduced rework. Companies embracing digital innovation stand out as reliable, future-ready partners.

Skilled Workforce and Training Capabilities

Availability of skilled labor, including mechanical engineers, welders, technicians, and project managers, is a decisive factor in this sector. Given the labor-intensive nature of fabrication and on-site EPC construction, companies that invest in training programs and skill development gain a competitive advantage. In O&M, specialized workforce knowledge in handling modern automated systems is equally critical. Talent shortages often drive-up costs, so firms with in-house expertise have a strong edge.

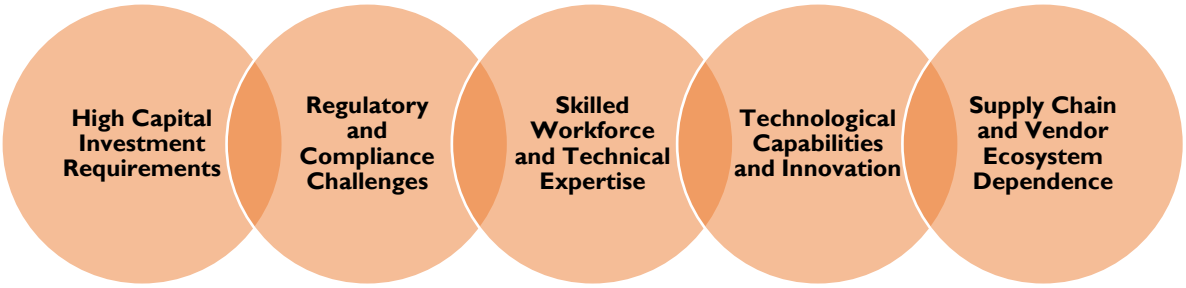
Client Relationships and Long-Term Contracts

The industrial O&M market often works on long-term service agreements, while EPC and metal fabrication rely heavily on large-scale contracts. Companies that build strong client relationships through reliability, transparency, and performance consistency tend to secure repeat business. Established players leverage long-standing ties with public sector enterprises, energy companies, and industrial giants to maintain their competitive position. Relationship management often proves as important as technical capability in winning projects.

Global and Domestic Competitive Pressure

Both domestic players and global EPC contractors compete in India's O&M and metal fabrication space. International firms bring advanced technology and global best practices, while Indian players often compete on cost efficiency and local market knowledge. The competition is further shaped by government policies, trade regulations, and preference for local manufacturing under "Make in India." The ability to balance global standards with local adaptability has become a defining factor for success.

Analysis of Entry Barriers/ Other Factors



High Capital Investment Requirements:

Entering the EPC and metal fabrication space demands substantial upfront investments in specialized machinery, fabrication shops, welding equipment, testing facilities, and advanced design software. For O&M, while the entry cost is relatively lower, setting up robust monitoring infrastructure and compliance systems

still requires significant resources. The need for financial strength makes it difficult for smaller players to compete with established companies.

Regulatory and Compliance Challenges:

Industrial projects are governed by strict regulatory frameworks covering safety, quality, and environmental standards. EPC projects must align with global norms such as ASME or ISO, while O&M must comply with industry-specific safety and emission standards. The complexity of meeting these multi-level regulations creates a barrier for new entrants, as non-compliance could lead to heavy penalties or disqualification from projects.

Skilled Workforce and Technical Expertise:

The sector is highly dependent on a trained and certified workforce, including mechanical engineers, welders, technicians, and safety officers. Training such a workforce requires years of experience and investment in skill development. Without proven technical expertise and a ready pool of skilled manpower, new entrants find it difficult to gain trust from industrial clients.

Technological Capabilities and Innovation:

The growing integration of digital solutions such as IoT-based monitoring, predictive analytics, and advanced design tools like BIM has raised the competitive threshold. New entrants lacking these technologies find it difficult to compete with established players who already offer advanced solutions. Continuous R&D and technology adoption have therefore become essential entry barriers in this sector.

Supply Chain and Vendor Ecosystem Dependence:

Metal fabrication and EPC projects rely on strong supply chains for steel, alloys, heavy machinery, and specialized components. Established players often enjoy preferred vendor relationships and bulk purchase advantages, which reduce costs and ensure timely delivery. New entrants face challenges in building reliable supplier networks, putting them at a disadvantage in both pricing and delivery timelines.

Peers Profiling:

Power Mech Projects Limited

Overview

Power Mech Projects Limited, incorporated in 1999 and headquartered in Hyderabad, Telangana, is an India-based engineering and construction company engaged in the execution of power and infrastructure projects. The Company provides erection, testing, and commissioning (ETC), operation and maintenance (O&M), and civil construction services primarily for power plants and industrial facilities. Over the years, it has expanded its service portfolio to include industrial construction, mining services, water projects, railway infrastructure, and overseas project execution.

The Company operates as an integrated engineering and execution platform with capabilities spanning boiler, turbine, and generator (BTG) erection, balance of plant (BOP) works, structural and civil construction, and long-term O&M services. Through its domestic and international operations, Power Mech undertakes large-scale infrastructure projects across India and selected global markets.

Product & Service Offerings

- **Erection, Testing & Commissioning (ETC):** Execution of mechanical erection, alignment, testing, and commissioning of Boiler–Turbine–Generator (BTG) packages and Balance of Plant (BOP) systems, including installation of steam generators, Heat Recovery Steam Generators (HRSGs), turbines, auxiliary systems, coal and ash handling systems, and associated structural and piping works for thermal and industrial power projects.
- **Operations & Maintenance (O&M):** Provision of plant O&M services encompassing preventive, predictive, and breakdown maintenance, performance monitoring, equipment overhauls, renovation and modernization (R&M), and lifecycle asset management for thermal power plants and industrial process facilities.
- **Industrial & Civil Construction:** Execution of large-scale civil and structural works including heavy foundations, reinforced concrete structures, structural steel erection, cooling towers, chimneys, equipment pedestals, and balance infrastructure for power and industrial projects.
- **Mining & Infrastructure Services:** Mine development operations including excavation, material handling, and associated mechanical support, along with execution of infrastructure projects such as water conveyance systems, railway sidings, and electrical transmission installations.

Key Customer Segments Served

- **Power Generation & Utilities:** The Company executes and maintains infrastructure for thermal power plants, supercritical and subcritical units, and other energy facilities for public and private sector developers.

- **Industrial & Infrastructure:** Power Mech undertakes civil, mechanical, and structural works for industrial facilities, mining projects, water infrastructure, and related large-scale industrial developments.
- **International Projects:** The Company extends its engineering and construction services to overseas markets through subsidiaries and joint ventures across multiple countries.

Key Strengths

- **Integrated Engineering Execution Capability:** Power Mech provides a vertically integrated service offering spanning erection, testing and commissioning (ETC), operations and maintenance (O&M), and civil and structural construction. This integrated capability enables execution of large-scale infrastructure and industrial projects through coordinated mechanical, electrical, and civil engineering functions. The company has executed over 208 projects and has served more than 80 clients in its 26 years of business.
- **Sector Diversification:** Although initially focused on thermal power plant execution, the Company has expanded its operational footprint into mining, railways, water infrastructure, and other industrial construction segments, thereby broadening its revenue base and sectoral exposure.
- **Geographic Presence:** Power Mech operates across multiple states in India and maintains an overseas presence through subsidiaries and project offices in select international markets, supporting cross-border project execution capabilities.

Thermax Limited

Overview

Thermax Limited, incorporated in 1980 and headquartered in Pune, Maharashtra, is an India-based engineering and technology company providing integrated energy and environment solutions. The Company delivers products, systems, and services across process heating, power generation, water and wastewater treatment, air pollution control, industrial cooling and heating systems, specialty chemicals, and outsourced utility services.

Thermax operates as an integrated engineering platform offering technology-driven solutions designed to improve energy efficiency, optimise resource utilisation, and support environmental compliance. Its capabilities are supported by manufacturing facilities, technology centres, and engineering teams serving industrial and commercial customers across domestic and international markets.

Product & Service Offerings

- **Power Generation Solutions:** Design and execution of captive power plants, cogeneration facilities, and waste heat recovery power systems delivered on an engineering, procurement, and construction (EPC) basis.
- **Air Pollution Control Systems:** Deployment of emission control technologies for particulate and gaseous pollutants, supporting regulatory compliance and environmental performance across industrial operations.

- **Water & Waste Management Solutions:** Engineering and implementation of water treatment, recycling, and wastewater management systems for industrial and commercial infrastructure.
- **Cooling & Heating Solutions:** Provision of industrial and commercial cooling and heating systems, including absorption chillers and thermal energy management equipment.
- **Specialty Chemicals:** Manufacture and supply of ion exchange resins and performance chemicals used in water treatment processes and industrial system optimisation.
- **Outsourced Utility Services:** Delivery of utilities such as steam, power, and compressed air through Thermax Onsite Energy Solutions Ltd. (TOESL) under long-term service and utility outsourcing arrangements**.**

Key Customer Segments Served

- **Industrial Utilities & Process Industries:** Thermax serves industrial clients requiring energy generation, steam systems, emissions control, water management, and utility optimisation across sectors such as power, cement, metals, chemicals, food and beverages, and other process industries.
- **Commercial & Institutional Infrastructure:** Provision of cooling, heating, and water management systems for commercial buildings, institutional campuses, and urban infrastructure applications.
- **Sustainable & Clean Energy Applications:** Deployment of renewable energy systems, waste heat recovery solutions, and energy-efficient technologies supporting sustainability initiatives.

Key Strengths

- **Integrated Energy & Environment Solutions:** Thermax offers a broad portfolio covering heating, power generation, cooling, water management, pollution control, and specialty chemicals, enabling multi-utility solutions for industrial customers.
- **Engineering & Technology Capabilities:** The Company's manufacturing and technology centres support solution customisation, system integration, and lifecycle service support for complex industrial applications.
- **Global Presence:** Thermax operates in domestic and international markets through manufacturing facilities, offices, and service networks, supporting project execution and after-sales services across multiple geographies.
- **Sustainability Focus:** The Company's business model emphasises clean energy, clean air, and clean water solutions, aligned with environmental and resource efficiency requirements.

ANI Integrated Services Limited

Overview

ANI Integrated Services Limited, founded in 1989, is an India-based engineering services and technical manpower solutions company headquartered in Thane, Maharashtra. ANI is engaged in providing integrated engineering, project execution, operations and maintenance (O&M), and technical manpower deputation services to a wide range of industrial and infrastructure clients. The Company is listed on the National Stock Exchange of India and operates across domestic and international markets including Africa, the Middle East, and the Far East through subsidiaries and global offices.

With over 35 years of industry experience, ANI has established itself as a provider of engineering and manpower solutions across project lifecycles — from turnkey project execution and supervision to site commissioning, shutdown management and long-term operational support. Its offerings are delivered by a team of highly skilled technical professionals, supporting clients in complex industrial and infrastructure settings.

Product & Service Offerings

- **Turnkey E&I Project Services:** Execution of mechanical, electrical, and instrumentation (E&I) turnkey project work, including construction supervision, pre-commissioning and commissioning support, and end-to-end project coordination.
- **Operations & Maintenance (O&M):** Ongoing plant and facility support covering preventive, predictive, and breakdown maintenance, equipment management, and operational support to ensure continuity and reliability of client assets.
- **Technical Manpower Deputation:** Provision of highly skilled technical manpower including engineers, technicians and specialists deployed across project planning, construction supervision, commissioning, shutdowns, and operations & maintenance assignments for industrial and infrastructure clients.
- **Engineering, Shutdown & Project Management Services:** Provision of engineering design support, procurement assistance, project planning, and end-to-end project management services, including planning and execution of scheduled shutdowns, safety-critical maintenance activities, commissioning coordination, and comprehensive project supervision to support seamless client project execution.
- **Inspection & Quality Assurance Services:** Specialised inspection services deployed across construction, assets and high-risk industrial environments to ensure compliance with technical, safety and quality standards

Key Customer Segments Served

- **Industrial & Process Sectors:** The Company serves a wide range of industrial clients requiring engineering projects, technical workforce support, and O&M services across sectors, including oil & gas, power, petrochemicals, chemicals, pharmaceuticals, water infrastructure, cement, FMCG, and mining.

- **EPC & Infrastructure Projects:** ANI supports engineering, procurement, and construction (EPC) contractors and infrastructure developers with turnkey installations, manpower deployment, and technical services across large-scale industrial and infrastructure assignments.
- **International Projects:** The Company extends its service offerings to international markets through its overseas operations, serving projects in the Middle East and Southeast Asia.

Key Strengths

- **Integrated Engineering & Project Execution Capabilities:** ANI provides an integrated suite of services including technical manpower deputation, turnkey E&I project execution, operations and maintenance (O&M), inspection services, and project management support. This integrated service model enables clients to streamline engineering and operational functions through a single execution partner.
- **Skilled Technical Workforce:** The Company maintains a large and technically qualified workforce comprising engineers, technicians, supervisors, and specialists who support project execution, commissioning, asset management, and operational supervision across diverse industrial environments.
- **Sectoral & Geographic Diversification:** ANI serves multiple industrial sectors across domestic and international markets. Its global presence spans Africa, the Middle East, and the Far East, supporting cross-border engineering and manpower assignments.
- **Established Industry Experience:** With over three decades of industry presence, ANI has developed project execution expertise and longstanding industry relationships, supporting its participation in large and technically complex assignments.

Thejo Engineering Limited

Overview

Thejo Engineering Limited, established in 1974 and headquartered in Chennai, Tamil Nadu, is an engineering solutions company specialising in bulk material handling, mineral processing, and corrosion protection systems. The Company provides engineered products and services designed to enhance operational efficiency, reliability, and asset lifecycle performance in heavy industrial environments.

Thejo operates as an integrated engineering platform combining product design, manufacturing, installation, and maintenance services. Its solutions primarily cater to industries handling bulk materials and operating in high-abrasion and corrosive conditions, including mining, power, steel, cement, ports, and fertilizer sectors. The Company has expanded its presence through domestic operations and international subsidiaries serving global markets.

Product & Service Offerings

- **Conveyor Care Solutions:** Provision of conveyor belt installation, maintenance, repair, belt splicing, pulley lagging, and refurbishment services to ensure reliability and uptime of bulk material handling systems.
- **Transfer Point Solutions:** Engineering and supply of material flow optimisation systems, including belt cleaners, impact beds, skirt sealing systems, belt tracking systems, and engineered chutes designed to reduce spillage and improve conveyor performance.
- **Abrasion & Wear Protection Solutions:** Design and manufacture of wear-resistant components such as mill linings, rubber and polyurethane lining systems, ceramic wear panels, and other protective solutions for high-abrasion operating environments.
- **Screening & Filtration Solutions:** Supply of screening systems for material separation and sizing, along with filtration systems used for dewatering and process applications within mineral processing and industrial plants.
- **Corrosion Protection Systems:** Engineering and installation of rubber lining and corrosion protection systems for tanks, pipelines, vessels, and process equipment operating in chemically aggressive environments.
- **Engineering Services & Operations Support:** Provision of project execution, installation supervision, system maintenance, and operational support services for bulk material handling and processing infrastructure.

Key Customer Segments Served

- **Mining & Mineral Processing:** Thejo provides conveyor maintenance, wear protection, screening, and material handling optimisation solutions for mining and mineral beneficiation operations.

- **Power, Steel & Cement Industries:** The Company supports heavy industrial facilities requiring reliable bulk material handling systems and protective solutions for continuous plant operations.
- **Ports & Process Industries:** Thejo delivers material handling, corrosion protection, and system optimisation solutions for ports, fertilizer plants, and other process industries handling bulk commodities.
- **International Industrial Operations:** Through its overseas subsidiaries and global footprint, the Company serves industrial clients across international markets in material handling and protection applications.

Key Strengths

- **Specialised Bulk Material Handling Expertise:** Thejo focuses on conveyor systems, wear protection, and corrosion-resistant solutions tailored for industries operating under high-abrasion and high-impact conditions.
- **Integrated Manufacturing & Service Model:** The Company combines in-house product manufacturing with installation, maintenance, and lifecycle service capabilities, enabling comprehensive support for industrial clients.
- **Technology-Driven Solutions:** Thejo develops engineered systems aimed at improving operational efficiency, reducing downtime, and enhancing equipment life in bulk material handling environments.
- **Global Presence:** The Company operates through subsidiaries and partnerships in international markets, supporting cross-border delivery of engineering products and services.
- **Established Industry Experience:** With over four decades of operational history, Thejo has built technical expertise in conveyor care technologies and industrial protection systems.

Monomark Engineering (India) Limited

Overview

Monomark Engineering India Ltd., incorporated in 2005, has evolved into a reputable provider of comprehensive operations and maintenance (O&M) services, industrial project execution, and metal fabrication. Backed by over 20 years of industry experience, the company delivers its services across a diverse range of sectors, namely cement, mining & metals, engineering & ports. Its capabilities are reinforced by one state-of-the-art fabrication workshops in Chittorgarh, Rajasthan, and a team of qualified, experienced personnel supported by a fleet of modern mechanical handling equipment (MHEs), all operating under a strong commitment to workplace safety and technical excellence.

The organization's guiding principles revolve around a clear vision, mission, and set of core values. Its vision is to become the world's most trusted brand in delivering best-in-class engineering solutions with top-notch quality. The mission emphasizes delivering meaningful value to clients through automation, lean management, safety, sustainability, technical excellence, and effective leadership. Monomark Engineering's foundational values, Commitment, Integrity, Growth, Innovation, and Excellence, reflect the company's dedication to honouring its commitments, maintaining ethical conduct, fostering growth, driving innovation to create impactful solutions, and pursuing excellence through robust management systems.

Product & Service Offerings

- **Comprehensive Operations & Maintenance (O&M):** Monomark Engineering excels in offering full-spectrum O&M services for process plants. They manage maintenance operations across diverse industries, including cement, non-ferrous metals (like zinc and copper), ferrous metals, infrastructure, and other manufacturing sectors.
- **Industrial Project Execution:** The company offers on-site project execution services encompassing metal fabrication, erection, installation, retrofitting, and debottlenecking projects. Their portfolio includes grinding units, busbar casting, bauxite handling plants, and CAPEX-related projects for major clients like Vedanta Group, Shree Cement Limited, FLSmidth, Larsen & Toubro (L&T) Limited, and ThyssenKrupp Uhde India Private Limited, Hindustan Copper Limited and among others.
- **Metal Fabrication & Erection:** Monomark operates one state-of-the-art fabrication workshops in Chittorgarh, Rajasthan. These facilities support the manufacturing and assembly of structural components and equipment, which are then erected and commissioned onsite, ensuring seamless integration with client operations.

Key Customer Segments Served

- **Cement:** Monomark serves leading players in the Indian cement industry through mechanical maintenance contracts, project execution, metal fabrication, and allied engineering services. Notable engagements include long-term Mechanical AMC support for Shree Cement's units IX, X & RNCU in

Ras, execution work for UltraTech Cement, including the Birla White Putty Project in Nathdwara, and projects for Lafarge (now Nuvoco) at Chittorgarh.

- **Metal:** The Company has established a strong presence in the mining and metal sectors by delivering operations & maintenance (O&M) services, project works, and equipment handling support across both ferrous and non-ferrous metallurgical facilities. Key clients include Hindustan Zinc Ltd across multiple mine sites and facilities, Vedanta group operations such as Alumina Refinery at Lanjigarh and Sterlite Copper in Silvassa, and metal processing works for entities.
- **Engineering & Ports:** Monomark provides comprehensive engineering, metal fabrication, erection, material handling, plant installation, and maintenance services across diverse industrial and infrastructure clients. This includes execution and support contracts for major process equipment manufacturers and service, and allied services including pipeline and cable laying, FRP linings, condition monitoring, and structural fabrication for broad industrial end-uses.

Key Strengths

- **Robust Industry Experience & Technically Skilled Workforce:** Monomark Engineering builds on its long-standing experience and the guidance of its promoters, who bring decades of operational and technical understanding. Supporting this leadership is a robust workforce of over 5,000 personnel, comprising qualified engineers, project managers, equipment specialists, technicians, and administrative staff. This human capital base forms the backbone of the company's project execution capabilities across its core verticals Operations and Maintenance (O&M), Mechanical Construction, and Custom Fabrication. Continuous training, emphasis on safety, and ongoing skill development enable the workforce to meet a range of project requirements with consistency and reliability.
- **Integrated End-to-End Service Capabilities:** Monomark Engineering offers a comprehensive, integrated suite of solutions spanning Operations & Maintenance (O&M), mechanical construction, metal fabrication, erection, retrofitting, debottlenecking, and CAPEX project delivery, positioning itself as a full-spectrum service provider for process-driven industries. The company's integrated service model enables them to secure additional projects across multiple verticals from the same client.

  These capabilities are further supported by one in-house fabrication workshops located in Chittorgarh, Rajasthan, which enhance the company's ability to undertake complex engineering assignments with greater precision, operational efficiency, and scalability. The close integration across service segments enables operational synergies, strengthens cross-selling potential, and helps build long-term client relationships throughout the lifecycle of industrial assets.

- **Geographical Reach and Expansion Focus:** Monomark operates across more than 10 states in India and has begun executing international assignments, including a contract in the United Arab Emirates (UAE). This distribution enables them to serve clients across multiple regions with timely support and

operational flexibility. The company's presence across key locations also strengthens accessibility to important industrial areas.

Building on this foundation, Monomark is now concentrating on expanding into additional international markets to diversify their revenue base and develop a broader global presence.