

INFRASTRUCTURE PROJECTS SEGMENT



Mahatma Gandhi Memorial College Hospital, Jamshedpur, Jharkhand

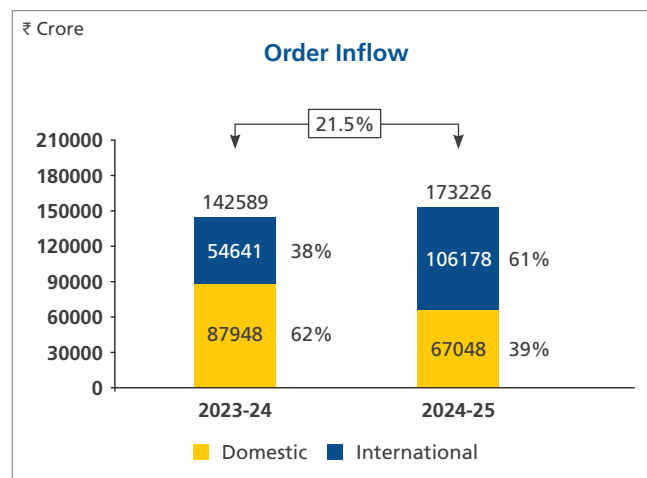
The Infrastructure Projects segment comprises the engineering, procurement and construction (EPC) of:

- Buildings & Factories
- Transportation Infrastructure
- Heavy Civil Infrastructure
- Power Transmission & Distribution
- Renewables
- Water & Effluent Treatment
- Minerals & Metals

To capitalise on growth opportunities in the clean energy space, the Renewables business vertical was carved out from the Power Transmission & Distribution business within the Infrastructure Projects Segment.

The Renewables business focuses on tapping the opportunities that arise as a result of the global shift towards clean energy and the need for decarbonised electricity to combat climate change.

Financial performance of the segment



The Infrastructure segment secured orders worth ₹ 1,73,226 crore in FY 2024-25, higher by 21.5% over the previous year, with the receipt of multiple orders across various sub-segments. During the current year, the Buildings & Factories business registered growth buoyed by the receipt of an international order for airport and a data center in a CIS (Commonwealth of Independent States) country. Power Transmission & Distribution business and Renewables business also benefitted from the receipt of multiple international orders for renewable energy projects as well as transmission lines and substation orders. Similarly, Minerals & Metals business registered growth over the previous year with receipt of a large value international order.



State Cancer Institute, Guwahati, Assam

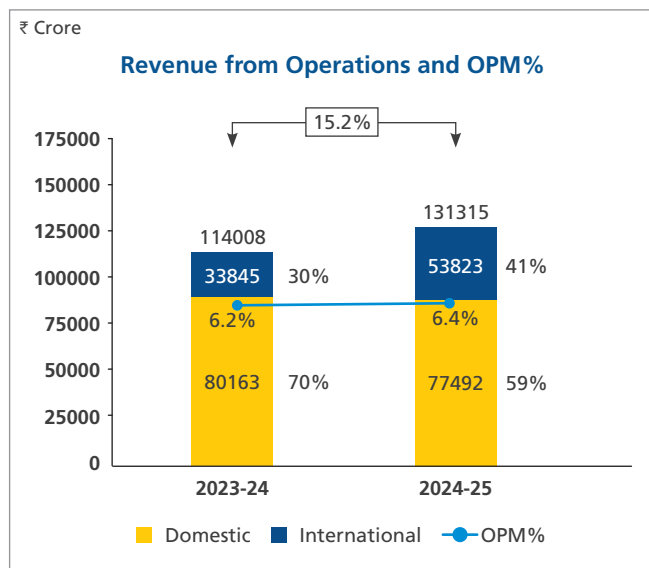
The Transportation Infrastructure and Heavy Civil Infrastructure businesses registered a decline in their growth on deferment of targeted prospects during the year. Again, Water & Effluent Treatment business was also impacted by the central and various state elections leading to delay in tendering of orders.

The share of international orders for the infrastructure segment increased to 61% from 38% in the previous year. The share of the Middle East in overall international order inflow for the segment however reduced to 69% compared to 93% in the previous year due to receipt of orders in a CIS country.

The Infrastructure segment registered revenue of ₹ 1,31,315 crore for FY 2024-25 - a growth of 15.2% over the previous year. The growth was mainly driven by the ramp-up of execution across multiple project sites. Revenue from international operations constituted 41% of the total revenue for FY 2024-25 compared to 30% in the previous year.

The segment's operating margin for FY 2024-25 marginally improved to 6.4% from 6.2% in the previous year.

The funds employed by the segment at ₹ 25,003 crore as on March 31, 2025, registers marginal increase of 4.0% vis-à-vis March 31, 2024, mainly on account of increase in working capital level.



Buildings & Factories

Overview

The Buildings & Factories business of the Company is at the forefront of building urban infrastructure and offers end-to-end design-and-build turnkey solutions that seamlessly traverse the entire project life-cycle, from concept to commissioning. Its expertise extends across sectors such as airports, hospitals, stadiums, retail establishments, educational campuses, IT parks, office towers, data centers, semiconductor fabrication (fab) and Outsourced Semiconductor Assembly and Test (OSAT) facilities, high-rise structures, industrial warehouses, automobile plants, test tracks, and other industrial structures.



Adora De Goa, a luxury residential project in Dabolim, Goa

Driving the success of the business are dedicated engineering design centres, competency cells and innovative formwork systems. The commitment to innovation has been continuous, improved by mechanised project execution, a robust network of seasoned consultants and dependable vendors, and a meticulously digitalised project control framework. A talented workforce, adept at navigating complex challenges, has contributed significantly to the realisation of iconic structures both in India and overseas.

The business is organised into the following Strategic Business Groups (SBGs):

Health, Public Spaces & Airports SBG:

This SBG consists of the following three businesses:

The **Health business** is committed to transforming healthcare infrastructure through its expertise in planning, design and execution of world-class medical facilities. With a strong portfolio of projects across India, the business plays a pivotal role in building the country's healthcare ecosystem.

The **Public Space business** undertakes design and execution of iconic projects like statues, museums, stadiums, metro stations, convention centres, malls, integrated multimodal developments, educational institutes, right from concept to commissioning on an EPC basis.

The **Airports business** specialises in designing and constructing airport terminal buildings, along with associated service structures. The business also provides integrated airport system solutions, including baggage-handling systems, passenger-flow monitoring, passenger boarding bridges,

visual docking guidance systems, ATC towers, cargo facilities, aircraft hangars, and other essential facilities.

Residential, Commercial Buildings & Factories SBG:

This SBG consists of the following three businesses:

The **Residential business** is a prime EPC solutions provider for elite, affordable and mass-housing projects. The business has expertise in executing high-rise towers and developing mass-dwelling units. This business has pioneered the use of precast technology for fast and quality construction.

The **Commercial Buildings business** specialises in end-to-end services, from conceptualisation to commissioning, for establishing data centers, semiconductor fab and OSAT facilities. It also provides turnkey design-and-build solutions for IT office spaces. The business also embraces innovative construction technologies, including prefabricated prefinished volumetric construction (PPVC), modular construction and 3D printing.

The **Factories business** offers comprehensive EPC solutions with single-point accountability, catering to the needs of sectors such as Automobiles - plants and test tracks, Electronics, Solar PV manufacturing, Glass, Paints, Life Science Products, Warehouses and FMCG products.

Business Environment

Health

The demand for specialised hospitals and advanced medical facilities continues to rise ensuring better healthcare



CIDCO Kharkopar, Navi Mumbai, Maharashtra

accessibility across the country. The states of Bihar, Odisha, Chhattisgarh and Jharkhand are emerging as key investment hubs for healthcare expansion. In the north-eastern states, healthcare investments are targeted to increase the hospital bed-to-population ratio. Both public and private investments are driving the growth of cutting-edge medical facilities.

Public Spaces

The public spaces business unit has demonstrated robust growth across multiple sectors, including stadiums, MUD (Mixed Use Development), hotels and malls. Opportunities in sports, tourism infrastructure and the re-construction of government office spaces is expected to drive growth in the near to medium-term.

Airports

The airport sector is witnessing strong growth, with passenger traffic increasing at a 13% y-o-y rate, driving the demand for infrastructure development. Rising demand for air travel from Tier II and Tier III cities is creating opportunities for the development of greenfield airports and the expansion and modernisation of existing facilities. The business is also exploring opportunities in the GCC (Gulf Cooperation Council) countries and the broader APAC (Asia-Pacific) region.

Residential

The real estate sector witnessed strong growth in FY 2024-25, with residential sales reaching new highs, driven by rising households' confidence and stable interest

rates. Demand surged in the upper middle class and luxury segments, while new launches and sales in the top seven cities grew by 25% y-o-y and 31% y-o-y, respectively. Rising urbanisation and demand for mega townships, along with policy support in the form of *Pradhan Mantri Awas Yojana* (PMAY) and floor space index (FSI) relaxations, continue to aid market expansion.

Commercial Buildings

Urbanisation, business expansion and investments in the technology sector remain the key drivers of demand for the Commercial Buildings segment.

The semiconductor industry is leveraging the rise of R&D centres and global capability centres (GCCs) to expand facilities in the country. The industry has thrown up opportunities to integrate smart building technology and energy-efficient solutions to develop sustainable semiconductor and cleanroom facilities. Government incentives and investments in semiconductor manufacturing are driving growth in the Indian market. The data center business is also gaining traction, in India and the broader APAC region.

Factories

India's factory construction business is witnessing sustained growth, driven by rising private sector investments and government initiatives like the Production-Linked Incentive (PLI) scheme, Make in India, Faster Adoption and Manufacturing of Electric Vehicles (FAME), Pradhan Mantri Mega Integrated Textile Region and Apparel (PM MITRA)



Multi Tenanted Building (MTB4) for Information Technology Park Ltd., Bengaluru, Karnataka



L&T Knowledge City, Vadodra, Gujarat - a large-scale, self-contained engineering campus developed by L&T

scheme, Electronic Manufacturing Cluster (EMC) scheme and the Automotive Mission Plan 2026.

International

The business has expanded its presence in the Middle East in general, capitalising on the economic upswing in Oman in particular. Selective opportunities are being pursued in the rest of the GCC region while growing business in newer geographies in the broader APAC region.

Major Achievements

Major Orders Won:

- ▣ Semiconductor fab plant in Dholera, Gujarat
- ▣ OSAT facility at Morigaon, Assam
- ▣ Automobile manufacturing plant at Bidadi, Karnataka
- ▣ Electronics manufacturing plant at Kancheepuram, Tamil Nadu
- ▣ Cancer hospitals in Navi Mumbai, Vizag and Mullanpur
- ▣ Institute of Neuroscience in Kolkata, West Bengal
- ▣ AIG super specialty hospital at Hyderabad, Telangana
- ▣ Residential developments for a leading real estate group across multiple locations in India
- ▣ International data center in the CIS region

Key Projects Commissioned:

- ▣ Data Center in Kancheepuram, Tamil Nadu
- ▣ National Cricket Academy for the Board of Control for Cricket in India (BCCI) in Bangalore, Karnataka

- ▣ Hotel for a prestigious client in Colombo, Sri Lanka
- ▣ Teaching Hospital in Flacq, Mauritius
- ▣ Government Medical College and Hospital in Jamshedpur, Jharkhand
- ▣ AIIMS Hospital in Gorakhpur, Uttar Pradesh
- ▣ Residential Township for a large conglomerate in Nagothane, Maharashtra

Competitive Positioning

The business continues to power ahead in the domestic market as it secures high-value orders with stringent timelines. The business maintains a strong competitive edge through timely project execution, design-led construction and sustainability-driven solutions. By leveraging advanced construction technologies such as prefab and modular construction, 3D printing technology, along with a focus on high-growth segments like cleanrooms, data center, semiconductor fab and OSAT facilities, and zero-carbon-rated buildings, the B&F business continues to reinforce its market leadership.

Significant Initiatives

The business continues to make significant strides in sustainability, with several pioneering initiatives. Strengthening its commitment to the utilisation of clean energy during the construction phase, several projects in Maharashtra have partnered with the Maharashtra Electricity Board to operate entirely on renewable energy sources. These initiatives not only contribute to a substantial reduction in carbon emissions, but also set a benchmark for sustainable construction practices.



Data Center at Tashkent, Uzbekistan

In addition to the adoption of renewable energy at project sites, the business has agreements in place to procure clean power. These steps further reinforce the organisation's commitment to environmental responsibility and leadership in integrating sustainable energy solutions.

Beyond clean energy initiatives, the business has implemented innovative carbon reduction measures across various projects by transitioning from high-speed diesel-based equipment to electrically driven operations. This transformation includes:

- ▣ Variable Frequency Drive (VFD)-driven Concrete Pumps
- ▣ Electric Air Compressors
- ▣ Electric Skid Steer Loaders
- ▣ Electric Wheel Loaders
- ▣ Autonomous Electric Burrows

These advancements mark a significant shift towards the adoption of low-emission construction technologies, enhancing energy efficiency, reducing environmental impact and setting new industry standards for sustainable development. By integrating renewable energy solutions and electrification of construction equipment, the business is driving meaningful progress towards its carbon neutrality goals.

Risks and Concerns

The business faces several challenges that require close monitoring. A stable political scenario, vibrant business conditions and balanced fiscal policies are factors that strengthen investment sentiment and the project funding environment.

Private investments in real estate, energy, data centers and semiconductors have gained traction over the past couple of years. However, the long-term growth prospects of these sectors would depend on the continuation of stable macroeconomic conditions and a supportive policy framework. Any slowdown in infrastructure investments could impact growth prospects in the near to medium-term.

While the GCC and the broader APAC regions continue to offer opportunities in various infrastructure segments, regional economic stability and regulatory changes must be carefully navigated.

In an increasingly competitive environment, the need for continuous innovation and differentiation is paramount. Additionally, achieving premium pricing in a highly competitive market remains a challenge. Proactive cost management, resilient supply chain strategies, market adaptability, mobilising, training and retaining the workforce will be crucial in mitigating risks while sustaining growth.

Outlook

Health

India's healthcare sector is projected to grow at a CAGR of 8% from 2024 to 2032, driven by urbanisation and increased government spending (2.5% of GDP) on the sector. However, Tier II and Tier III cities, along with rural areas, still face a healthcare service shortage. To bridge this gap, the government plans to add 75,000 medical seats by FY 2030-31 and establish 200 daycare cancer centres in district hospitals. The Ayushman Bharat scheme, which now covers ~38% of



Bhogapuram International Airport, Visakhapatnam, Andhra Pradesh

the population, has led to enhanced accessibility for medical services. With growing demand for specialised hospitals, India's healthcare industry is set for a major transformation.

Public Spaces

Central Government initiatives such as the Target Olympic Podium Scheme (TOPS) and the improved scenario in the hospitality industry have allowed for increased traction in the Public Spaces business. Further, opportunities that may arise from the Central Vista Redevelopment plans, Mixed-Use Development schemes and sports development projects, signal a healthy outlook for this business.

Airports

Supportive government policies such as UDAN (*Ude Desh ka Aam Nagrik*) and the Air Cargo Policy are driving investments in airport projects across the country. The business also envisages an uptick in investments from the Central Government and private airport operators. Furthermore, the business is also looking at opportunities in the GCC countries and the broader APAC region.

Residential

The Residential business has seen a consistent y-o-y increase in project launches and property sales across the top seven cities in the country. At the same time, average inventory had reached an all-time low of 15 months at the end of 2023. Affordability, stable interest rates and the wealth effect are likely to contribute to the growth of this business in the near to medium-term.

Commercial Buildings

The Commercial Buildings business is well-positioned to capitalise on the growing demand for the niche market segments of semiconductor fab and OSAT facilities and data center construction in India and abroad, by leveraging its experience, expertise and strategic partnerships. The business continues to focus and serve its clients in the commercial and retail segments as well.

Factories

India's manufacturing sector is set for significant growth, driven by government initiatives like the PLI programme and state-specific industrial policies. Government initiatives are also driving investments in solar, EVs, electronics, batteries, automobiles and FMCG sectors, positioning India as a global manufacturing hub.

International

The business is selectively pursuing opportunities in Saudi Arabia, Oman and Sri Lanka. In Oman, the focus remains on hospitality and healthcare projects. The business has strengthened its footprint by securing the first AI-enabled and sustainable data center in the CIS region.



Ganga Expressway Project, Uttar Pradesh

Transportation Infrastructure

Overview

The Transportation Infrastructure business offers comprehensive turnkey design-and-build EPC solutions with single-point responsibility for delivering projects such as roads, runways, bridges, elevated corridors, railways, urban transit infrastructure and airports.

The business is divided into two Strategic Business Groups (SBGs), namely - Roads, Bridges & Formations (RBF) Business Group and Railways Business Group (RBG).

The **RBF Business Group** provides EPC design-and-build construction services. The RBF business group is further subdivided into the Roads & Runways (R&R) business unit, the Bridges business unit and the Formations & Structure (F&S) business unit.

The R&R business unit operates in the (a) road infrastructure sector viz. associated structures, cross-drainage, toll plaza, wayside amenities, etc.; (b) airport sector viz. construction of complete airside infrastructure - including runways, taxiways, aprons, airfield ground lighting, fuel hydrant systems - for both domestic and international airports (both greenfield and brownfield); and (c) design and construction solutions for elevated corridors in urban areas.

The Bridges business unit undertakes the construction of bridges by employing innovative and advanced bridge

construction techniques like incremental launching, segmental construction, full span, cable stay, precast and pre-stressed concrete as well as steel and concrete composite construction.

The F&S business unit provides construction services for railway civil works in dedicated freight corridors (DFC), high-speed rail (HSR) and urban railway network projects.

The **RBG Business Group** is further sub divided into the Mainline business unit (MLBU) and Metro business unit (MTBU). MLBU addresses EPC construction works in the domains of civil and trackwork, electrification, system integration including signalling and telecommunication for all mainline railway projects, dedicated freight corridors (DFCs) and rail links to ports, mining and power plant facilities. MTBU carries out EPC construction works that require ballastless trackwork, electrification and systems integration for mass rapid transit systems (MRTS), regional rapid transit systems (RRTS), semi-HSR and HSR projects in India and abroad.

To focus on the opportunities emerging in the ASEAN (Association of South East Asian Nations) region and the Middle East, a separate International Business Unit (IBU) has been formed. The scope of the IBU includes mainline works and integrated systems works for mass transit and HSR projects.

The business has Engineering Design Centres located in Mumbai, Faridabad and Chennai, a Competency Development Centre at Kancheepuram and a Workmen Training Centre at Ahmedabad.



Precast Slab Track for Delhi-Meerut RRTS – India's first semi-high-speed rail

Business Environment

Roads, Bridges & Formations

In FY 2024-25, capital expenditure of the National Highway Authority of India (NHAI) reached an all-time high of ₹ 2.5 lakh crore, reporting a strong growth of 21% over the previous year. India continued to witness significant momentum in road construction, driven by continued investments under the *Bharatmala Pariyojana* project and the National Infrastructure Pipeline (NIP). The government plans to further intensify efforts with an emphasis on green infrastructure, expanding multimodal logistics corridors and integrating smart technologies into highway management. New initiatives such as the *PM Gati Shakti* master plan will further streamline project execution, while the focus on public-private partnerships (PPP) is expected to unlock additional investments.

Railway Business Group

The railway sector has experienced significant growth over the past few years, driven by increased investments and financial backing from the government. The National Rail Plan 2030 offers numerous opportunities across various railway domains.

The Union Budget for FY 2025-26 included a record-breaking capital allocation of ₹ 2.65 lakh crore for the railways. The key areas targeted for investment are rolling stock, multi-tracking works, electrification, passenger amenities, high-speed rail and DFCs. The government is also exploring

private investments into rolling stock manufacturing and operation and maintenance services.

The government's emphasis on modernising and expanding railway infrastructure is evident through several key initiatives. These include the introduction of HSR and semi-HSR corridors, RRTS, suburban rail systems, first and last-mile connectivity projects, station modernisation, enhanced implementation of the Automatic Train Protection System 'KAVACH,' and the deployment of LTE-R (Long Term Evolution for Railways).

Following directives from the Railway Board, zonal railways have gradually adopted the EPC delivery model. Building on the successful commissioning of the DFC, some railway zones are in the process of transitioning to large-scale EPC packages instead of smaller contracts.

The acceptance of advanced transport systems, such as RRTS and HSR, continues to grow, as demonstrated by the recent commissioning of the Delhi-Meerut RRTS corridor. Furthermore, there is a significant pipeline of projects across both the mainline and metro segments that are expected to be bid out in the near term.

Major Achievements

Major Orders Won:

- ▢ Navi Mumbai Airport Influence Notified Area (NAINA) development from City and Industrial Development Corporation (CIDCO), Maharashtra. The project will have 4 approach roads of 13.28 km.



Inaugural landing of commercial aircraft at Navi Mumbai International Airport

- ▣ 6-lane Chennai Peripheral Ring Road - Pkg 3 (11 km) from Tamil Nadu Road Infrastructure Development Corporation (TNRIDC), Tamil Nadu.
- ▣ Civil, Track and OHE Package: New Paharpur – New Kastha | 3rd & 4th Line (46 rkm) for DFCC and IR | EPC.

Projects Completed:

The business has completed / commissioned the following projects:

- ▣ Meerut-Aligarh-Ghaziabad Road Project (MAGRP)
- ▣ Mej-Indergarh Expressway Project (MIEP)
- ▣ Mukkola-Kanyakumari Road Project (MKRP)
- ▣ MMRC 10C Track: Commercial operations commenced on the entire 24 tkm stretch from Aarey to BKC on October 7, 2024, TOC received on March 12, 2025
- ▣ RRTS Delhi-Meerut Track: Multiple priority stretches inaugurated. Overall, 108 tkm route from New Ashok Nagar (Delhi) to Meerut South has commenced commercial operations

Significant Initiatives

- ▣ Setting up of mechanised, automated precast moulds for bridge segment casting in precasting yards
- ▣ Deployment of computer vision for monitoring of cycle time of Full Span and U Girder precasting
- ▣ Mould Cleaning Robot - Jointly developed with the L&T Product Development Centre, this magnetic tracked robot is designed to clean steel concrete moulds. It functions as

a platform for interchangeable attachments, including pressure nozzles, paint sprayers and NDT tools

- ▣ To achieve water neutrality, wastewater recycling through modular STPs and ETPs was introduced in the MAHSR T3 Track Slab Manufacturing Facility, treating over 3,900 KL of water in FY 2024-25
- ▣ To address the challenges of a diverse set of project categories each with unique challenges, a unified Audit Management System — QARS 2.0 — has been introduced. This system incorporates 20 railway-specific audit parameters and has been successfully implemented

Outlook

Roads, Bridges & Formations

Under the Union Budget 2025-26, the budgetary allocation for the Ministry of Road Transport and Highways (MoRTH) is ₹ 2.87 lakh crore, an annual increase of 2.4% on a y-o-y basis.

The Build-Operate-Transfer (BOT) model by the government offers contractors long-term revenue opportunities through the operation and maintenance phases of an infrastructure project. Meanwhile, the business continues to focus on opportunities in this segment by partnering with BOT concessionaires for the EPC scope of the project.

Railway Business Group

As envisaged under the National Infrastructure Pipeline, the focus of railway investments is on improving track capacity, enhancing freight efficiency, increasing train speeds, enhancing safety and ensuring better connectivity.



Mumbai-Ahmedabad High-Speed Rail Project – Package 6

The Union Budget for FY 2025-26 allocated a record ₹ 2.65 lakh crore to the railway sector. The focus of the outlay is expected to be on projects aimed at capacity augmentation and traffic decongestion. The next wave of technological improvements includes upgrading electrification to 2x25kV from the current 1x25kV on trunk routes.

There has been a strong focus on the development of semi-HSR corridors, with track and systems packages worth ₹ 25,000 crore expected to be finalised over the next few years. The National Capital Region Transport Corporation (NCRTC) is expected to issue tenders for civil packages and system contracts by the end of the year, as part of the ongoing development of the four RRTS corridors.

There is a continued thrust on building new and expanding the existing Metro and MRTS to facilitate ease of movement and reduce carbon footprint. System orders are expected to be finalised across four major metro cities and several Tier-2 cities.

International Front

As part of L&T's growth strategy, the RBG is focused on expanding its operational footprint across three key regions: Southeast Asia, Middle East and North & East Africa. In addition to these markets, the business continues to strengthen its presence in South Asia.

The global railway systems market is poised for significant growth, driven by increasing investments in HSR, Metro, Light Rail Transit (LRT) and mainline corridors.

To effectively address these opportunities and strengthen its presence in key geographies, L&T is in the process of forming alliances with global EPC companies, technology partners and original equipment manufacturers (OEMs).

Heavy Civil Infrastructure

Overview

The Heavy Civil Infrastructure business is an EPC market leader in the core civil infrastructure segments that are crucial to the country's sustainable economic growth and development. The business segments include:

- Urban Transit Infrastructure consisting of Metros, Semi & High-Speed Rail (HSR) and Urban Tunnels
- Hydel & Tunnels
- Nuclear
- Ports & Harbours
- Defence Infrastructure

The business has a robust domestic presence and undertakes large-scale, complex projects, offering turnkey solutions tailored to meet customer's requirements.

The business derives a competitive edge due to its dedicated in-house design and technical capabilities, competency cells, fabrication facilities, specialised training centres and strong resource base consisting of a skilled workforce, talented pool of employees and a large fleet of advanced construction equipment.



Chennai Metro Rail's Phase 2, C4-ECV-01 Package, Tamil Nadu

Urban Transit: As a frontrunner in augmenting urban transit infrastructure in India, the segment is currently participating in the construction of various metro rail packages - both elevated and underground - in Mumbai, Bengaluru, Chennai, Kolkata, Patna, Agra and New Delhi.

This segment is currently executing multiple packages in India's first HSR corridor connecting Mumbai to Ahmedabad. It has deployed the most advanced high-end construction techniques for the construction of Full Span Launching girders. With a view to promote the *Aatmanirbhar Bharat* initiative of Government of India (GoI), in-house fabricated equipment like Straddle Carrier, Launching Girders, Girder Transporter are being used in the construction of this prestigious project.

Hydel & Tunnels: This segment offers comprehensive turnkey construction solutions for hydroelectric dam projects, barrages, pumped storage plants and complex irrigation projects. The business is in the process of executing projects in Madhya Pradesh, Assam, Arunachal Pradesh, Uttarakhand, Jammu & Kashmir, Rajasthan and Sikkim.

Nuclear: This segment undertakes civil construction works for nuclear power plants. It has expertise in the construction of Pressurised Heavy Water Reactors (PHWR), Light Water Reactors (LWR) and Natural Draft Cooling Towers (NDCT).

Ports & Harbours: This segment has extensive expertise in constructing greenfield ports, shipyard structures and seawater intake systems along the country's coastline. It specialises in offering comprehensive construction solutions for various marine infrastructure elements that include

breakwaters, berths, jetties, wharfs, dry docks and shore protection structures. Currently, the business has presence in Tamil Nadu, Kerala, Andhra Pradesh and Maharashtra.

Defence Infrastructure: This segment offers single-point EPC solutions from concept to commissioning, for various defence civil establishment infrastructure facilities in India.

L&T GeoStructure Private Limited, a wholly owned subsidiary, is a pioneer in the ground engineering space, and is engaged in foundation and ground improvement related projects. It has a strong, professional and specialised team with knowledge of design, equipment and methods to execute and supervise sophisticated foundation works. The business has expertise in deep piling and diaphragm walls, multi-cellular intake wells for river-linking, marine terminals with berths, jetties and deep cut-off walls.

Business Environment

Urban Transit

India's urban landscape is undergoing a rapid transformation, driven by the need to expand and modernise infrastructure to accommodate a rapidly growing population. To this end, the development of efficient urban infrastructure – particularly mass transit systems – is crucial.

India's metro rail development has been remarkable in recent years and has transformed urban mobility across the country. Covering over 1,000 km across 11 states and 23 cities, millions of people rely on metros for quick, easy and affordable travel. India has now become home to the



1,000 MW Pakal Dul Hydro Electric Project, Jammu & Kashmir

third-largest metro network in the world. India's metro rail systems are not only enhancing urban mobility but also contributing to environmental sustainability. There are extensive plans for further expansion of metros with an additional 1,032 km of rail networks having been approved, which will extend the reach to 26 cities.

India has been making significant strides in developing urban transit tunnels to improve connectivity and reduce traffic congestion. These projects are part of India's broader strategy to modernise its infrastructure and support sustainable urban development.

Hydel

India's commitment at COP26 was to establish a non-fossil fuel-based power generation capacity of 500 GW by 2030. To this end, the government has been taking steps to increase investments in offshore wind, pumped storage, hydel power and nuclear power sectors. Pumped Storage Plant (PSP) projects are regarded as a priority among all energy storage systems to support the attainment of this goal.

The GoI has introduced a new framework and streamlined the processes to expedite the development of PSPs. This framework aims to accelerate the growth of India's renewable energy capacity. Key aspects of this framework include streamlined approvals, improved site allocation processes and incentives for private sector participation.

Nuclear

Under the *Viksit Bharat* initiative, India has set an ambitious target to achieve 100 GW of nuclear power capacity by 2047. This goal is part of India's long-term energy transition strategy to ensure energy reliability and reduce dependency on fossil fuels.

To support this target, the government has introduced the Nuclear Energy Mission, which includes significant investments in R&D, particularly in Small Modular Reactors (SMRs). The Union Budget 2025-26 has allocated ₹ 20,000 crore for this initiative, aiming to develop at least five indigenously designed and operational SMRs by 2033.

The government is also focusing on enhancing domestic nuclear capabilities and promoting private sector participation through policy interventions and infrastructure investments.

Ports & Harbours

Sagarmala, a flagship programme of the Ministry of Ports, Shipping and Waterways, aims to promote port-led development in the country. According to the ministry, as many as 800 projects have been identified as a part of the programme. Port modernisation, new port development and port connectivity enhancement are expected to result in increased capacity and world-class infrastructure at Indian ports. The Union Budget for FY 2025-26 announced an allocation of ₹ 30,000 crore for port modernisation and expansion, Green Ports initiative and the development of new ports.



Natural Draft Cooling Tower, Rajasthan Atomic Power Plant 7 & 8

Defence

The government is focusing on building new capacities and upgrading existing defence infrastructure through an increased budget allocation to the Ministry of Defence. This will lead to opportunities in various defence infrastructure projects.

International

The business is exploring opportunities in Middle East and SAARC (South Asian Association for Regional Cooperation) with prospects in the Urban Transit, Defence and Ports & Harbours businesses.

Major Achievements

Major Orders Won:

- ▣ Nuclear Island (NI) Mechanical Package for Gorakhpur Haryana Anu Vidhyuth Pariyojana (GHAVP 1&2) Project: This involves EPC, testing and commissioning of primary piping works, nuclear ventilation, common services and plant water package from Nuclear Power Corporation of India Limited (NPCIL).
- ▣ Shahpur Pumped Storage Project (PSP): This involves constructing an Upper Dam (to form the upper reservoir), Lower Dam (to form the lower reservoir), Intake Structure with an Approach Channel, Steel Lined Buried Penstock / Pressure Shaft (vertical and horizontal), Surface Powerhouse, Tailrace Outlet Structure, Tailrace Channel, etc. from a leading Renewable Energy solutions company in India.

- ▣ Agra Metro Package Phase 1, Line-2: This involves the design and construction of a vital 15.09 km elevated viaduct that will connect Agra Cantonment to Kalindi Vihar through 14 elevated stations and another 2.61 km depot connecting line from Sadar Bazar to PAC depot.
- ▣ Teesta Dam 3: Scope of work includes construction of coffer dam, diversion structures, concrete gravity dam for 1200 MW (6 X 200 MW) Teesta III Hydro Electric Project at Mangan, Sikkim India from a leading Renewable Energy solutions company in India.

Projects Inaugurated:

- ▣ Thane Creek Bridge III, North Side Bridge inaugurated on January 26, 2025
- ▣ Riyadh Metro inaugurated on November 27, 2024
- ▣ Mumbai Metro Line 3 Package 7 inaugurated on October 5, 2024

Other key achievements:

- ▣ Mumbai-Ahmedabad High-Speed Rail MAHSR C4 has completed 196 km of super structure build
- ▣ Successfully erected the IC dome liner (270 MT) of KKNPP Unit 4 and commissioned unit 7 of RAPP NDCT
- ▣ Chennai Metro CMRL RT 01 Package erected 52 numbers U-Girder erection in a single month
- ▣ Pakal Dul HEP HRT-TBM package team has achieved a new record achieving 46.596 RM of tunneling in a single day and 628.652 RM of tunneling in December 2024



380 kV Double Circuit Overhead Transmission Line (OHTL) between Arar and Rafha, Kingdom of Saudi Arabia

Outlook

India is expected to spend nearly ₹ 143 lakh crore on infrastructure up to 2030 with a focus on urban transit, renewable energy and ports. The upcoming phase of infrastructure development is set to witness an increase in the average project size and a notable increase in the number of mega-scale projects.

To this end, the government is looking to encourage private and foreign investment through various initiatives such as liberalised FDI policy, fiscal incentives and measures such as *PM Gati Shakti* and a National Single Window System to improve the ease of doing business.

Faced with rapid urbanisation, the government is considering the implementation of Mass Transit Systems such as Metro / Metro Lite / Metro Neo / Personal Rapid Transit System in Tier 1 and Tier 2 cities. These initiatives are part of the green mobility drive to reduce the country's carbon footprint in the fight against climate change.

With a strong push towards green energy initiatives, including supportive policies and fiscal incentives, this business has numerous opportunities in the hydro, nuclear and pumped storage sectors to contribute meaningfully to India's sustainable energy transition.

Power Transmission & Distribution

Overview

The Power Transmission & Distribution business vertical is a major EPC player, providing technology-driven, end-to-end solutions for enabling access to clean, reliable electricity. It offers integrated EPC services and related digital energy solutions, starting from the establishment of smart and efficient transmission and distribution (T&D) networks to last-mile electrification. It serves utilities, renewable energy developers, industrial and infrastructure customers in 30 countries across the SAARC, ASEAN, the Middle East, Africa, North America and CIS regions.

The business is broadly organised into T&D and Digital Energy Solutions (DES) businesses.

The **Transmission & Distribution** business caters to various T&D utilities and developers, along with bulk power supply consumers like metros, airports, etc. in creating the following infrastructure:

Substation: Turnkey solutions for Extra-High Voltage (EHV) air-insulated / gas-insulated substations up to 1,200 kV, Flexible AC Transmission Systems (FACTS) devices such as Static Synchronous Compensator (STATCOMs) and Static VAR Compensator (SVCs), Digital Substation related solutions and EHV cable systems.



300 MVar Zakher STATCOM, UAE

Transmission Line: Complete EPC solutions for overhead transmission lines. It is well integrated with the digitally driven, sustainability-focussed tower manufacturing units, with a combined capacity to produce more than 1 lakh tonnes of tower components per annum. The Kancheepuram manufacturing facility also houses a state-of-the-art Tower Testing and Research Station, which provides its design and testing services to clientele across 33 countries.

Power Distribution: A range of EPC services related to urban/rural electrification, augmenting, reforming and strengthening of high voltage and low voltage distribution networks, power quality improvement works and advanced distribution management solutions.

Geographically the major operating regions are India, Saudi Arabia, UAE and the rest of the Middle East. The business also has strong presence in Africa, ASEAN and the CIS regions.

The business has earned a strong reputation in the Middle East among the utilities and energy companies in Saudi Arabia, UAE, Oman, Qatar, Kuwait and Bahrain, having executed several marquee projects. It enjoys an enviable track record and garners a significant share of T&D projects awarded every year.

Larsen & Toubro Saudi Arabia LLC (LTSA), a wholly owned subsidiary, provides engineering, construction and contracting services in the sphere of T&D in Saudi Arabia.

In the Africa region, the business has executed landmark projects in Algeria, Egypt, Morocco, Kenya, Ethiopia,

Tanzania, Uganda, Botswana, Mozambique and Malawi. It has made further inroads into Western and Northern Africa with ongoing projects in Guinea, Cameroon and Tunisia.

In the ASEAN region, L&T is an established T&D player, holding a portfolio of prestigious projects spread across several countries.

The Digital Energy Solutions arm provides electricity related consulting and digital solutions globally through its unique platform and a multitude of software products and solutions. Its cutting-edge offerings include hybrid energy management systems, control room and substation automation solutions, grid edge interconnections and power system cyber security needs, amongst other solutions. Driven by powerful algorithms and simulations, the solutions offered by this business unit enable customers across India, the Middle East and the USA to build resilient future-ready systems.

The focus of the PT&D business vertical is to create a path for a transition to sources of clean energy in India and abroad, while enabling the customers/prosumers with the highest standards of reliability, availability and efficiency of power T&D networks.

Business Environment

The pursuit of grid strengthening in the Middle East countries, the pace of renewable capacity addition and projected demand growth have provided ample opportunities for growth in the substation and transmission line businesses.



A Transposition Tower along the 765 kV Fatehgarh–Bhadla Transmission Line in Rajasthan

In India, certain trendsetting orders related to grid digitalisation have been awarded. This is expected to pave the way for modernisation of distribution and for better management and control of the electricity network as renewable energy penetration increases.

The revival of order finalisation of 765 kV transmission line packages associated with emergent renewable energy zones has provided further opportunities in India.

Major Achievements

Major Orders Won:

- ▣ 5 packages of 765 kV transmission lines and 2 numbers of 765 kV substations for energy transfer from RE Zones in Western India to multiple load dispatch centres
- ▣ ± 800 kV Bipole High Voltage Direct Current (HVDC) transmission link in Western India
- ▣ Advanced Distribution Management System in West Bengal
- ▣ Upgrading Energy Management System in Southern Region load dispatch centre in India
- ▣ 2 packages of ± 500 kV Bipole HVDC transmission lines in Saudi Arabia for regional interconnections
- ▣ 4 numbers of 380 kV substations and 5 transmission line packages for grid expansion in Saudi Arabia
- ▣ 14 substations of various voltage levels in UAE and 3 substations in Qatar
- ▣ 400 kV substations and a transmission line in Kuwait
- ▣ 3 packages of 400 kV transmission lines and associated grid stations in Oman

- ▣ Setting up of a new National System Control Centre in Kenya which will serve as a transmission hub for facilitating integration of variable RE and enabling merit order power dispatch

Projects Completed and Commissioned:

- ▣ Tunnel electrical and mechanical works packages associated with Udhampur Baramulla Srinagar Rail Link project, Jammu & Kashmir
- ▣ 765 kV transmission link in Rajasthan
- ▣ 400 kV gas-insulated substations in Andhra Pradesh and Rajasthan
- ▣ 2 substations in Nepal
- ▣ 2 transmission line projects in Bangladesh
- ▣ 5 substations and 312 km of overhead transmission lines in Saudi Arabia
- ▣ 18 substations and 168 km of underground cables across UAE, Kuwait and Qatar including STATCOM and offshore substation projects
- ▣ 3 substations and 117 ckm of transmission lines in Africa
- ▣ 4 substations in ASEAN region

Significant Initiatives

- ▣ Launched Liquefied Natural Gas (LNG)-powered truck for transporting transmission line tower parts from Kancheepuram factory to project sites as a supply chain decarbonisation initiative.
- ▣ Developed a unique software-defined Phasor Data Concentrator and Substation Gateway which is a



400/220 kV Gas Insulated Substation at Mylasandra near Electronic City in Bengaluru, Karnataka

remarkable milestone in digital management and control of vast grid networks.

Outlook

International

The multifold expansion of transmission grid infrastructure in the Middle East region is expected to continue as several in-country and country-to-country interconnections are planned. The need for grid strengthening to sustain capacity addition is also well understood across these countries. HVDC corridors and Flexible AC Transmission System (FACTS) components are also being added to the network.

In addition, ancillary opportunities are expected to open up as substantial investments take place in the real estate, industrial and technology projects in the GCC region that create new sources of electricity demand. For instance, Saudi Arabia has embarked on the creation of a dozen vibrant urban downtowns while several housing projects and theme parks are being developed in other GCC countries. In the artificial intelligence mission, electricity generation capacity and a strong grid are considered as critical enablers.

Even as projects in the renewable space come onstream, the revival of optimism in conventional areas with carbon reduction strategies may offer opportunities.

Selective pursuit in specific countries in Africa and ASEAN - especially in renewables-linked projects - is expected to fuel growth in the near future.

Domestic

The domestic opportunities are expected to regain momentum with inroads into select Tariff Based Competitive Bidding (TBCB) projects, digital solutions and distribution projects. 765 kV transmission line and substation opportunities, primarily for the purpose of renewable energy evacuation, are expected to provide a stable order inflow in the medium-term. Further, opportunities in HVDC corridors and metro rail projects are also expected to bolster prospects. The next phase of distribution modernisation is expected to gain momentum and should provide further opportunities from select distribution companies (DISCOMs).

The impact on supply chain due to the unfolding 'trade war' scenario is a risk factor. Strategies to navigate challenges with respect to fluctuating commodity prices, increasing localisation requirements in certain geographies and equipment delivery constraints are in place. Further, strengthening of teams to enable timely execution of the fast-track jobs in early stages is being worked upon.

A strong order book and visibility of prospects offers a constructive outlook. Armed with core engineering skills and in-house software development capabilities, the ability to provide a range of advanced physical and digital solutions including advanced network-wide energy management systems, intelligent power distribution systems and dynamic reactive power compensation, at scale, gives the PT&D business an edge over competition. Further, the business continues to focus on managing its working capital efficiently which should enable further improvement in the return ratios in the near to medium-term.



2 GWp Ar Rass 2 PV Solar project in Kingdom of Saudi Arabia

Renewables

Overview

The Renewables business vertical is a single-stop EPC service provider for GW-scale solar PV, energy storage, microgrid and hybrid renewable projects. L&T is amongst a few players with experience and expertise in handling different module technologies, module mounting structures, contour-based solutions for challenging terrains and storage types. It serves renewable energy developers, utilities, industrial, and infrastructure customers across India, Middle East, the SAARC, ASEAN, Africa and CIS regions.

The business group has accumulated in-depth engineering and construction know-how to execute a vast range of renewable projects, be it hybrid, floating or linear, with best-suited technologies for terrain type and tracking. The round-the-clock (RTC) renewable energy required by emerging load centres such as data centers and green hydrogen plants can be effectively provided by the business, with its wide-ranging capabilities in solar PV plants, battery energy storage systems (BESS), energy management systems / SCADA, wind balance of plant, and grid elements.

The container integration facility at Kancheepuram augments the capabilities of the business with an annual capacity to integrate ~1.2 GWh of BESS with associated intelligent management and control system.

Business Environment

A vibrant renewable energy market in India, Middle East and CIS provides ample opportunities for growth. These opportunities come with significantly higher package sizes, thereby aiding effective resource utilisation and facilitating volume growth.

Renewable energy projects in India face challenges related to land acquisition, inter-state transmission system (ISTS) connectivity and power evacuation, intense competition from smaller EPC players, e-reverse auctions, in-house EPC execution by most private developers, and policy uncertainties. The business focuses on select opportunities from public sector undertakings (PSUs), state utilities and specialised projects such as floating solar power projects.

Major Achievements

Major Orders Won:

- ▣ 2.5 GWp solar PV and 10 GWh BESS EPC order in UAE
- ▣ 1.2 GWp solar PV and 1 GWh BESS EPC order in CIS
- ▣ 3.5 GWp solar PV plant EPC order in KSA
- ▣ 0.7 GWp solar PV, 45 MWh BESS and 156 MW floating solar plants in India

Projects Completed and Commissioned:

- ▣ Completed - 3.7 GWp solar PV plants in KSA
- ▣ Commissioned
 - 0.7 GWp solar PV plants + 57 MWh BESS across India
 - 1 GWp of solar PV plants in UAE
 - 2.6 GWp of solar PV plants in KSA



112.5 MW Solar PV for WBSEDCL, West Bengal

Significant Initiatives

- ▣ Established a new wind vertical in response to the prospects in wind projects
- ▣ Enhanced capacity of container integration facility at Kancheepuram through technology tie-up and localisation approach for BESS Liquid Cooling Container Integration from 400 MWh to 1.2 GWh per annum

Outlook

Renewable electricity has emerged as the preferred source of energy in varied applications and industries. Significant investments for enhancing renewable energy capacity are being witnessed in both developed and emerging economies.

Novel solutions involving a spectrum of renewable technologies, including energy storage and wind, are being integrated for solar generation. This expansion of renewable energy production will go hand in hand with a multi-fold expansion of the transmission grid infrastructure.

The GCC countries have set ambitious renewable energy plans for 2030, which are backed by action on the ground. Besides diversification of fuel mix, renewable energy for green hydrogen is another major driver. Our reputation and relationships with the major developers in the region are expected to fuel the growth of the business in the other regions as well.

The Renewables vertical will look to focus on certain countries in Africa and ASEAN where it can leverage its proven track record, established relationships with various stakeholders and ability to access the project finance market to pursue select opportunities arising from just transition initiatives to grid interconnection requirements and renewable proliferation.

In India, the manufacturing capacity of solar PV cells is expected to increase substantially in the coming years. In this regard, the Ministry of New and Renewable Energy has recently amended the Approved List of Models and Manufacturers (ALMM) Order for implementation of ALMM for solar PV cells. It is crucial for India to achieve self-sufficiency in PV cell manufacturing to meet the ambitious RE targets by 2030.

The influx of orders coupled with ramped-up execution, automation and mechanisation of the execution processes and efficient working capital management provides strong ground for improved return ratios in the near to medium-term.



HPCL Rajasthan Refinery Limited (HRRL) Water Block Package

Water & Effluent Treatment

Overview

The Water & Effluent Treatment business delivers end-to-end water management solutions for both government and private sector clients. The business expertise covers the entire water life-cycle, including potable water treatment, storage and conveyance, wastewater management, industrial water solutions, irrigation, desalination and smart water infrastructure. Through its in-house Water Technology Centre, the business continuously integrates cutting-edge technological advancements and world-class processes to enhance efficiency and innovation in water management.

With a strong footprint across India and operations spanning five international markets, the business delivers large-scale, high-impact projects aimed at improving clean water access, optimising treatment processes and modernising distribution networks. Adhering to rigorous quality and safety standards, the business has earned a recognition for excellence, sustainability and technological innovation. As it expands into high-growth sectors, the business remains committed to operational efficiency and ESG principles, further solidifying its position as a trusted leader in the water management industry.

The WET business is structured into three verticals:

- ▣ Water & Wastewater
- ▣ Irrigation, Industrial & Infrastructure
- ▣ Water International

The **Water & Wastewater** business vertical delivers comprehensive water solutions for the municipal and rural water sectors. In the potable water domain, it manages projects end-to-end covering sourcing, treatment, transmission, storage and distribution. In the municipal wastewater segment, project bids cover collection and conveyance of sewage, construction of pumping stations and advanced wastewater treatment plants, including high-standard sludge treatment and power generation.

The **Irrigation, Industrial & Infrastructure** business vertical caters to the irrigation and industrial sectors by offering a diverse range of water solutions, including mega and micro irrigation systems, industrial effluent treatment, plant water systems and water infrastructure for smart cities. This vertical also undertakes desalination projects in India and abroad to support sustainable water management.

The **Water International** business focusses on providing complete water solutions in markets in Middle East and East Africa.

Business Environment

Government policies are set to reshape India's water management landscape, with initiatives from both the central and state governments playing a crucial role in driving demand across potable water, wastewater treatment and irrigation segments. The union budget underscores a strong commitment to India's water future through measures such as extending the *Jal Jeevan Mission* until 2028, targeting investments to bolster irrigation



Water Treatment Plant (WTP) in Buxwaha is part of the Buxwaha Multi Village Rural Water Supply Scheme (MVRWSS), Madhya Pradesh

by launching river interlinking programmes, large-scale irrigation projects, and accelerated upgrades in urban water systems under AMRUT 2.0.

The business faces industry-specific challenges, including intense competition from established players and new entrants, workforce shortages and cost escalations. To address these challenges, the business capitalises on the in-house Water Technology Centre to provide for low-cost innovative solutions that are sustainable and future-ready.

The Middle East saw robust growth driven by extensive investments in desalination projects and the adoption of smart water technologies, as governments and private entities focus on addressing water scarcity and enhancing water security. Strategic partnerships and large-scale initiatives emerged to modernise infrastructure and improve the efficiency of water distribution systems amidst heightened environmental challenges.

Major Achievements

Major Orders Won:

- The business bagged multiple orders in India and abroad:
- ▣ Ras Mohaisen Desalination Plant, KSA – 300 MLD capacity
 - ▣ Amravati Capital City Development, Zone 7, Andhra Pradesh – Utility Network
 - ▣ Dholpur Water Supply Scheme, Rajasthan – 190 km pipeline network
 - ▣ Pirana STP, Gujarat – 424 MLD Sewage Treatment Plant

Major Projects Commissioned:

More than two million people benefitted with the commissioning of 10 projects during FY 2024-25. Some of the major projects commissioned during the year are:

- ▣ Athikadavu – Avinashi LIS, Tamil Nadu
- ▣ Narmada Kshipra Lift Irrigation, Madhya Pradesh
- ▣ Water Transmission Project in Ad Dakhiliyah, Oman
- ▣ HPCL Rajasthan Refinery Ltd. (HRRL) Water Block Package, Gujarat
- ▣ Buxwaha Water Supply Scheme, Madhya Pradesh
- ▣ Tapi Lift Irrigation Scheme, Gujarat
- ▣ Rajkot Smart City, Gujarat

Significant Initiatives

Multiple initiatives were undertaken with a focus on operational efficiency, technological advancements, financial prudence and market expansion to strengthen business resilience, address key challenges and capitalise on future growth opportunities.

- ▣ Real-time risk monitoring and implementation of control measures are being implemented across project sites along with operational control procedures across risk profiles to achieve operational excellence and safety awareness.



Athikadavu Avinashi Lift Irrigation Scheme, Tamil Nadu

- ▣ An in-house unit has been constructed in Madhya Pradesh for micro-irrigation projects where a technology driven system is being developed for applications in Large Water Management Systems (LWMS). This system optimises water delivery to crops, reduces wastage and increases agricultural yield.
- ▣ Timely completion of project and smooth handover to O&M customers are crucial activities within the project life-cycle. The business has formed a 'Commissioning Cell' to work closely with project teams for faster completion of jobs.

Outlook

The business predominantly operates as a B2G vertical with dependency on Central and State policies, with ongoing initiatives playing a pivotal role in shaping business opportunities. India's water and wastewater sector is poised to grow at a CAGR of 12%, targeting USD 17.9 billion by FY 2028-29, primarily driven by the need for improved wastewater treatment and water security. Government-led initiatives, of establishing over 500 wastewater treatment plants by 2027 and the extension of the Jal Jeevan Mission programme until 2028, present significant growth prospects in both potable as well as treated water infrastructure. Additionally, large-scale river interlinking projects in Haryana, Rajasthan and Madhya Pradesh, along with irrigation expansion in Karnataka and Bihar, continue to drive sectoral investments.

Urban water infrastructure is witnessing substantial upgrades, with major cities such as Delhi, Chennai, Bengaluru and Pune developing modern sewage treatment plants, while Maharashtra advances on a desalination project in Mumbai. States like Punjab and Karnataka are also strengthening wastewater management and urban water systems under AMRUT 2.0, enhancing the overall demand for advanced water solutions.

In the Middle East and Africa, countries are increasingly investing in desalination and water distribution projects to meet the rising demand for clean water. Strategic partnerships and regional economic growth initiatives will be crucial in leveraging these opportunities.

Going forward, the business will focus on expanding opportunities in irrigation, wastewater treatment, desalination and urban water management while strengthening its international footprint.

While the industry presents strong growth potential, challenges such as escalating operational costs, competition from new entrants and commodity price volatility persist. The business remains focused on technological innovation and process efficiencies to enhance competitiveness and sustain market leadership. Robust strategic planning and risk management will be the key in navigating the evolving market dynamics and ensuring long-term business resilience.



Freight Handling Facility for Etihad Rail, UAE

Minerals & Metals

Overview

The Minerals & Metals business offers complete EPC solutions for the mineral and metal sectors across the globe. The business undertakes end-to-end engineering, procurement, manufacturing, supply, construction, erection and commissioning of projects covering the complete spectrum from mineral processing to finished metals.

The business also offers comprehensive product solutions with an array of customised mineral crushing equipment and plants for varied applications; surface miners; material handling equipment; high-speed railway construction equipment; steel plant machinery; port and shipyard cranes, and other custom-made critical equipment and complex assemblies catering to core industrial sectors including mining, steel, ports, fertilisers, cement, chemical plants, etc.

The complete range of product solutions is backed by six decades of experience and knowledge, in-house design resources, state-of-the-art manufacturing capabilities and after-sales product support with value-added and cost-effective services to ensure higher uptime.

M&M has manufacturing centres located at Kansbahal, Odisha and Kancheepuram, Tamil Nadu. The Kansbahal centre is equipped with advanced engineering resources, computer-aided engineering and simulation facilities for its operations. This centre is also certified ISO 9001:2008. The business's Engineering Design & Research Centres (EDRCs) are in Kolkata, Chennai and Mumbai.

Business Environment

Domestic Business

India remains a dominant player in the iron and steel industry as world's second largest crude steel producer. The growth in domestic steel consumption continues to be robust, driven by key sectors such as infrastructure, automotive, construction and consumer goods. In FY 2024-25, crude steel production is expected to exceed 145 million tonne (MT), while domestic steel consumption is expected to reach around 135 MT.

The government's ongoing focus on infrastructure development continues to play a pivotal role in driving demand for steel and other metals. These policies, coupled with favourable market conditions, have helped the metal industry improve production volumes and achieve stronger realisations.



Launching Girder manufactured by Minerals & Metals - Product Business Unit, in action at the High-Speed Rail Project in Anand, Gujarat

Recently, India has made significant discoveries of lithium reserves, particularly in Jammu & Kashmir and Rajasthan. Besides its immense use and relevance in future-focused industries like EVs and energy storage, discovery of this critical resource can reduce India's dependence on imports and support transition to green mobility.

International Business

Planned investments in the metallurgy sector in the Middle East are a key focus area for the M&M business. The region enjoys the advantages of land availability, low energy costs, high solar irradiation potential and proximity to the European market. In addition, the continuous push to diversify the economy has given a much-needed push to the minerals industry for value creation within the GCC region.

GCC countries have a planned roadmap to tap the extensive minerals resources within their respective territories. Apart from minerals reserves within the region, GCC countries are working to secure their supply chain for raw materials for the domestic industry in general and new age and transition metals in particular.

Opportunities in setting up process plants for iron and steel, aluminum, gold, phosphate, copper and new age metals in the region are extensive. These opportunities allow for a higher degree of visibility for the business in the near to medium-term.

Product Business

The outlook for the product business, driven by continued investments in infrastructure, urbanisation and industrial expansion, remains positive. The government's push for large-scale infrastructure projects, including smart cities, roads, highways and ports, presents significant opportunities for growth in the domestic market.

This business is actively pursuing opportunities in select international markets and has secured its first order from a European client for a stacker reclaimer. The business has also received repeat orders for surface miners from Africa.

The growth of core products such as crushing systems, surface miners, material handling equipment, port and shipyard cranes and steel plant equipment is primarily driven by higher investments in the following industrial sectors:

Cement Sector: The cement segment in India is expected to grow at a CAGR of 6% to 7% over the next five years, with significant investments in greenfield and brownfield projects. Major domestic players are undertaking ambitious expansion plans to capitalise on this growth potential.

The business unit witnessed large order inflows from the cement sector in FY 2024-25. The strong order pipeline is expected to continue on the back of the current momentum in the infrastructure economy. It is estimated that the Indian cement industry is likely to add ~ 40-45 MT capacity in FY 2025-26.



Blast Furnace for JSW Dolvi, Maharashtra

Mining, Power & Steel Sectors: The surge in steel plant capacity, along with the continued growth in coal and iron ore production to meet rising demand in the steel and power sectors, has significantly boosted business opportunities for a range of business's equipment, including coal crushers, surface miners, stacker reclaimers and wagon tipplers.

Backed by the National Steel Policy targeting 300 MTPA capacity by 2030, the sector is witnessing significant investments by major players. Additionally, the Government of India has envisaged 80 GW coal-based thermal power capacity addition by 2030 with major public and private players driving expansion.

The year also witnessed increased order inflow for surface miners, apron feeders, stacker reclaimers, wagon tipplers, coal crushing equipment from the above sectors. The growth momentum is expected to continue in the coming years in line with expansion plans of mining, power and steel enterprises.

Construction Sector: The growth in the infrastructure space is the primary demand driver for aggregate crushing solutions equipment. With an increased budget allocation for roads and highway development in FY 2025-26, the sector is poised for significant growth. Following the successful supply of new generation high-capacity aggregate crushing solutions, FY 2025-26 presents promising opportunities, driven by the momentum in infrastructure development.

Port Sector: The port sector in India is set for significant growth, driven by government initiatives such as the *Sagarmala* Programme and Maritime India Vision 2030. Container traffic is projected to grow steadily at 8% y-o-y, leading to an expected capacity addition of 21 MTEUs in container terminals and 455 MTPA in bulk terminals by 2031. Additionally, Gol's renewed focus on enhancing shipbuilding capacity and upgrading/expanding naval dockyards is expected to drive demand for shipyard cranes.

Major Achievements

Major Orders Won:

- ▣ DRI plant and pellet plant in the UAE
- ▣ Freight handling facilities in the UAE
- ▣ First ever EPC order for 2*8 MTPA pellet plant from a large global steel producer
- ▣ Coke oven battery for a large domestic public sector steel producer
- ▣ Alumina refinery in Odisha for a large domestic non-ferrous metals company
- ▣ Tail gas treatment plant for a large domestic non-ferrous metals company at Chanderiya and Debari
- ▣ Largest order received for material handling equipment from a large domestic infrastructure company for 12 sets of stacker reclaimers and 4 sets of wagon tipplers



Mansourah-Massarrah Gold Project - Gold Processing Plant in Kingdom of Saudi Arabia

- ▣ Largest order received for port crane equipment from a domestic shipbuilding company for 8 numbers of electric level luffing cranes
- ▣ Largest order for 14 numbers of 380 tonne torpedo ladle cars from a domestic private sector steel producer

Marquee Projects Commissioned:

- ▣ 3 MTPA alumina refinery in Lanjigarh, Odisha, commissioning Train #1 of the refinery on March 31, 2024
- ▣ Hot commissioning of twin slab caster at a major domestic private sector steel plant
- ▣ Load commissioning of domestic coal handling projects
- ▣ Commissioning and performance guarantee test completion for domestic coal handling projects
- ▣ Commissioning of a large domestic non-ferrous metal company's roaster plant
- ▣ Commissioning of stacker reclaimers / wagon tippers for a major domestic industrial company's project at Yadadri, Telangana
- ▣ Designed and manufactured hybrid tandem wagon tippler for a major domestic private sector steel producer

Significant Initiatives

- ▣ 2.5 MWp solar plant commissioned at Kansbahal Works to replace 45% of energy usage with renewable energy, expected to reduce 3,200 MT of CO₂ emissions by lowering dependency on thermal power
- ▣ First robotic welding machine for crusher rotors successfully installed at Kansbahal Works, which will enhance weld quality and reduce welding man-hours by 75% thereby ensuring safer operations
- ▣ Kansbahal Works is certified ISO 3834-2:2021 and EN 1090-2:2008

Outlook

More than 70% of the world's steel production is in Asia. While Japan and South Korea, historically major producers of steel, are experiencing decline in their global shares as they move towards reducing domestic production for environmental and economic reasons, India, with its vast iron ore reserves and expanding domestic consumption, is increasingly emerging as a major beneficiary of this shift. India is well-positioned to meet its steel production targets by 2030, further strengthening its role as a leading global supplier.



Laminar Cooling System for 3 MTPA Hot Strip Mill (HSM) at Rourkela Steel Plant, Odisha

In India, the ongoing privatisation of mining assets is attracting increased investments in mineral beneficiation and pelletisation of iron ore. These developments aim to enhance the value of raw materials while producing more environmentally friendly products for both domestic and export markets. Indian steel companies are progressing with their capacity expansion plans, supported by strong domestic consumption and robust margin.

The non-ferrous sector, particularly in aluminum and zinc, continues to see capacity expansion. Major players are investing in new projects to meet rising demand and to capitalise on technological advancements in production.

In the Middle East, the minerals and metals sector is becoming an increasingly attractive investment destination.

The region benefits from low energy costs, investor-friendly policies and accessible financing options. This aligns with the Middle East's vision to diversify its economy beyond oil with a focus on growing industries such as metals and minerals. Significant investments are being made in logistics and infrastructure projects in the UAE and Oman, particularly in expanding port facilities, transportation networks and storage capabilities. Several of these key projects are nearing completion, which will further enhance the region's ability to handle growing trade in metals and minerals.

Overall, the outlook for FY 2025-26 remains positive, with sustained growth driven by ongoing capacity expansions, technological innovations and strategic investments across key regions and sectors in the global minerals and metals industry.