

Date of Submission: 29 September 2025



ASSESSMENT OF FACILITY MANAGEMENT SERVICES MARKET IN INDIA

Scope of the Study

Market Focus:

Market Scope			
Geographical Coverage	India		
Historical Period	FY2020 – FY2024		
Base Year	FY2025		
Forecast Period	FY2026 – FY2030		
Monetary Unit	INR		

Service Focus:

Service Scope					
Integrated Facility Management	Facility Management Services	Soft Services Housekeeping & Cleaning Landscaping & Gardening Admin Support Transport/Fleet Services Waste Management Other Services Hard Services MEP & HVAC Lighting Other Services			
	Corporate Catering Services				
	Electric Buses Operation and Maintenance Services Beach Development and Cleaning Services				

	Sports Event Management Services			
	Factory Relocation Services			
Environment and Sustainability	Waste Management Services			
	Landscape Developmental Services			
	Renewable Energy Services			
Emergency Response Services	Emergency Response Services			
	Ambulance Services for National Highways and Road Safety			

Acronyms

Title	Abbreviations	Title	Abbreviations		
ABDM	Ayushman Bharat Digital Mission	CAGR	Compound Annual Growth Rate		
AI	Artificial Intelligence	CATS	Centralised Accident and Trauma Services		
AIFF	All-India Football Federation	CCS	Carbon Capture Storage		
ALMM	Approved List of Models and Manufacturers	CCTV	Closed-circuit Television		
AMRUT	Atal Mission for Rejuvenation and Urban Transformation	CCU	Carbon Capture Use		
AVYAY	Atal Vayo Abhyuday Yojana	CESL	Convergence Energy Services Limited		
BCCI	Board of Control for Cricket in India	CO2	Carbon di oxide		
BEAMS	Beach Environment & Aesthetic Management Service	СРІ	Consumer Price Index		
BEVs	Battery Electric Vehicles	CQCBS	Combined Quality cum Cost-Based Selection		
BFSI	Banking, Financial Services and Insurance	CSP	Concentrated Solar Power		
BIM	Building Information Modelling	CSR	Corporate Social Responsibility		
BIS	Bureau of Indian Standards	DESH	Development Enterprise and Services Hub		
BMS	Building Management Systems	DISCOMs	Distribution Companies		
вот	Build, Operate, Transfer	DSWM	Decentralised Solid Waste Management		
ВРО	Business Process Outsourcing	E-Buses	Electric Buses		
BREEAM	Building Research Establishment Environmental Assessment Methodology	EMI	Equated Monthly Instalments		
CAFM	Computer Aided Facility Management	EMRI	Emergency Management and Research Institute		

EPF	Employee Provident Fund	HAI	Hospital Acquired Infections
EQUIP	Education Quality Upgradation and Inclusion Programme	H-CNG	Hydrogen enriched Compressed Natural Gas
ERP	Enterprise Resource Planning	HVAC	Heating, Ventilation and Air- conditioning
ERS	Emergency Response Services	ICC	International Cricket Council
ERSS	Emergency Response Support System	ICZM	Integrated Coastal Zone Management
ESDM	Electronics System Design and Manufacturing	IEA	International Energy Agency
ESG	Environment, Social and Governance	IECC	Integrated Exhibition cum Convention Centre
ESIC	Employees' State Insurance Scheme	IGBC	Indian Green Building Council
FAME	Faster Adoption and Manufacturing of Electric Vehicles	INR	Indian Rupees
FAO	Food and Agricultural Organisation	IoT	Internet of Things
FCEVS	Fuel Cell Electric Vehicles	IPL	Indian Premier League
FDI	Foreign Direct Investments	IRRC	Integrated Resource Recovery Centres
FEE	Foundation for Environmental Education	ISL	Indian Super League
FM	Facility Management	ISO	International Organisation for Standardisation
GCC	Gross Cost Contract	IT	Information Technology
GDP	Gross Domestic Product	ITDC	Tourism Development Corporation Limited
GPS	Global Positioning Systems	ITeS	Information Technology enabled Services
GST	Goods and Services Taxes	ITPO	India Trade Promotion Organisation
GVA	Gross Value Add	KPI	Key Performance Indicators
GW	Giga Watts	LEED	Leadership in Energy and Environmental Design

LSEM	Large-Scale Electronics Manufacturing	NHM	National Health Mission
MEP	Mechanical, Electrical & Plumbing	NRHM	National Rural Health Mission
MICE	Meetings, Incentive, Conferences and Exhibitions	NRI	Non-Resident Indians
MMT	Million Metric Tonne	NUHM	National Urban Health Mission
MNC	Multinational Companies	OMT	Operate, Maintain, Transfer
MNRE	Ministry of New and Renewable Energy	PCMC	Pimpri-Chinchwad Municipal Corporation
MoSPI	Ministry of Statistics and Program Implementation	PF	Provident Fund
MSME	Micro, Small and Medium Enterprises	PFCE	Private Final Consumption Expenditure
MSW	Municipal Solid Waste	PLI	Production Linked Incentives
MT	Million Tonne	PMAY	Pradhan Mantri Awas Yojana
MW	Mega Watts	PPA	Power Purchase Agreements
NABH	NextGen Airports for Bharat	PPP	Public Private Partnerships
NAS	National Ambulance Service	PSAP	Public Safety Answering Point
NATRIP	National Automotive Testing and R&D Infrastructure Project	PSU	Public Sector Undertaking
NBFC	Non-banking Financial Company	PV	Photovoltaic
NCR	National Capital Region	PWD	Public Works Department
NDMA	National Disaster Management Authority	R&D	Research & Development
NEBP	National E-Bus Program	RCS	Regional Connectivity Scheme
NGO	Non-Government Organisations	RDF	Refuse Derived Fuel
NHAI	National Highways Authority of India	RFID	Radio Frequency Ddentification

RISE	Revitalising Infrastructure and System in Education	SOP	Steam Methane Reformation
RMS	Remote Monitoring System	SPI	Strengthening of Pharmaceutical Industry
ROW	Rest of World	STP	Software Technology Park
SAAP	State Annual Action Plan	T20	Twenty20
SAI	Sports Authority of India	TIMS	Traffic Incident Emergency Management System
SBM-G	Swachh Bharat Mission (Gramin)	UDAN	Ude Desh ka Aam Naagrik
SBM-U	Swachh Bharat Mission (Urban)	UHC	Universal Health Coverage
SDG	Sustainable Development Goals	UK	United Kingdom
SEIS	Service Export from India Scheme	USA	United States of America
SEIS	Society of Integrated Coastal Management	USD	United States Dollar
SIGHT	Strategic Interventions for Green Hydrogen Transition Programme	USGBC	U.S. Green Building Council
SLA	Service Level Agreements	WCM	Workplace Change Management
SLAM	SLA Monitoring	WHO	World Health Organisation
SMR	Steam Methane Reformation	WTO	World Trade Organisation

Market Definitions

Title	Definition
Integrated Facility Management Services	Integrated Facilities Management is where a single contractor is appointed to deliver and manage all of the services and to integrate them as well. In practice the entire facilities function has been outsourced to one provider. Integrated Facility Management Services for the purpose of this report is defined as Facility Management Services, Corporate Catering Services, Factory Relocation Services, Sports Event Management Services, Beach Development Services, and E-bus Operation & Maintenance Services.
Facility Management Services	Facilities Management refers to a coordinated effort involving space and people in order to maintain buildings and properties. This consists of Soft Services and Hard Services.
Soft Services	This includes Housekeeping & Cleaning, Landscaping & Gardening, Admin Support, Transport/ Fleet Services, Waste Management Services and Other Services such as Pest Control and Façade Cleaning.
Hard Services	This includes Mechanical, Electrical, Plumbing (MEP) Maintenance Services, Heating, Ventilation & Air-conditioning (HVAC) Services, Lighting Services and Others such as Fire Safety Systems Services.
Corporate Catering Services	This refers to providing food services on a contract to Industrial and Commercial Segment. This includes both on-site kitchens and off-site kitchens.
Factory Relocation Services	Factory Relocation includes shifting of several things that are connected to it, and includes plant relocation, raw material shifting, manpower relocation, by-product shifting, and manufactured goods shifting.
Sports Event Management Services	This refers to providing Facility Management Services such as cleaning, Catering, Accommodation and Transportation Services to sports events.
Beach Development and Cleaning Services	Beach Development and Cleaning Services refers to establishing/building the necessary infrastructure for Beaches and providing maintenance services.

This includes providing operational and maintenance services for E-buses for State Transport Authorities. It involves supply manpower, spare parts and complete responsibility for operations.
This refers to the development and maintenance of Parks, Gardens, Green Spaces, lakes/lakefronts, irrigation systems, flora on road medians/islands, etc.
This refers to turnkey projects, tolling job works and other services associated with operation and maintenance of renewable energy plants.
This includes Municipal Solid Waste Management Services, Bio-mining Services, WaterWaste Management Services, Hazardous Waste Management Services and Waste Processing Services.
Emergency Response Services (ERS) refers to services such as providing professional ambulance services, roadside assistance, travel, health and safety. Such services also handle police and fire emergencies through toll free numbers. This includes handling of calls received at central command centre, connecting citizens to trained staff to provide immediate assistance, dispatching ambulance or police officers to the right location as a first responder and taking necessary actions as per the standard operating procedures.
Ambulance Services for National Highway and Road Safety includes providing ambulance services - both on highway and within state.

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CHAPTER 1: MACRO-ECONOMIC OVERVIEW OF INDIA

Gross Domestic Product Growth and Outlook:

The Indian economy is the fifth largest in the world, with a Gross Domestic Product (GDP) of INR 176.5 trillion in FY2024 and 188.0 trillion in FY2025 (MoSPI estimates). The last decade was a mixed bag for the Indian economy with a see-saw movement in the GDP growth between 2010 and 2020. The economy, which was already slowing down since FY2018, received a massive jolt in FY2021 due to COVID-19 pandemic and shrunk by 5.8% in FY2021. However, the Indian economy showed tremendous resilience and bounced back from Q3 FY2021 on the back of corrective measures taken by the government along with huge pent-up demand and the festive season. FY2022 through FY2024 were strong, and the Indian economy registered 9.7% and 9.2% growth respectively, outperforming many other major economies.

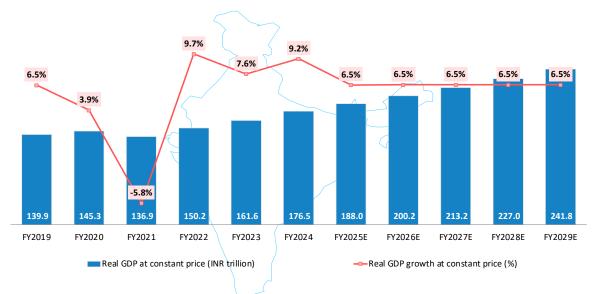


Exhibit 1.1: Real GDP and Real GDP Growth (annual percentage change), India, FY2019 - FY2029

Note: E refers to Estimate Source: MoSPI (Annual Estimates of GDP at constant price, 2011-12 series) February 2025, RBI, IMF; Frost & Sullivan Analysis

India is expected to close FY2025 at a growth of 6.5%, much lower than the previous three years. Trade uncertainty is the major reasons for the growth slowdown and this is expected to continue to pose a risk for the economic growth up to FY2029; India's GDP is forecast to grow at a rate of 6.5% annually from FY2026 – FY2029. Rural demand backed by a rebound in agricultural production, fiscal support, domestic demand, a stable inflation and a stable macro-economic environment are expected to provide an upside to near-term growth. Tax exemptions announced in the budget FY2026 are expected to increase consumer spending and contribute to the economic growth. The Reserve Bank of India (RBI) is also expected to continue implementing its monetary policy to support economic growth and manage inflation rates.

Despite the lower growth projected for India than the previous years, it is still expected to be one of the fastest growing economies in the world up to CY2030 driven by domestic demand, favourable demographics, capex investments, digitalisation and policy stability.

Exhibit 1.2: Real GGP Outlook of Select Global Countries, CY2024 - CY2030

Country	CY2024	CY2025P	CY2026P	CY2027P	CY2028P	CY2029P	CY2030P
Brazil	3.4	2.0	2.0	2.2	2.3	2.4	2.5
Canada	1.5	1.4	1.6	1.7	1.6	1.6	1.5
China	5.0	4.0	4.0	4.2	4.1	3.7	3.4
France	1.1	0.6	1.0	1.2	1.3	1.2	1.2
Germany	-0.2	0.0	0.9	1.5	1.2	1.0	0.7
Japan	0.1	0.6	0.6	0.6	0.6	0.5	0.5
Mexico	1.5	-0.3	1.4	2.1	2.2	2.2	2.1
Russia	4.1	1.5	0.9	1.1	1.1	1.2	1.2
Saudi Arabia	1.3	3.0	3.7	3.6	3.2	3.2	3.3
United Kingdom	1.1	1.1	1.4	1.5	1.5	1.4	1.4
United States	2.8	1.8	1.7	2.0	2.1	2.1	2.1
World	3.3	2.8	3.0	3.2	3.2	3.2	3.1

Source: IMF World Economic Outlook, April 2025 edition

GDP per Capita:

Per capita income is a broad indicator of the prosperity of an economy. Consumer confidence and discretionary consumption both improve with the rising per capita income. India's per capita income in CY2024 was USD 2,711.4 and is considered a lower middle-income country. Even though India's per capita income grew by almost 100% since FY2015, wealth distribution among India's 1.4 billion people remains highly skewed. Equitable access to healthcare, quality education, and jobs would be critical for India to deliver sustained growth in per capita income.

CAGR (CY2019 - CY2024): 5.8% CAGR (CY2024 - CY2030E): 8.7% 17.5% 9.3% 9.3% 9.3% 9.2% 8.9% 7.9% 6.5% 6.2% 4.9% -6.6% 2,711.4 2,050.2 2,250.2 2,361.1 2,546.8 2,878.5 3,136.0 3,426.3 3,743.8 4,089.5 4,468.5 1,915.6 CY2023 CY2024 CY2019 CY2020 CY2021 CY2022 CY2025E CY2026E CY2027E CY2028E CY2029E GDP per Capita (USD) ---Growth Rate (%) Note: E refers to Estimate Source: IMF, World Economic Outlook, April 2025; Frost & Sullivan Analysis

Exhibit 1.3: GDP Per Capita, India, CY2019 - CY2030

The GDP Per Capita is expected to grow at a CAGR of 8.7% from CY2024 — CY2030 and this growth is expected to favour the Facility Management Market in the long-term by creating demand for premium facility management services, gardening and landscaping services and corporate catering services across major end user segments such as offices, healthcare, educational institutions, residential, retail & entertainment etc.

Sector-Wise Share of Gross Value Add:

Services sector is the key contributor to the growth of the Indian economy in the past decade with a share of 54.5% of the total Gross Value Add (GVA) in FY2024 and is expected to be around 55.0% in FY2025. Industry sector is also gaining momentum, and this sector along with the Services sector are expected to be the key economic enablers for India in the long-term.

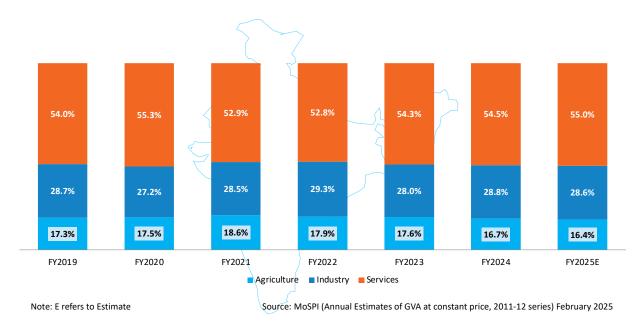


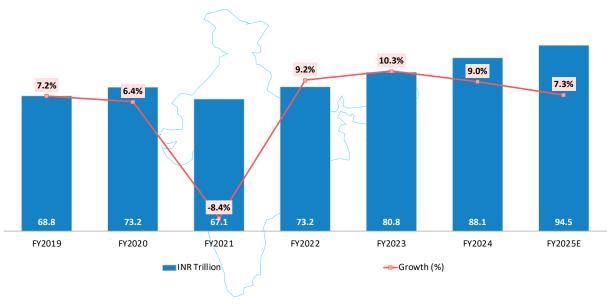
Exhibit 1.4: Percent Share of GVA by Economic Sectors at Current Prices, India, FY2019 - FY2025

Agriculture includes agriculture, forestry and fishing. Industry includes mining and quarrying, manufacturing, electricity, gas, water supply & other utility services and construction. Services includes trade, repair, hotels & restaurants, transport, storage, communication & services related to broadcasting, financial services, real estate, ownership of dwelling & professional services, public administration & defense, and other services.

Correlation of GDP/GVA with the Demand for Services Sector: The Services sector has emerged as a significant contributor to India's GDP, employment, and overall economic development. Services encompass various industries such as Information Technology (IT), finance, banking, telecommunications, healthcare, education, tourism, and professional services.

The service sector is a substantial source of employment, absorbing a large portion of India's workforce. It provides employment opportunities across various skill levels, including high-skilled jobs in IT and finance, as well as jobs in hospitality, retail, and other service-oriented fields, which contribute to the growth of per capita income.

Exhibit 1.5: Services Sector GVA at Basic Prices, India, FY2019-FY2025

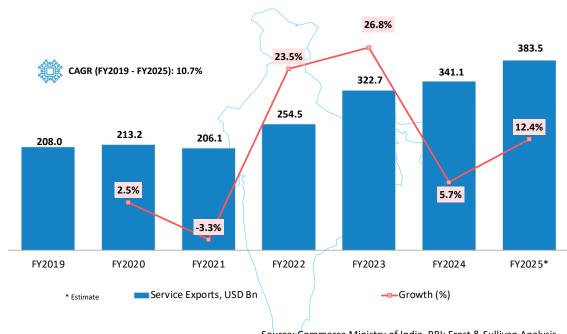


Note: E refers to Estimate

Source: MoSPI (Annual Estimates of GVA at constant price, 2011-12 series) February 2025

India's service exports, particularly in IT services, business process outsourcing (BPO), and software development, bring in substantial foreign exchange earnings. These export revenues contribute to the country's foreign exchange reserves, improving its balance of payments and overall financial stability.

Exhibit 1.6: Services Sector Exports, India, FY2019 - FY2025



Source: Commerce Ministry of India, RBI; Frost & Sullivan Analysis

The exports from Indian Services Sector are expected to improve as inflation in advanced economies have increased labour costs and has made local sourcing expensive. This is expected to open up avenues for

outsourcing to low-cost emerging economies and India stands to benefit from this situation. India's Service Sector exports have been resilient and recording a strong growth backed by the country's robust IT infrastructure and manpower resources. As per the economic survey FY2025, India's share in global services exports rose to 4.3% in 2023 from 1.9% in 2005¹. The Service Sector exports grew by 11.6% in the first nine months of FY2025 and has a multi-sectoral presence with contributions from various end user segments.

The growth of India's Service sector, particularly in IT and related services, has attracted significant FDI from global companies. Foreign investment not only contributes to the sector's growth but also creates linkages with other sectors of the economy, creating a multiplier effect on overall growth. From April 2000 to September 2024, the Indian Services sector attracted FDI inflows worth USD 84.56 billion².

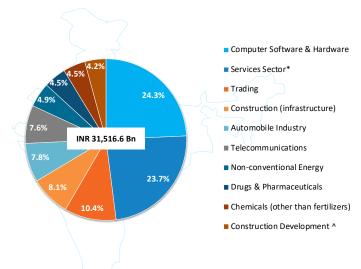


Exhibit 1.7: Cumulative FDI Equity Inflows, India, April 2000 – December 2024

Source: Department of Industrial Policy and Promotion Fact sheet, December 2024, Frost & Sullivan Analysis

- * Services Sector includes financial, banking, insurance, non-financial/business, outsourcing, R&D, courier, technology, testing and analysis and others
- ^ Construction development includes townships, housing, built-up infrastructure, and construction development projects.

The Indian Services Sector is bolstered by several government efforts including Smart Cities, Clean India, and Digital India, which are creating a favourable growth environment for the sector. Growth of the Services Sector is one of the major factors contributing to the real estate development and this creates more building stock/ assets in the country. Growth in assets and associated services demand create a high growth environment for several markets including facility management, waste management, renewables, catering, and gardening & landscaping.

 $^{^1\,}https://economic times.indiatimes.com/small-biz/trade/exports/insights/economic-survey-2024-25-indias-share-in-global-services-exports-doubles/articleshow/117787454.cms? from=mdr$

² <u>https://www.ibef.org/industry/services</u>

Private Final Consumption Expenditure Growth in India:

India's Private Final Consumption Expenditure (PFCE) has increased by 7.6% in FY2025 and by 5.7% in FY2024. Due to COVID-19 pandemic, the FY2021 PFCE was not only 5.3% lower than FY2020; it was also 0.3% lower than FY2019. As the threat and uncertainty around COVID-19 significantly declined in FY2022, consumer confidence increased and PFCE had reached pre-COVID levels in FY2022.

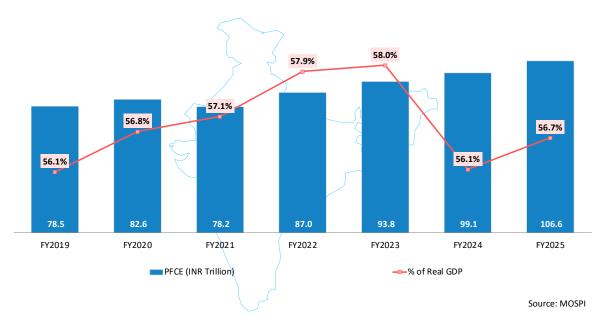


Exhibit 1.8: Private Final Consumption Expenditure, India, FY2019 - FY2025

The PFCE is expected to remain robust and witness growth over the next five years backed by strong domestic demand, rising income levels, continued urbanisation and growth in middle-class population. Anticipated positive PFCE outlook for India will remain key growth enabler for the services sector in the long-term; higher consumer spending creates demand for services in retail, e-commerce, healthcare, schools, restaurants, leisure, entertainment among others. Increase in PFCE has a direct impact on physical infrastructure in the country, particularly segments such as offices, hospitals, educational institutions, shopping malls and retail outlets, hotels and restaurants and residential. It also increases the footfall in public spaces which directly corelate with the demand for facility management services such as cleaning, sanitation, gardening, landscaping, waste management etc. Higher PFCE increases disposable incomes, leads to lifestyle upgrades, and digital literacy, which demand premium services and focus on quality. This is expected to increase the outsourcing in facility management services, which creates a favourable platform for long-term growth.

Consumer Price Inflation and its Impact on Service Sector:

The standard measurement of inflation is the government's Consumer Price Index (CPI). Components of the CPI include a "basket" of certain elementary goods and services, such as food, energy, clothing, housing, medical care, education, and communication and recreation. Controlled inflation, no higher than 6% and perhaps somewhat lower, may have a beneficial impact on economic recovery while inflation at 10% or above would have a negative impact on the economic growth.

The CPI inflation fell to 4.6% in FY2025³, the lowest since FY2019 in India. This is a reflection of the country's pro-growth monetary policy, which balanced the economic growth and price stability. The year-on-year inflation rate for March 2025 decreased to 3.3%, which is a decline of 27 basis points from February 2025. The declining trend in CPI inflation highlights the sustained efforts undertaken by the country to curb price rises while fostering economic growth. Some of the key measures to control inflation include bolstering buffer stocks of essential food items and releasing them periodically in open markets and subsidised retail sales of staples like rice, wheat flour, pulses, and onions. Lower import duties in critical food items and reduced GST rates on essentials have also contributed to the lower CPI inflation rates in FY2024 and FY2025. The inflation rate is expected to further drop to around 4.0% by CY2027.

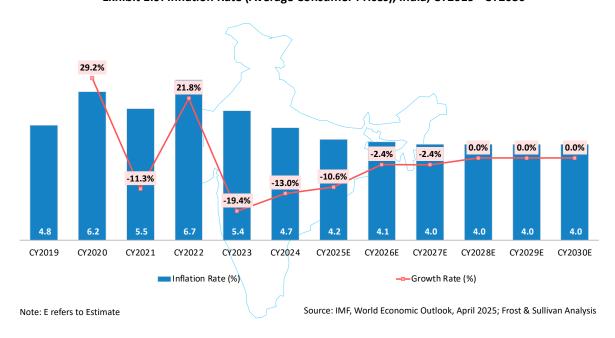


Exhibit 1.9: Inflation Rate (Average Consumer Prices), India, CY2019 - CY2030

Lower inflation translates to higher purchasing power particularly in middle- and lower-income households. This increases the non-discretionary spending such as dining out, travel, entertainment, personal care, education, hospitals etc. The increase in spending will positively impact the growth of major service segments such as retail, hospitality, healthcare, education, e-commerce, logistics etc. Stable inflation also attracts capital investments in the above sectors, which leads to business expansions and further demand for services including facility management.

Overall Government and other Initiatives/Reforms and its Impact on the Economic Growth:

Viksit Bharat 2047: "Viksit Bharat 2047" (meaning Developed India 2047) is a long-term national vision and strategic initiative launched by the Government of India with the goal of transforming the country into a developed nation by the year 2047, which marks 100 years of India's independence. Key objectives of

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³ https://pib.gov.in/PressReleasePage.aspx?PRID=2122148

the vision are economic growth, social inclusivity, sustainability, technological leadership, governance, global influence etc. This vision is being implemented through several initiatives such as Smart Cities Mission, Digital India, Skill India, Make in India, Atmanirbhar Bharat and others.

Smart Cities Mission: The Smart Cities Mission is a government initiative aimed at promoting the growth of the Facility Management Industry in India. The initiative was launched in 2015 and aims to develop 100 smart cities across the country. Under this initiative, the government is providing funding and technical assistance to cities to develop smart infrastructure and provide better public services. The focus is on developing integrated solutions that use technology to improve the efficiency and sustainability of urban infrastructure and services.

Facility management plays a crucial role in the development and management of smart cities. Facility management services are essential for the maintenance and upkeep of public infrastructure, including roads, buildings, parks, and other facilities. With the development of smart cities, the demand for facility management services is expected to increase significantly.

Digital India: The Digital India initiative is a flagship program launched by the Indian government in 2015 to transform India into a digitally empowered society and knowledge economy. The initiative aims to provide digital infrastructure and services to all citizens, including those living in remote areas.

Under this initiative, the government is promoting the adoption of digital technologies in various sectors, including the facility management industry. The use of digital technologies, such as the Internet of Things (IoT), Artificial Intelligence (AI), and cloud computing, can improve the efficiency and effectiveness of facility management services.

For example, the use of IoT sensors can enable facility managers to monitor the performance of equipment and systems in real time, allowing for proactive maintenance and reducing downtime. Al-powered systems can analyse data and provide insights to help facility managers make informed decisions and optimise operations. Cloud computing can enable facility managers to access and manage data from anywhere, improving collaboration and productivity.

Ayushman Bharat: In 2018, the Government of India launched the 'Ayushman Bharat' scheme (as outlined by the National Health Policy 2017) to make healthcare services more accessible and affordable to citizens and aid the country in achieving its target of universal health coverage (UHC) by 2030. One of the primary components of this mission is the Health and Wellness Centres. These are envisaged to deliver expanded range services that go beyond maternal and child healthcare services to include care for non -communicable diseases, palliative and rehabilitative care, oral, eye and Ear, Nose, Throat care, mental health and first level care for emergencies and trauma, including free essential drugs and diagnostic services. The scheme had a target of creating 1.5 lakh Health and Wellness Centres and this was achieved by the end of CY2022. Another component of Ayushman Bharat is Pradhan Mantri Jan Arogya Yojana (PMJAY), which aims to provide financial protection for secondary and tertiary care to about 40% of India's households.

Make in India: With the launch of the Make in India campaign, the Government of India is facilitating investment, fostering innovation, enhancing skill development, protecting intellectual property, and developing best-in-class manufacturing infrastructure in the country. Government of India expects the

campaign to play an important role in the economic development of the country by utilising the Indian talent base, creating additional employment opportunities, empowering the secondary and tertiary sector, and encouraging investments from around the world. The Make in India 2.0 program, which succeeds the Make in India, has identified 27 sectors for growth, including aerospace and defense, automotive and auto components, pharmaceuticals and medical devices, biotechnology, capital goods, textiles and apparel, chemicals and petrochemicals, Electronics System Design and Manufacturing (ESDM), leather and footwear, food processing, gems and jewelry, shipping, railways, construction, and new and renewable energy.

Self-reliant India (Atmanirbhar Bharat Abhiyan) Mission: India launched the Self-reliant India (Atmanirbhar Bharat Abhiyan) mission in May 2020 to promote Indian goods in the global supply chain markets and help the country achieve self-reliance. The mission was announced amid the pandemic when the government allocated funds worth INR 20,000 billion which amounts to ~10% of India's GDP, as a stimulus package to help recover the economy by promoting incentives for domestic production. It encompasses themes such as 'Local for Global: Make in India for the World' and 'Vocal for Local'. Under this mission, Indian government implemented various schemes including the Production Linked Incentive Scheme (PLI).

Production Linked Incentives Scheme: This was announced in March 2020 and updated in November 2020 to create national manufacturing champions. The schemes' objectives are to scale up domestic manufacturing facilities, increase import substitution through domestic production, and generate employment opportunities. The PLI scheme provides turnover-linked incentives to investors upon meeting investment, capacity, and turnover criteria. The PLI Scheme has an outlay of INR 1,970 billion and focuses on 14 critical sectors⁴. Key highlights of the PLI scheme are:

- PLI Scheme for Electronics and IT Hardware INR 9,000.00 crore budget for FY2026.
- PLI for Automobiles and Auto Components INR 2,818.85 crore budget for FY2026
- PLI for Pharmaceuticals INR 2,444.93 crore budget for FY2026
- PLI for Textiles INR 1,148.00 crore budget for FY2026
- As of August 2024, actual investment of INR 1,460 billion have been realised and this has resulted in a production value of INR 1,250 billion and an employment generation of 9.5 lakh.
- FDI equity inflow in the manufacturing sector rose by 69.0% from USD 98 billion in 2004 2014 to USD 165 billion in 2014 2024.

China + 1 Strategy of Global Companies: China has been the manufacturing hub of the world for decades, but the country has been gradually losing its position due to several factors. Ageing manufacturing hubs that rely on cheap labour are no longer working for China. A shrinking and ageing workforce in China implies that the country's labour-driven manufacturing expertise is fading and is facing stiff competition from other South Asian and Southeast Asian nations including India. Besides, escalating trade tensions between China and the United States have forced many global companies to diversify their supply chain and opt for the China+1 strategy. For instance, companies like Apple have aggressively expanded their

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⁴ https://pib.gov.in/PressReleasePage.aspx?PRID=2107825

operations in India – a path that many large manufacturing companies are expected to follow in the coming years.

On the other hand, India emerged as a key alternative to traditional manufacturing hubs, particularly under the global "China+1" strategy, where companies are seeking to diversify their supply chains beyond China. With its robust economic growth, increasing industrial output, and government-backed initiatives like 'Make in India' and 'Production Linked Incentive' (PLI) schemes, India presents an attractive alternative for manufacturing to the global investors. Additionally, the country offers a competitive labour market, growing domestic demand, and a large pool of skilled workforce. The strategic focus on sectors like electronics, pharmaceuticals, renewable energy components, and automotive manufacturing further reinforces India's potential as a leading global manufacturing hub.

Swachh Bharat Mission: The Swachh Bharat Mission was initiated in October of 2014, and it was divided into two segments — (i) Swachh Bharat Mission (Gramin) (SBM-G), which would be executed in the rural areas and (ii) Swachh Bharat Mission (Urban) (SBM-U), which would be responsible for implementation in urban areas. SBM-G aims at the total eradication of open defecation in rural areas by increasing awareness and access to sanitation along with usage of suitable technologies for sanitation. It is also focusing on the improvement of solid and liquid waste management in rural areas. SBM-U is also laid on similar lines in the urban areas with the goal of total elimination of open defecation of the urban India along with 100% door to door collection and scientific management of the municipal solid waste in 4,041 statutory towns across the nation. The World Bank will also be lending a helping hand as it will contribute with a technical assistance of INR 1.7 trillion to certain select State governments.

Skill India Initiative: The Skill India initiative is a government program launched in 2015 to provide training and skill development to the country's workforce. The initiative aims to improve the employability of the workforce and meet the demands of various sectors, including the Facility Management industry.

Under this initiative, the government is providing funding and technical assistance to training institutions to develop courses and training programs that are relevant to the needs of the industry. The government is also offering incentives to companies that hire and train skilled workers.

India is also focusing on skilling the manpower at global standards and to support this, several initiatives were launched such as the Skill India International Centers (SIIC) and partnerships facilitated through Government-to-Government (G2G) Memorandums of Understanding (MoUs). The operational centers in Varanasi and SDI Bhubaneswar showcase this initiative's early success. There are seven more centres in the pipeline. Such initiatives would drive the opportunities in business services such as facility management and staffing – both domestic and global.

The Facility Management industry requires a skilled workforce to provide high-quality services to clients. The Skill India initiative is providing the industry with access to a skilled workforce, improving the quality of facility management services offered in the country. The initiative is also promoting the adoption of best practices and the use of new technologies, improving the efficiency and effectiveness of facility management services.

National Apprenticeship Promotion Scheme (NAPS): India launched the NAPS scheme to promote apprenticeship in India in August 2016. The scheme provides financial support to companies to hire

apprentices. It introduces incentives for employers that promote apprenticeship and offer apprenticeship training. Apprentices get an opportunity to undergo 'on the job' training and are exposed to real working conditions, situations, and challenges. Employers that offer such training programs are entitled to certain benefits including reimbursement of 25.0% of the prescribed stipend per apprentice, and reimbursement of cost of basic training in certain circumstances, up to specified thresholds. Implementing agencies for the program are Directorate General of Training and National Skill Development Corporation. Key benefits to companies include increase in availability of industry ready skilled manpower well versed with culture of the company, reduces expenditure on hiring process etc.

National Apprenticeship Training Scheme (NATS): This is one of the flagship programs for skilling Indian youth in trade disciplines. This scheme under the provisions of the Apprentices Act, 1961 amended in 1973, offers graduate, diploma students and vocational certificate holders a practical, hands-on on-the-job-training based skilling opportunities with duration ranging from 6 months to 1 year. Target audience for the scheme include graduates and diploma holders in engineering, technology, architecture, pharmacy, etc.

National Employability Enhancement Mission (NEEM): The government also similarly introduced NEEM to offer 'on the job' practical training to enhance employability of individuals pursuing graduation/diploma in any technical or non-technical stream or individuals who have been compelled to discontinue their education, in order to increase their employability.

Global Access to Talent from India (GATI) Foundation: India is positioning itself as a global hub for skilled manpower and to support this vision, Indian government launched GATI Foundation. This foundation is backed by The Convergence Foundation, TeamLease Services, and the Godrej Foundation. The objective is to create a structured, ethical, and circular pathways to meet growing international demand for skilled and semi-skilled workers, particularly in advanced/high-income economies that are expected to have a gap of 40-50 million workers by 2030⁵.

Several other skilling initiatives in India include National Policy on Skill Development & Entrepreneurship (NPSDE), Prime Minister's Internship Scheme 2024, Indian Institute of Skills, Swiggy Skills, STRIVE project, Pradhan Mantri Kaushal Vikas Yojana, Skill India Digital Hub platform etc.

Demographic Overview of India:

Population Growth:

India's population is forecasted to reach 1.68 billion by 2050, registering a CAGR of 0.6% from 2020 – 2050. Increase in median age to 34.48 years in 2036 from 24.92 years in 2011 and fertility rates contribute to the population growth and India overtook China to become the world's most populous country in 2022. According to World Population Review, the population of India as of April 2025 was 1.46 billion.

 $^{^5\} https://www.cnbctv18.com/india/india-launches-gati-foundation-to-boost-global-talent-mobility-and-tackle-labour-shortages-all-you-need-to-know-19599817.htm$

1.7 1.6 1.6 1.5 1.5 1.4 1.3 1.2 1.2 1.1 CY2000 CY2010 CY2015 CY2020 CY2025P CY2030P CY2035P CY2005 CY2040P CY2045P CY2050P ■ Population in billions Note: P refers to projections Source: <u>www.worldpopulationreview.com</u> and <u>www.worldometers.info</u>

Exhibit 1.10: Population Forecast, India, CY2000 - CY2050

Demographic Dividend:

A demographic dividend is a key factor for economic growth as the working age population (15–59 years of age) is usually more productive.

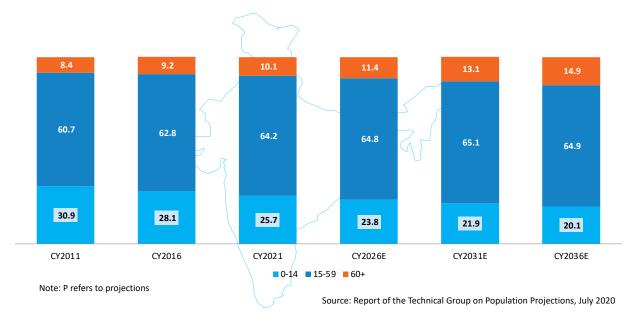


Exhibit 1.11: Population Forecast Percent Breakdown by Age Group, India, CY2011 - CY2036

India is set to witness a considerable increase in its working population over the next decade. The Indian economy has the potential to grow at a rapid rate as the working age population is expected to be 64.2% of the total Indian population in 2021 and reach 64.9% by 2036.

Urbanisation:

The growing urban population of India has led to increase in urbanisation of the country. There are almost 10 million people migrating to cities and towns every year. The high economic growth, higher standard of living and increasing opportunities in the cities have led to urbanisation. This has led to investments in housing, road networks, urban transport, water and power utility infrastructures, smart cities, and other forms of urban management.

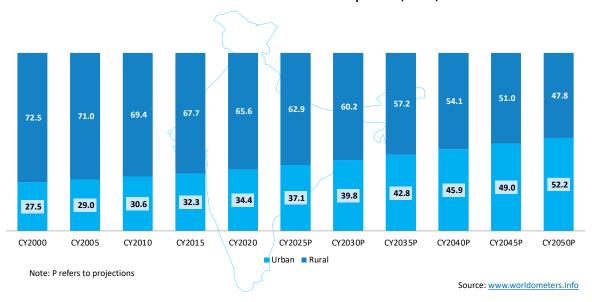


Exhibit 1.12: Percent Breakdown of Urban and Rural Population, India, CY2000 - CY2050

By CY2050, India's population is expected to be 1.68 billion, with 52.2% of this population living in urban areas; the urban population contributed to 34.4% of the total population in 2020. Delhi is expected to be 100% urban by CY2036. Tamil Nadu, Kerala, Maharashtra, Telangana, and Gujarat are expected to be more than 50% urbanised by CY2036. According to Worldometers, urban population made up 36.6% of the total population in India with 530.38 million people living in urban areas in India in CY2024.

Favorable demographics and economic growth have driven the growth of the middle class (defined as consumers spending from USD 2 to 10 per capita per day⁶) in India. This growth could be associated with a shift away from large-scale informality, which currently characterises much of the services and manufacturing sectors, and toward more formal, wage-earning, and medium-scale firms.

Large population base and working-age group along with a high urbanisation rate set a high-growth trajectory for the services sector by increasing the domestic demand in various segments such as education, healthcare, offices etc. With the skilling initiatives and the job creation through growth in services and industrial sectors, the per capita income levels are expected to increases and this would lead to increase in disposable spending, which would lead to demand for services from hospitality, restaurants, leisure, entertainment etc. All these factors eventually drive the demand for facility management services,

⁶https://eastasiaforum.org/2024/05/21/understanding-indias-evolving-middle-classes/

emergency response services, waste management services, beach development services, sports event management services etc.

India Labour Market Overview:

The total labour force in CY2024 was 607.7 million in India. The future growth is expected to be robust as all structural drivers such as education enrolment, population growth rate, labor force participation rate, public and private sector investment across key sectors like infrastructure and industry are projected to remain strong over the long-term.

The creation of jobs is one of the central government's main priorities, and various programs have been started in this regard. The net additions to Employee Provident Fund (EPF) subscriptions during January 2025 was at 17.89 lakh members, an increase by 11.5% from December 2024⁷. The hiring activity was strong in FY2025 driven by the economic growth. As per the Employees' Provident Fund Organisation (EPFO), the net additions in formal jobs in FY2025 is estimated to be 13.22 million, up to February 2025⁸. This is higher than the 13.14 million jobs created in FY2024. The net additions in formal jobs is expected to be at 14.5 million for FY2025 and this is expected to be the highest in the country's history, surpassing the previous record of 13.8 million in FY2023.

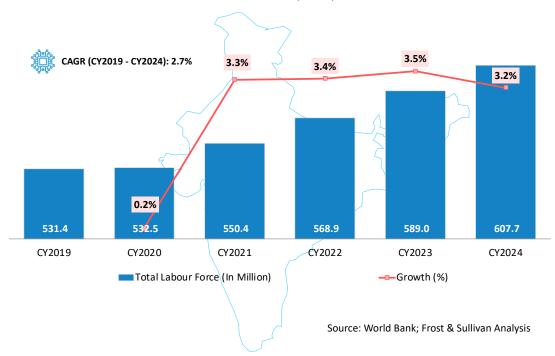


Exhibit 1.13: Total Labour Force, India, CY2019 - CY2024

⁷ https://www.epfindia.gov.in/site_docs/PDFs/EPFO_PRESS_RELEASES/EPFOAdds17.89LakhNetMembersduring_January2025.pdf

⁸ https://timesofindia.indiatimes.com/business/india-business/formal-job-creation-may-hit-record-high-in-fy-2024-25-heres-what-epfo-data-suggests/articleshow/120580314.cms

Employment Demand across Economic Sectors - Agriculture, Industry and Services:

Agricultural sectoral contribution to the economic growth, though still has the highest share, has been shrinking in the past decade and has resulted in the decline of employment generation. This has forced the labour force to seek employment in other sectors.

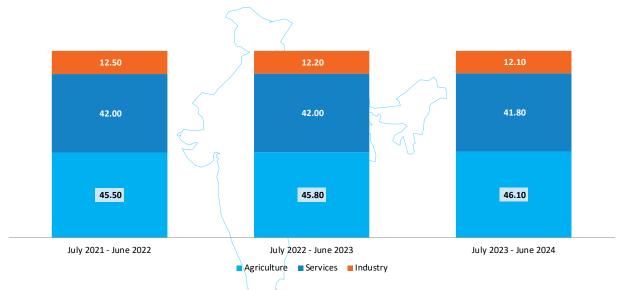


Exhibit 1.14: Percent Distribution of Total Employment by Economic Sectors, India, July 2021 – June 2024

Source: Directorate General of Employment, Ministry of Labour and Employment, Periodic Labour Force Survey Reports

Industrial sector includes Mining and Quarrying, Manufacturing, Gas, Electricity, Construction and Water supply. This is also known as the secondary sectors of the economy. It accounts for around 28.6% of the Indian GVA in FY2025. Several government initiatives to expand the manufacturing sector in India has resulted in increasing investments and this has resulted in employment generation across manufacturing. Service sector is currently the backbone of the Indian economy and contributing around 55.0% of the Indian GVA in FY2025. Job opportunities were the highest in the services sector in India, driven by IT and ITeS, E-Commerce and Telecom sectors.

Average Minimum Wages in India:

The Indian parliament passed the Minimum Wage Act in 1948. This act fixes the minimum wage for specific 'scheduled employment' categories. Under this Act, certain minimum wages have been fixed or revised for employees engaged to do any work whether skilled, unskilled, manual, or clerical (including outworkers) in any employment listed in the schedule to the Minimum Wages Act, wherein no worker is obliged to work for a wage that is less than the minimum prescribed rate. There are several factors that have been taken into consideration while determining the minimum prescribed rate. These include level of income, paying capacity, prices of essential commodities, productivity, and local conditions.

Exhibit 1.15: Minimum Wages by Skill Set (Construction Sector), India, 2021, 2023 & 2025 - Rates of wages per day (in Rupees)

Category	2021			2023			2025		
	Class A Towns	Class B Towns	Class C Towns	Class A Towns	Class B Towns	Class C Towns	Class A Towns	Class B Towns	Class C Towns
Un-skilled	645	539	413	736	616	494	805	674	541
Semi- skilled	714	609	505	816	695	577	893	760	632
Skilled	784	714	609	897	816	695	981	893	760
Highly skilled	853	784	714	973	897	816	1,065	981	893

Source: Labour Commission of India

CHAPTER 2: INTEGRATED FACILITY MANAGEMENT MARKET ANALYSIS

Global Facility Management Market Outlook

The Facility Management (FM) Market is undergoing a significant transformation that is being fueled by technological advancement, new business models, emerging value propositions, disruptive competition, and new service offerings. Value propositions are shifting to service outcomes, user experience, and business productivity.

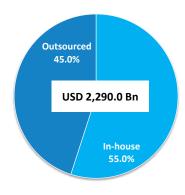
Modern buildings and facilities have become more complex, incorporating advanced technologies, automation, and sophisticated systems. Facility Management Services are essential to ensure the efficient operation, maintenance, and optimisation of these complex infrastructures.

There is a rising emphasis on sustainability, energy efficiency, and green building practices worldwide. Facility Management plays a crucial role in implementing sustainable practices, managing energy consumption, and achieving environmental certifications, such as Leadership in Energy and Environmental Design (LEED) and Building Research Establishment Environmental Assessment Methodology (BREEAM).

The advancement of digital technologies and IoT devices has revolutionised delivery of Facility Management Services. Smart building solutions, data analytics, and predictive maintenance enable facility managers to make data-driven decisions and enhance overall operational efficiency.

The expansion of multinational companies (MNC) necessitates standardised Facility Management practices across multiple locations and countries, leading to the growth of global Facility Management service providers.

Exhibit 2.1: Facility Management Market: In-house versus Outsourcing, Global, CY2024



Source: Frost & Sullivan Analysis

Businesses and corporations are employing the outsourcing of Facility Management Services more frequently as a strategy to attain strategic advantages like enhancing their competitive advantage and achieving market preservation or dominance goals. In the last decade, cost optimisation has been the primary goal of outsourcing; however, organisations now seek to outsource Facility Management Services

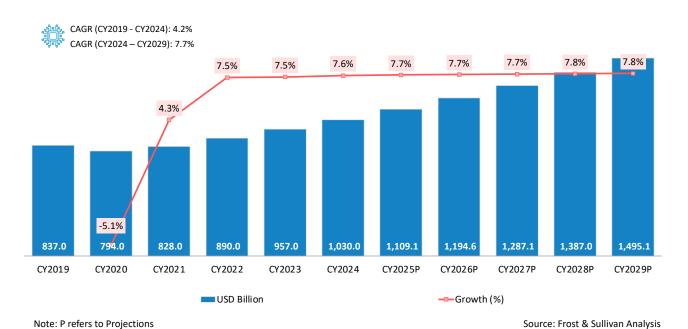
to free up internal resources to provide strategic value. They are working to achieve these goals by concentrating on their core business operations and receiving marketable benefits (or cost savings) from strategic partners through outsourcing.

Market Size and Forecasts:

The global outsourced Facility Management Market for CY2024 is valued at USD 1,030.0 billion and has recorded a CAGR of 4.2% from CY2019— CY2024. Market performance has stabilised and recovered since the 5.1% drop in revenue in CY2020. The market reached pre-pandemic spending levels by late CY2021. Increasing investments in construction and infrastructural projects, growth in industrialisation, development of smart buildings and penetration of digital solutions are expected to drive the demand for Facility Management Services across the globe.

The industry is well placed today to take advantage of infrastructural investments in the global scenario. The market propensity for renovating existing buildings presents a good opportunity for this industry to grow. Governmental bodies across emerging countries are contracting with multiple private contractors, including several international players to keep the infrastructure clean and green, including smart building construction. The outsourced Facility Management Market is expected to reach USD 1,495.1 billion by CY2029, recording a CAGR of 7.7% from CY2024 – CY2029.

Exhibit 2.2: Outsourced Facility Management Market: Historic Revenue Trend and Forecast, Global, CY2019 – CY2029

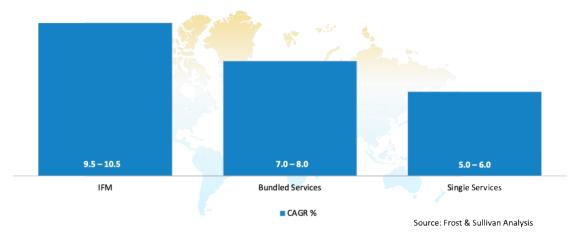


The global Facilities Management Market is characterised by the presence of single service contracts (providing only one type of service, for example cleaning only contract), bundled contracts (providing a few services bundled together withing hard or soft services segment, for example a soft service contract that includes cleaning, mailroom management, and admin support) and integrated contracts (providing

several services across hard, soft and other services such as property management, energy management environmental management etc.). Integrated FM contracts are gaining traction in the global market driven by efficiency, cost optimisation, and single point of accountability, as the service providers are governed through a centralised framework for hard, soft and other additional services necessary for the operation of a facility. Integrated contracts are prominent in advanced Facility Management Markets such as the North America, Europe and Asia (only Australia). Major end user segments adopting integrated FM in the above regions are corporate offices, healthcare, retail, manufacturing, educational institutions, and government. The technological advancements across different solutions for building operation and maintenance are also favouring the growth of integrated FM approach globally. Use of IoT, computer-aided facility management (CAFM), computerized maintenance management system (CMMS) and artificial intelligence (AI) enable resource optimisation and centralised & remote monitoring of assets; therefore, end users prefer to bring all the services in a single platform, which drives the integrated FM approach. The integrated FM segment is expected to witness higher growth than the single- and bundled-services segment, at ~10.0% during the forecast period.



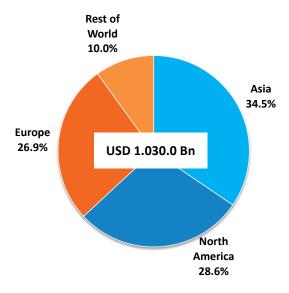
Exhibit 2.3: Outsourced Facility Management Market: CAGR by Service Segment, Global, CY2025 - CY2029



Another notable and emerging trend in the global market is the expansion of the service offerings by the major facility management service providers. In parallel to integrated facility management offerings that include hard services and soft services, business services such staffing, workplace solutions such as connected workplaces and smart workplaces, security services, community services etc. and environment and sustainability related services such as landscaping, waste management, renewables, decarbonisation, climate protection etc. are being offered by the leading service providers in the global facility management. The service providers are looking at buildings as an opportunity and broadening their service offerings to include all necessary solutions for not just the operation and maintenance of the building, but also contribute to the economic activities within them. This market trend is expected to gain momentum across all regions during the forecast period.

Market Segmentations by Regions:

Exhibit 2.4: Outsourced Facility Management Market: Percent Breakdown by Regions, Global, CY2024



Source: Frost & Sullivan Analysis

The Asian Facility Management Market is the largest globally with a share of 34.5% of the total outsourced Facility Management Market in CY2024 and is expected to grow at a CAGR of 10.0 – 11.0% up to CY2029, with China and India being the main growth drivers. During the last five to ten years, the diverse Asian Facility Management market overtook North America and Europe as the largest regional market globally. While Australia, the most developed market in the region, has reached a high degree of maturity and has similar dynamics to several European countries, other markets, including China and India, are still relatively new and will grow rapidly. The Chinese market is seeing exceptional growth and will become the biggest Facility Management market globally by 2028 through extensive expansion and mergers & acquisition activities, Although Japan's and South Korea's markets are large and have well-developed outsourcing practices, foreign suppliers, especially the USA and European companies, find it difficult to enter the market. Asia has by far the biggest Facility Management market globally, but the penetration of outsourced Facility Management is low, making the growth opportunity high. The low penetration of Facility Management Services in many of Asia's fast-growing economies indicate huge potential for market participants, as outsourcing will become more commonplace during the next decade. The competitive landscape is diverse. International suppliers coexist with national and local Facility Management companies. The region's dynamic property markets attract Facility Management companies with core construction, real estate, and property management services, giving them a strong presence.

Exhibit 2.5: Outsourced Facility Management Market: CAGR by Regions, Global, CY2025 - CY2029



Source: Frost & Sullivan Analysis

North America is a leading market in integrated contracts segment because of the local presence of large contract management and real estate firms. This segment in North America is expected to see an average 7.0% CAGR through CY2029. The USA market accounts for about 88% of the North American Facility Management Market revenues while the Canadian Market covers the remaining 12%. The Canadian and the USA markets are similar in structure and sophistication, and most leading suppliers operate in both markets. Outsourcing growth drives the overall market, with new opportunities coming from less typical end user segments such as Industrial, Healthcare, Aviation and Retail. Like most major developed markets, the major trends in North America focus on technology, sustainability, and energy management. The accelerated use of digital technologies in service delivery and the growing importance of sustainability will be the biggest drivers post COVID-19. Historically, the Soft Services market in North America has been janitor-led, with the main demand representing problem-solving. Hard Services were more of an add-on than a core part of the customer strategy. However, the market is becoming more engineering-led, where technical services will be the core of the Facility Management contract. Service integration is well above the global average, and North America has the largest and most-developed Integrated Facility Management market globally, which will remain true throughout the forecast period. The market is highly competitive, and pricing pressures will continue even as macroeconomic indicators improve. Retaining healthy margins will remain a challenge for market participants and drive efficient and integrating trends. Many large national and international Facility Management companies with backgrounds in construction, technical services, property management, and support services dominate the North American market. Construction, property, and technical Facility Management firms focusing on operation & maintenance services around Heating, Ventilation and Air-conditioning (HVAC) functions are strong in North America.

European Facility Management Market has seen accelerated use of digital technologies since the pandemic. The European market is diverse, and revenue opportunities depend on the outsourcing rates. The markets of Northern Europe (especially the United Kingdom and the Nordics) are the most advanced

and sophisticated Facility Management Markets in Europe, in terms of outsourcing rates, service innovation, and market maturity. Although the market opportunity is substantial in Southern Europe, its less-established outsourcing culture has delayed revenue growth. Countries such as France, Spain, and Italy have lower outsourcing penetration rates, especially for Integrated Facilities Management. The private sector is still the main driver and will continue to account for more than two-thirds of the overall European market. While the public sector has experienced turbulent times in recent years, which has led to smaller contracts in some countries, it has increased its willingness to outsource and openness to Integrated Facilities Management concepts that facilitate cost savings. Companies typically choose integrated outsourcing approaches. The UK, for example, hosts Europe's largest outsourced public sector market, and outsourcing continues to be a core strategy to drive efficiency and reduce costs. Despite low revenue growth in the overall Facility Management Market, the European market remains attractive for companies that can innovate in the high-growth subsectors of service integration, energy management, workplace solutions, sustainability, and business productivity.

The Rest of World (ROW) market includes large economies of Brazil, Russia, and Mexico, all of which have high revenue potential and are expected to show outsourcing growth in the upcoming years. The Middle East has the most established Facility Management Market in ROW, which has boomed because of its many construction projects and well-established outsourcing rates. The United Arab Emirates, Qatar and Saudi Arabia are the main growth markets. Because the ROW market is the smallest and least-developed globally, it is expected to grow rapidly. Although it is concentrated on commercial hubs where MNC have been pioneering demand, it will soon distribute more evenly across other end user segments. The market will benefit from the economic growth of most regional countries and increasing interest in professional Facility Management concepts among local end users. New facilities drive much of the Integrated Facilities Management demand in this region; however, private, and public sector organisation are showing an increased interest in modernising Facility management operations for existing facilities, which is good news, especially for foreign Facility Management companies, as they are the most capable of promoting efficient Facility management concepts and changing the culture of Facility Management in nascent markets.

The more mature markets of North America and Europe will see CAGRs of ~ 4.0% and ~5.0% respectively, through 2029. Both regions suffer from the commoditisation of Facility Management Services, fierce competition, and high Facility Management outsourcing rates. However, customers are typically more aware and engaged with Facility Management service providers, and technology innovation, sustainability, and customer experience have a better chance to create differentiation in these regions.

The USA is the largest facility management market in the world in CY2024 in terms of market revenues and accounts for 25.1% of the total market revenues. The fastest growing markets in the world are China, India and Middle East, particularly the Gulf Cooperation Council (GCC) countries during the forecast period.

Exhibit 2.6: Outsourced Facility Management Market: Future Trends, Global, CY2024 - CY2029

Attribute	CY2024	CY2029

Region	 Asia has overtaken North America and Europe to be the largest facility management market. 	 The highest revenue growth is expected to come from Asia and Rest of World. Asia will remain the largest facility management market through 2029.
Segment	 The private segment accounts for approximately two-thirds of the facility management market 	 The public and private segments will see revenue growth, but the public sector will grow faster. Technology and connectivity will mean that no customer is too small.
Business Model	 Contract-based and outsourced services have strong growth in service bundling, integration, and internationalisation. 	 Technology-enabled and outcomes- based circular business models, such as anything as a service (XaaS), will open new and diverse opportunities.
Supply	 Suppliers sell labor and services with a strong focus on cost optimisation. 	 Customer relationships, selling outcomes, user experience, and business improvements that focus on value creation will increase.
Customer	 Customers focus on process and asset efficiency and problem- solving. 	 Customers will focus on human and building/facility assets to drive productivity and profitability.
Competitive environment	 Incumbent suppliers with long market histories dominate the environment and focus on international expansion. 	 Consolidation among top-tier suppliers and collaboration with multiple new entrants, especially technology and XaaS companies, will increase.

Source: Frost & Sullivan Analysis

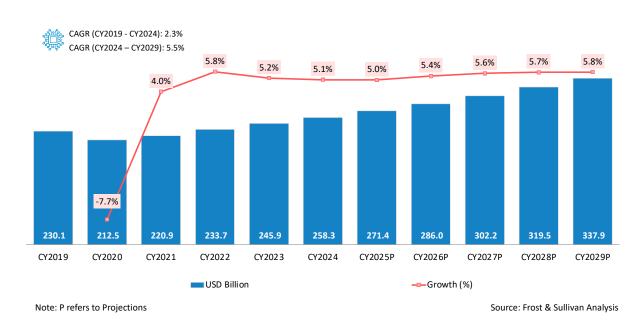
Recent market trends, including the COVID-19 pandemic, have forced the Facility Management companies to move beyond the total cost of ownership and building efficiency. Next-generation solutions focus on the convergence of digital technology and services to deliver value propositions that enhance total business productivity and user experience with sustainability at the heart. Partnerships, collaboration, and the co-creation of services will be crucial to meeting customers' growth objectives and sustainability visions. The factors defining productivity are unique to each customer, and success depends on the definition, capture, management, and optimisation of core performance data across end users.

The accelerated use of technology and new business models has led to Integrated Facilities Management companies acquiring data analytics capabilities to deliver excellent services. Digital transformation has enabled high growth in connected services, remote asset management and workplace optimisation.

The USA Facility Management Market Insights:

The USA is one of the largest and most mature Facility Management Market globally. Major growth enablers driving the market demand are outsourcing trend for cost control and focus on core business, increase in smart buildings and need for technology driven services, emphasis on health, safety and indoor air quality, especially in a post COVID work environment, sustainability related initiatives from end users, ESG practices in businesses and the need for predictive maintenance and energy efficiency. The USA Facility Management Market is valued at USD 258.3 billion in CY2024 and is expected to record a CAGR of 5.5% from CY2024 – CY2029 to reach USD 337.9 billion.

Exhibit 2.7: Outsourced Facility Management Market: Historic Revenue Trend and Forecast, The USA, CY2019 – CY2029



Hard services dominate the USA Facility Management Market in CY2024 and is expected to remain the major segment through the forecast period. Employee safety, workplace safety and compliance are some of the factors driving the demand for hard services in the country. Facility Management service providers in the USA are exploring new business models by integrating multiple services such as energy management, real estate, maintenance and employee-related services into one bundled contract to achieve cost savings and improve overall operational efficiency. Integrated service contracts are expected to be a major growth opportunity in the USA Facility Management Market.

Technology adoption is a key trend in the USA facility management and is driven by the need for operational efficiency, sustainability, and enhanced occupant experiences. All and IoT technologies are used to automate daily tasks, predict equipment failures, and optimise maintenance schedules. IoT sensors are used to collect real-time data on equipment performance, while Al is used to analyse the data to forecast potential issues, enabling predictive maintenance strategies that reduce downtime and operational costs. Mobile and cloud-based solutions are used by facility management service providers to

enhance responsiveness and collaboration between different facility management teams. The adoption of sophisticated building management systems is another key trend in the USA, that allows for centralised control of HVAC, lighting, and other critical systems. These systems enhance energy efficiency and contribute to sustainability goals by optimising resource usage based on occupancy and environmental conditions.

Healthcare industry is one of the fastest growing sectors in the USA and this segment is a major growth opportunity for Facility Management service providers. Aging population and increasing healthcare needs are creating demand for healthcare facilities, which in turn drive the demand for facility management services. The outsourcing of facility management services from this industry is very high and is driven by the highly complex nature of the facilities that require specialised knowledge for efficient operations and maintenance. Compliance for these healthcare facilities is very critical w.r.t safety, cleanliness and infection control. These factors are expected to drive the demand for facility management services from this industry in the long-term.

The GCC Facility Management Market Insights:

The GCC Facility Management Market is witnessing steady growth driven by various factors including infrastructure development, urbanisation and the increasing awareness on the importance of professional facility management services. The GCC countries are investing heavily in infrastructure projects, including airports, hospitals, and shopping malls. The commercial and residential real estate segments are also seeing high investments. As the building stock continues to grow through these investments, the demand for facility management services is expected to rise. The GCC geographic scope includes the Kingdom of Saudi Arabia (KSA), the United Arab Emirates (UAE), Qatar, Oman, Kuwait and Bahrain. The market is estimated to be USD 13.0 billion in CY2024 and is expected to grow at a CAGR of 6.8% from CY2024 – CY2029 to reach USD 18.1 billion. The KSA and the UAE are the top opportunities for Facility Management Market in the GCC.

Integrated facility management contracts are very minimal, at $^{8.0}$ – 10.0% of the total revenues in CY2024. The penetration of integrated contracts in the GCC is comparatively lower than the global average of about 13.0%. Key growth opportunities in the GCC Facility Management Market include leverage of advanced technologies for service advancement, resource management for first-mover advantage, sustainability solutions for competitive differentiation, and building occupant experience for facility management client retention.

Exhibit 2.8: Outsourced Facility Management Market: Historic Revenue Trend and Forecast, The GCC, CY2019 – CY2029



Note: P refers to Projections Source: Frost & Sullivan Analysis

Soft services are the largest service type in the GCC in CY2024, and are expected to remain the largest segment up to CY2029. Hard services are expected to gain importance in the GCC Facility Management Market in the long-term. Hard services are expected to record a higher CAGR compared to other facility management service types. Additional services are the smallest service type by revenue, but make up for an important segment, which is expected to record double-digit CAGR from 2021 to 2027.

The top-three end user segments are commercial, institutional, and industrial, cumulatively accounting for about 80.0 - 85.0% share of total revenues in CY2024. The industrial segment is expected to record the highest growth and this is attributed to the expansion of manufacturing activities and continuation of oil and gas downstream business in the region. Nonetheless, the commercial sector will remain the largest end user throughout the forecast period. Factors for facility management adoption in commercial facilities, including offices and shopping malls, are green building certifications and corporate sustainability initiatives.

Indian Integrated Facility Management Market Overview

Market Overview:

Strong macroeconomic growth fundamentals are contributing to a steady growth in the Facility Management Market in India. In the past decade the market has witnessed solid growth except for the COVID-19 pandemic; expanding urbanisation, formalisation of industrial sector, rising commercial and residential infrastructure, and increasing adoption of technology-driven solutions are expected to drive the growth momentum over the next five years. Higher FDI, driven by liberal economic policies in India are creating opportunities for private sector. As a result, the business prospects have bourgeoned in industries ranging from banking and aviation to pharmaceuticals and IT, and India has attracted large MNC with its business-friendly climate. The real estate sector has experienced a boom in business opportunities, which has prompted the sector to invest in construction activities to grow the stock of buildings. The rise of organized retail developments in India have also contributed to the built environment, thereby driving the demand for Facility Management Services.

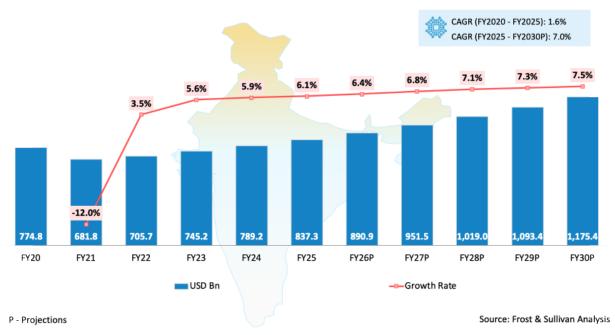


Exhibit 2.9: Construction Sector Market Forecast, India, FY2020 - FY2030

The Indian real estate sector is one of the largest contributors to the country's GDP, driven by rapid urbanization and infrastructure development. The sector is expected to contribute to 13% of the country's GDP by 2025. Renewed investment interest among Non-Resident Indians (NRI) and millennials in Indian real estate is a driving factor for the future growth. Private equity investments in real estate sector from January to December 2024 stood at USD 4.2 billion¹⁰. The demand for office spaces remains strong, with IT, BFSI, and manufacturing sectors driving leasing activity in metro cities. Demand for office and

⁹ https://www.ibef.org/industry/real-estate-india

¹⁰ https://content.knightfrank.com/research/2948/documents/en/trends-in-private-equity-investments-in-india-2024-11783.pdf

commercial space in Tier 1 and Tier 2 cities are the future growth hot spots and this is expected to drive the demand for facility management services in Tier 2 cities in the long-term.

Furthermore, several initiatives by the government to provide housing to all citizens – such as the ambitious Pradhan Mantri Awas Yojana (PMAY) Urban 2.0 scheme of the Union Ministry of Housing and Urban Affairs and the development of Smart Cities in India are projected to have a beneficial impact on the Indian Facility Management industry in the long-term. Asset owners are more inclined to professional Integrated Facility Management since it not only increases the building's lifespan but also makes sure the asset complies with global health and safety requirements.

Integrated Facility Management Market Opportunity Size:

Integrated Facility Management Services for the purpose of this report is defined as Facility Management Services, Corporate Catering Services, Factory Relocation Services, Sports Event Management Services, Beach Development Services, and E-bus Operation & Maintenance Services. The total market opportunity size for Integrated Facility Management Services including outsourced and in-housed services for FY2025 is estimated to be INR 1,337.0 billion.

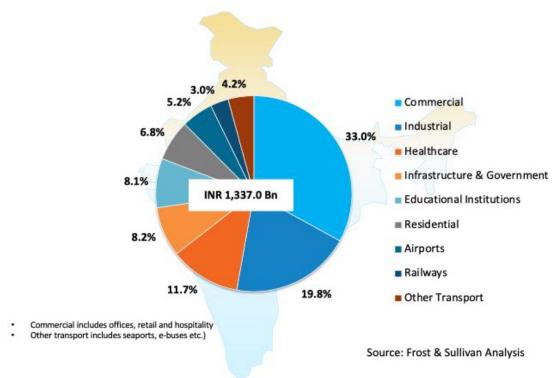


Exhibit 2.10: Total Market Opportunity for Integrated Facility Management Services, India, FY2025

Facility Management Market Analysis

Lifecycle Stage of the Facility Management Industry in India:

The Indian Facility Management Market is in its growth stage and is evolving rapidly, fueled by the improving outsourcing rates, rapid formalisation of the economy and investments across end user segments such Commercial, Residential and Industrial segments. India has the unique advantage of being a geographically spread-out nation with the world's largest population and the presence of a large

numbers of trade, financial and supporting business activities, which create an immense potential for Facility Management Services than most of the Asia Pacific countries such as Singapore and Australia that are smaller in geography. Yet, the market maturity, understanding and acceptance of outsourcing such services by end users is moderate currently and is expected to improve over the long-term.

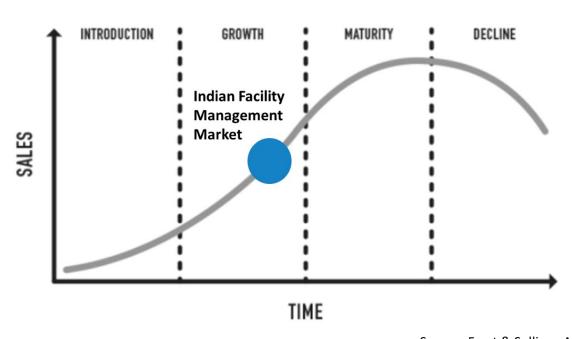


Exhibit 2.11: Life Cycle Stage of the Facility Management Market, India, FY2025

Source: Frost & Sullivan Analysis

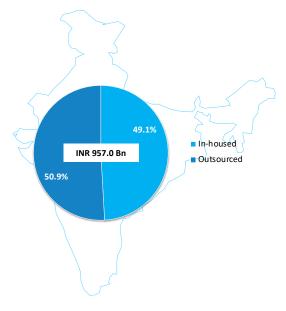
The demand outlook for Facility Management Services in India is expected to remain positive and would mainly be driven by the improvements in maturity of end users and the need for enhanced building operational efficiency, improved safety and customer experience. The presence of global and MNCs across major end user segments are also spiking the demand for Facility Management Services as the probability of outsourcing the services from this band of customers is high due to their higher awareness levels and willingness to outsource.

The Facility Management Market is set to experience higher growth rates over the next ten years. Service providers are expanding into niche/ value-add services to expand their growth prospects. The market is poised to grow at a stupendous rate and offers high growth potential. Demand for both Hard and Soft Services are expected to remain strong as end users value the experience and professional service that these service providers can offer.

Historical Growth Trends of the Indian Facility Management Market:

The Total Facility Management Market in India in FY2025 is valued at INR 957.0 billion and around 50.9% of this is outsourced to 3rd party companies. Between FY2020 and FY2025, the outsourced Facility Management Market grew at a CAGR of 9.1%. In FY2025 the outsourced Facility Management Market was estimated to be worth INR 487.0 billion.

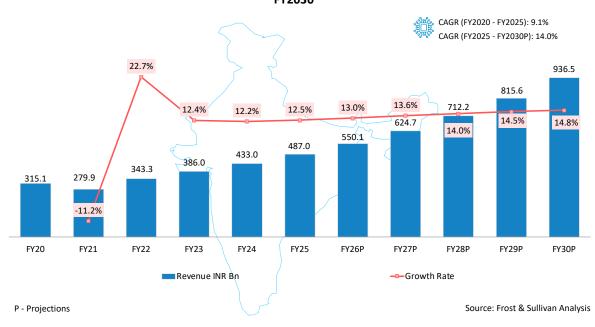




Source: Frost & Sullivan Analysis

Outsourcing of Facility Management Services is becoming a well-accepted concept across all major end user segments. Within the Residential segment, high-rise residential complexes and premium villas/ homes in urban areas are more inclined to outsourcing. In the past three years the market has witnessed increase in outsourcing of Facility Management from Government sector. With the increasing choice of outsourcing for safe, clean, secure, and sustainable built environment, the demand for Facility Management Services have been increasing. The market in FY2025 recorded a growth rate of 12.5% from FY2024. The market witnessed a degrowth of 11.2% in FY2021 due to the global pandemic and recovered in the second half of FY2022.

Exhibit 2.13: Outsourced Facility Management Market: Historic and Forecast Revenue Trend, India, FY2020 – FY2030



The Facilities Management Market in India is witnessing a shift from a single service contract model to an integrated model, which involves consolidating many or all of the office/ building's services under one contract and management team. This shift is driven by improved building performance while streamlining communication and making day-to-day operations simpler to manage.

Growing investments in end user segments such as Commercial Offices, Airports, Railways, Healthcare, Education, Retail etc. are expected to drive the growth in the outsourced Facility Management Market at a CAGR of 14.0% from FY2025 – FY2030 to reach INR 936.5 billion.

Market Segmentations:

Market Segmentation by Services:

The Facilities Management Market primarily consists of Soft Services and Hard Services and in terms of market revenues, the Facilities Management Market is dominated by the Soft Services segment. The wide range of services provided under the segment makes it the largest category.

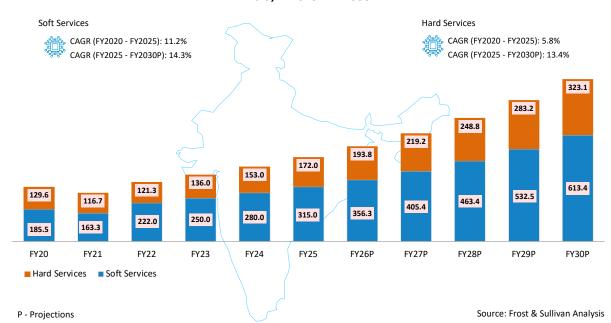


Exhibit 2.14: Outsourced Facility Management Market: Historic and Forecast Revenue Trend by Service Type, India, FY2020 – FY2030

Soft Services segment was estimated at INR 315.0 billion in FY2025 and has recorded at CAGR of 11.2% from FY2020 – FY2025. Indian Commercial Offices segment witnessed strong recovery in terms of resuming work from office in the past two years. This resulted in a high growth in Housekeeping & Cleaning and Disinfection Services demand. With the ongoing trend of hybrid work model, the demand for these services from the offices segment is anticipated to remain high in the forecast period. Based on the analysis of market growth enablers and investments in key end user segments, the market is expected to reach INR 613.4 billion by FY2030, recording a CAGR of 14.3%. The top three segments with Soft Services are Housekeeping & Cleaning, Waste Management and Landscaping & Gardening and these segments account for a combined market share of 67.4% of the Soft Services Market in FY2025.

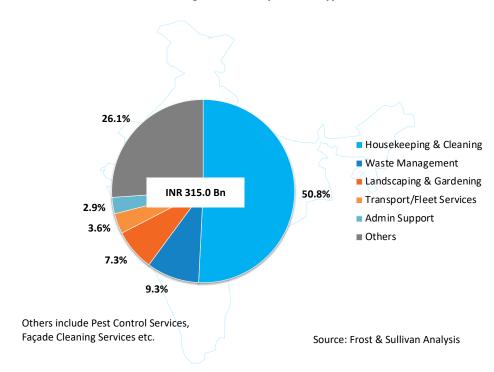


Exhibit 2.15: Soft Services Market: Segmentation by Service Types, India, FY2025

- Housekeeping/ Cleaning Services: Growing importance for clean and hygienic workplaces are
 driving the demand for Housekeeping & Cleaning services. A hygienic business environment
 increases concentration and boosts productivity. Housekeeping & Cleaning service delivery has
 evolved in the past by adopting technological solutions. Lots of innovations in cleaning tools and
 machines have assisted human resources to achieve excellent service delivery in terms of quality
 and has enhanced productivity among the field workers.
- Waste Management Services: Solid waste generated from commercial buildings, residential
 complexes and industrial buildings are being managed by the Facility Management service
 providers through a Soft Services contract. Sustainability and Corporate Social Responsibility (CSR)
 activities among large companies across end user segments are driving the demand for
 outsourcing Waste Management Services at the building level. Sustainable Development Goals
 (SDG) and adopting Environment, Social and Governance (ESG) reports are also driving
 outsourcing of such services among end users.
- Landscaping & Gardening Services: Increasing per capita income, changing and progressive lifestyle have resulted in high growth for Landscaping & Gardening Services in India. Aesthetically appealing landscaping is being desired across all premium projects across Commercial and Residential segments. Rapid urbanisation and industrialisation have led to the increasing boom in malls, green corridors, amusement parks, commercial offices and residential townships, that are seeking landscaping services.

Hard Services segment was estimated at INR 172.0 billion in FY2025 and has recorded at CAGR of 5.8% from FY2020 – FY2025. Investments in end user segments, growing importance of energy efficiency, net zero and lowering carbon emissions are expected to broaden the scope of HVAC services within Hard

Services and would be a key growth driver during the forecast period. The Hard Services Market is expected to reach INR 323.1 billion by FY2030, recording a CAGR of 13.4%. Mechanical, Electrical & Plumbing (MEP) & HVAC Services are the largest solution under the Hard Services segment, and this accounts for more than 80.0% of the Hard Services Market in FY2025.

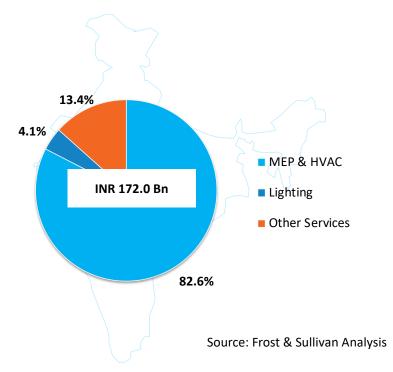


Exhibit 2.16: Hard Services Market: Segmentation by Service Types, India, FY2025

• MEP & HVAC Services: HVAC maintenance service is the predominant solution provided under Hard Services historically. However, in the past five years the segment has evolved to include diverse range of services to adopt to the evolving built environment that includes fire, smoke, and carbon monoxide detection systems, automated firefighting/fire suppression systems, extra-low voltage / low voltage, and medium voltage systems, such as building automation system, security systems (access control, Closed-circuit television (CCTV)), lighting control systems, power distribution, switchgears, generators, transformers, lightning protection, data and voice cabling etc. This widens the scope of services provided and thereby opportunities under Hard Services. The growing need for energy management and reduction of the building operating cost has increased the focus on preventive maintenance which is now a lucrative area for growth in Hard Services segment. Additional equipment such as solar, gas, electric-powered hot water generators and roof-top solar photovoltaic power systems, in line with the construction market trends are adding to complexity of building maintenance and at the same time increasing the potential for MEP Maintenance Services.

Market Segmentation by End User Segments:

Commercial is the largest segment and includes Offices, Retail, Hospitality, and Hospitals. Commercial, Healthcare and Industrial are the top three end user segments for Facilities Management Market in FY2025

with a combined market share of 63.0%. Investments in industrial and commercial real estate are the key factors that are expected to drive the demand from these segments in the forecast period.

In terms of growth rates, the top three end user segments for facility management services are Industrial, Infrastructure & Government and Healthcare.

- Within the industrial segment, automotive sector has witnessed high growth and this is driving the need for facilities management professionals. The oil and gas sectors are also expected to expand due to increasing energy demand. The power sector is set to grow significantly as the demand for electricity is on a rise due to government initiatives like 'Power for All'. With an increase in the size of manufacturing industries such as transport equipment, petroleum, and electrical machinery, there is a corresponding increase in demand for facility management services as some of these industries have stringent laws for maintaining clean manufacturing units. The anticipated growth in the above sectors would create growth opportunities for facility management service providers.
- A growing demand for facility management services in government sector offers an opportunity
 of INR 74.0 billion in FY2030. Several niche opportunities are present in the government sector
 and one of them is the privatisation of bus depots in India. The public sector bus depots are
 outsourced to private companies for end-to-end management including revenue collection, and
 only a license fee is required to be paid to the government. Key factors driving the outsourcing are
 operational efficiency, financial constraints among others. PPP is the commonly used contract
 type, where private players undertake specific tasks or manage entire depots under contracts with
 the government.
- The healthcare industry was valued at USD 280 billion in FY2020 and is expected to reach USD 638 billion by FY2025¹¹. As Hospital Acquired Infections (HAIs) have been a major threat to the healthcare environment, there is an increased need for specialised sanitation and hygiene solutions for hospitals in India. The healthcare segment is expected to offer a huge potential of close to INR 117.1 billion in FY2030.

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¹¹ https://www.ibef.org/industry/healthcare-india

3.7%1.2% Commercial 6.6% Healthcare 7.5% Industrial 39.3% Educational Institutions 9.0% INR 487.0 Bn Airports ■ Infrastructure & Government 9.0% Residential Railways 11.7% Other Transport 12.0% Commercial includes offices, retail and hospitality Other transport includes seaports etc. Source: Frost & Sullivan Analysis

Exhibit 2.17: Outsourced Facility Management Market: Segmentation by End User Types, India, FY2025

Market Segmentation by Regions:

The Western, Northern, and Southern regions contribution to Facilities Management demand is almost similar in FY2024 and is expected to remain the same during the forecast period. The presence of many global/Indian MNC, the availability of qualified manpower, fewer labour conflicts, and competitive labour cost are the critical factors that have led to the growth of Facility Management Market in these regions. These three regions have greater potential than the Eastern region due to their ability to attract more investments in the country. The low level of investment among Commercial and Industrial segments, limited awareness levels among customers, and growing labour and land conflicts, have caused the Eastern region to be the least attractive for Facilities Management Market among the four regions of India.

Moving forward, all the above three regions are expected to witness growth in terms of construction activities, which would eventually create opportunities for Facility Management Services. The growth is also spreading out beyond the prominent cities (Tier 1) in each region. The recent trend of hybrid/remote work, driven by the pandemic is one of the key factors driving the growth in Tier 2 cities. Nation-wide shutdowns during the pandemic forced individuals to go back to their hometowns and many are continuing to prefer to work from these locations. This has led to the evolution of an ecosystem, which is enabling businesses to function from these Tier 2 cities.

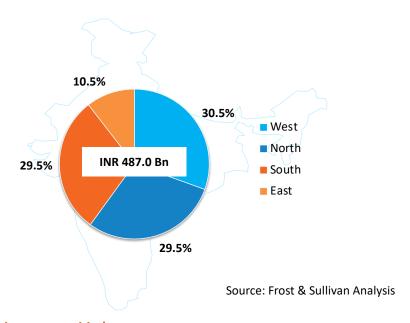
Banks willingness to expand their business operations to Tier 2 cities by developing shared service centers, investments by IT, Pharmaceutical, Healthcare and Life Sciences segments are expected to create the need for built environment and Facility Management Services, as the Tier 2 cities are now better equipped with required infrastructure, higher talent availability and attractive commercial real estate propositions.

Improved skilling opportunities driven by the presence of management colleges and government skilling programs in Tier 2 cities are proving the necessary manpower for businesses to operate from the Tier 2

cities. Low operating costs in Tier 2 cities is an attractive business proposition for companies and is a major factor driving their expansion plans in Tier 2 cities. Willingness of the working population to work from Tier 2 cities, which is driven by the quality of life, work-life balance and other social factors is other advantage. Major Tier 2 cities expected to drive the next wave of Facility Management demand are:

- Northern Region: Jaipur, Chandigarh, Kanpur and Lucknow
- Western Region: Vadodara, Indore, Thane, Nagpur, and Indore
- Southern Region: Coimbatore, Trichy, Visakhapatnam, and Kochi

Exhibit 2.18: Outsourced Facility Management Market: Segmentation by Regions, India, FY2025



Outlook of the Indian Facility Management Market:

Market Drivers:

Exhibit 2.19: Market Drivers and Impact, India, FY2026 – FY2030

Market Drivers	Impact			
	1-2 Years	3-4 Years	5-7 Years	
Growth in real estate sector	High	High	High	
Operational benefits due to outsourcing Facility Management Services	High	High	High	
Health and safety issues	Medium	High	High	
Focus of Government initiatives such as Swachh Bharat Mission, Clean Cities, etc.	Medium	Medium	High	

Government focus on tourism industry, due to demand from hospitality industry	Low	Medium	High
Increasing complexity of commercial buildings	Low	Medium	Medium
Energy conservation and optimum usage of building solutions	Low	Low	Medium

Source: Frost & Sullivan Analysis

Growth in real estate sector: Increase in real estate stock has a direct implication on the growth of the Facility Management Market. Regular investments in office, residential and retail segments lead to the rapid addition to India's real estate stock across commercial, residential, retail, industrial and warehousing. Demand for coworking spaces is increasing in India and the global pandemic has contributed to the growth of coworking/ flexible spaces in the past three years. With hybrid working models gaining prominence, the demand for flexible and coworking spaces is expected to increase as companies are uncertain about investing in permanent large offices spaces. Flexible office spaces also allow companies to expand into smaller cities, adapt and stay competitive in a dynamic business environment.

49.6 42.0 14.7 9.0 6.6 5.0 6.9 7.3 6.0 1.4 1.2 Bengaluru Chennai Delhi NCR Hyderabad Kolkata Mumbai Pune Pan India Values in million square feet CY2023

Exhibit 2.20: Net Absorption in Office Real Estate by Major Cities, India, CY2023 and CY2024

Source: https://www.jll.com/en-in/newsroom/office-market-at-49-56-mn-sq-ft-of-net-absorption-in-2024

Metros such as Mumbai, Delhi NCR, Bengaluru and Chennai are experiencing strong demand in luxury segment driven by lifestyle changes and rising disposable incomes. Tier II and tier III cities are emerging as key hotspots in the real estate segment for commercial and residential properties and this is driven by

affordability, infrastructure development, improving connectivity etc. The expanding real estate into tier II and tier III cities create growth opportunities for facility management.

Operational benefits due to outsourcing Facility Management services: Outsourcing saves the cost of operating and training staff which is much higher compared to hiring a professional agency. It enhances flexibility in terms of availing the services as per the changing specifications. Outsourcing also helps in better utilisation of time for other business activities.

Health and safety issues: Post COVID -19 situation, companies continue to prioritize health and hygiene of the facility. Companies are increasingly engaging professional facility management experts, majorly for integrated services. Increased awareness on maintaining indoor air quality, safety aspects related to fire audits, regular maintenance of fire safety systems, electrical equipment, and security devices are driving the need for outsourcing Facility Management services to experts.

Focus of government initiatives such as Swachh Bharat Mission, Clean Cities, etc.: Government of India is expected to spend more on the maintenance of public infrastructure, such as municipal parks and government-run schools, increasing impetus provided to cleanliness in these facilities in the form of government initiatives. The key enabler for the growth of facility management market would be the main objectives of the Swachh Bharat Mission – to clean the streets, to clean the roads and infrastructure of the statutory towns of the country. Facility management players are capitalizing on the opportunity and considering including waste management as one of the top offerings. Apart from public infrastructure, railways, metros, government hospitals and educational institutions are also expected to increase their outsourcing in the long-term.

Government focus on tourism industry, due to demand from hospitality industry: Travel and tourism are the segments that is receiving major boost in India. It is a necessity for the hospitality segment to provide the best services to visitors and guests to ensure a pleasant stay. Cleanliness and hygiene are necessary in hotels. This will open more business opportunities for facility management companies in the coming years. One of the key programs, Incredible India 2.0 is an international marketing tourism campaign run by India's Ministry of Tourism to promote tourism in the country.

Increasing complexity of commercial buildings: Increasing complexity of commercial buildings is encouraging the involvement of professional maintenance services to increase the building's life span. Growth from the commercial segment is expected to be replicated in the growth of outsourced IFM services market revenue. With the emergence of innovative technology, engineering, administrative and regulatory compliances, the demand for professional facility management in commercial spaces will continue to grow.

Energy conservation and optimum usage of building solutions: The significance of conserving energy is gradually picking up momentum due to rising energy costs, encouraging companies to hire professional IFM services for maintenance of energy intensive equipment. IFM service providers are expected to play a key role in building sustainability as energy efficiency strategies gain prominence. Sustainability in Facility Management includes reduction of energy consumption. All the supporting services offered should be aimed at improving the sustainability of the customer.

Market Restraints:

Exhibit 2.21: Market Restraints and Impact, India, FY2026 - FY2030

Market Restraints	Impact			
	1-2 Years	3-4 Years	5-7 Years	
Inflation leading to increase in management costs	High	High	High	
Presence of large unorganised segment	Medium	Medium	High	
Adoption of technology still at nascent stage in India	Low	Medium	Medium	
Safety equipment cost and hygienic cost exceeding the initial cost of services	Low	Medium	Medium	

Source: Frost & Sullivan Analysis

Inflation leads to increase in management costs: Short-term contracts lead to competition and impact business continuity for Facility Management companies. High inflation costs and other critical factors are forcing customers to replace long-term contracts with medium-term ones. Many customers find it easier to maintain medium and short-term contracts than to maintain long-term ones, as the latter are prone to price increases because of surging inflation and labour costs.

Presence of large unorganized segment: Currently, the large, organised Facility Management comprises contributing to a small portion of the market. Ease of market entry led to huge chunk of unorganised competition. Many facilities are still not ready to hire a professional agency for cleaning. They either do it in-house or get it done through local agencies to provide housekeeping services. However, push for organised Facility Management Services are also emerging from across business verticals, both in terms of demand and supply.

Adoption of technology still at nascent stage in India: In India there is a huge gap between understanding and adopting technologies. Many businesses have in-house cloud computing and IoT systems; however, it is not incorporated into the Facility Management ecosystem. Transition from conventional office layouts to a modern set up is still in infancy stage. Despite Facility Management playing a key role in operations, enterprises are unaware of the various evolving solutions. Also, there is a challenge in integration of Facility Management with the existing Enterprise Resource Planning (ERP) system. When failures occur, prompt actions are required to maintain access and ensure security which is possible only through remote monitoring and other technology tools.

Safety equipment costs and hygienic cost exceeding the initial cost of services: Facility Management workers need to be provided with proper protective equipment, temporary accommodation, and hygiene support and their safety must be taken care of as well. Similarly, there is risk of sending back employees to their houses. Facility Management companies are forced to arrange for temporary accommodation for the employees. Also, there is a need for contactless cleaning and involvement of other technological intervention which will eventually increase the overall cost of services.

Outlook of Key End User Segments:

Healthcare: The Indian Healthcare Sector is one of the key contributors to the economy and is growing at a steady rate due to its strong coverage, diverse services, and increasing expenditure by public as well private players. This consists of hospitals, medical devices, clinical trials, telemedicine, medical tourism, health insurance, pharmaceuticals and medical equipment.

The Healthcare Market in India is being driven by the rising prevalence of lifestyle diseases, increasing demand for affordable healthcare delivery systems due to rising healthcare costs, technological advancements, the emergence of telemedicine, rapid health insurance penetration, government initiatives like e-health, along with tax benefits and incentives.

The low cost of healthcare has led to an increase in medical tourism in the nation, drawing people from all over the world. Further, due to its relatively low cost of clinical research, India has become a centre for research & development activity for foreign businesses.

Hospitals is the largest segment within the Healthcare sector and accounts for around 80% of the total Healthcare revenues in India. India has only 0.79 public hospital beds per 1000 person¹² as against 5.0 in China, 2.7 in North America and 5.3 in European Union¹³. In the past decade India has been focusing on improvements in healthcare infrastructure and capacity building, which are expected to continue in the long-term. Despite the increasing investments, the demand for hospital beds remains high at 2.4 million beds to meet the global average on bed-to-population¹⁴. Several initiatives have been launched by the government to support the inflow of investments. Favorable investment policies such as the 100% FDI in construction of hospitals under the automatic route and 100% FDI in greenfield projects under the automatic route have attracted significant investments. Around USD 10.26 billion¹⁵ investments have been received in hospitals and diagnostic centers from April 2000 to March 2024.

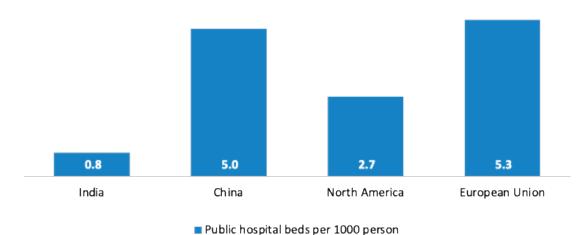
¹² https://thesouthfirst.com/health/india-has-only-0-79-beds-per-1000-population-in-government-hospitals-short-by-2-4-million-hospital-beds/

¹³ World Bank

¹⁴ https://thesouthfirst.com/health/india-has-only-0-79-beds-per-1000-population-in-government-hospitals-short-by-2-4-million-hospital-beds/

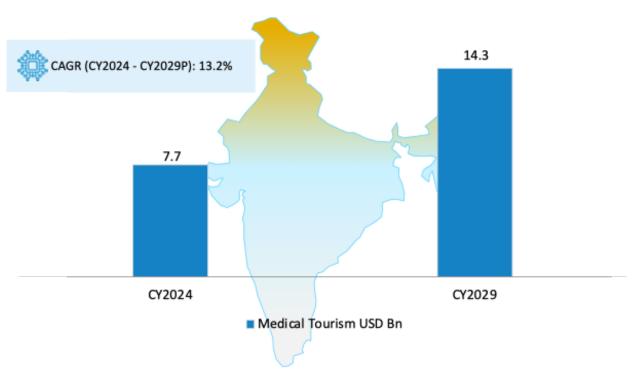
¹⁵ https://www.investindia.gov.in/sector/healthcare

Exhibit 2.22: Hospital Beds per Person by Key Countries and Regions, CY2024, Global



Source: Frost & Sullivan Research

Exhibit 2.23: Medical Tourism Market, CY2024 & CY2029, India



Source: IBEF November 2024 Healthcare Report, Frost & Sullivan Analysis

The Indian Healthcare Sector has been undergoing consolidation since the COVID-19 as customers are seeking higher-quality healthcare services. The customers are moving from smaller nursing homes to bigger hospitals in search of quality healthcare. This has resulted in small and independent hospitals seeking partnerships with hospital chains or attaching themselves with larger hospital networks. This has

resulted in market consolidation and the market share of organised companies has been growing steadily. Many of the major companies have announced significant expansion plans and these focus on commissioning nearly 22,000 beds over the next three to five years by the private sector¹⁶.

Investments in healthcare and hospital infrastructure are anticipated to drive the demand for Facility Management Services over the forecast period. Outsourcing rates are also expected to improve in this segment driven by the need for specialised skills, compliance and to ensure high-quality environment for patient care.

Key investment highlights:

- The All-India Institute of Medical Sciences (AIIMS) in Bilaspur is expected to build a 300-bed trauma center. ¹⁷
- Apollo Hospitals Enterprise Ltd. has committed to expand its capacity by adding more than 3,500 beds across 11 locations in India by FY2026. This ambitious expansion plan is expected to be carried out through a mix of greenfield, brownfield, and acquisition projects, and is expected to cost approximately INR 6,100 crore.¹⁸
- Dozee, a health-tech start-up specializing in Al-based contactless remote patient monitoring (RPM) and early warning systems (EWS), is expected to expand its Indian footprint to over 2,000 hospitals and 100,000 beds by 2028. Currently they have partnerships with nearly 280 hospitals, covering over 17,000 beds across India.¹⁹
- KIMS Hospitals targets top-three status in India by FY2027, aiming to double its capacity to 8,000 beds through aggressive expansion efforts.²⁰
- Max Healthcare has announced plans to invest INR 6,000 crore by FY2027 to expand its bed capacity to 9,000 beds
- Bihar's state health minister announced that around 1,500 new hospital buildings, including primary healthcare centres, additional primary healthcare centres and health sub-centres, would be established in rural areas in FY2026. Other plans for the state include the development of a new cancer treatment hospital in Begusarai, a 100-bed paediatric hospital in Patna and new medical colleges and hospitals in seven districts²¹.
- PB Healthcare Services, owned by PB Fintech has secured USD 218.0 million in seed funding to develop a technology-driven hospital network in Delhi NCR region. The company is expected to launch 600 – 800 beds in the next year²².

¹⁶ https://theprint.in/economy/india-will-see-an-addition-of-over-22000-hospital-beds-in-private-hospitals-over-next-3-5-years/2272593/

¹⁷ https://newsonprojects.com/news/aiims-bilaspur-to-establish-300-bed-trauma-centre

¹⁸ https://newsonprojects.com/news/apollo-hospitals-to-invest-6100-crore-for-3500-new-beds-across-11-locations-by-fy26

¹⁹ https://newsonprojects.com/news/dozee-aims-to-expand-local-presence-to-over-2000-hospitals-by-2028

 $^{^{20}\,}https://ehealth.eletsonline.com/2024/11/leading-indian-hospitals-announce-aggressive-expansion-plans-amidst-heightened-competition-in-healthcare/$

 $^{^{21}\} https://timesofindia.indiatimes.com/city/patna/govt-to-open-more-than-1500-new-hospital-buildings-in-rural-are as-minister/articleshow/119265885.cms$

²² https://ehealth.eletsonline.com/2025/05/pb-healthcare-raises-218-million-to-launch-hospital-network/

- Aster DM Healthcare Limited plans to develop a new multi-speciality hospital with a capacity of 430 beds; the first phase of the project will add 300 beds by FY2027 and the remaining 130 beds by FY2029 in second phase²³.
- Global Health Ltd, the parent company of Medanta Hospital is expected to develop a 750-bed super speciality hospital in Pitampura, New Delhi²⁴.
- The Ambuja Neotia Group has announced its plan to expand its healthcare footprint with the development of seven new healthcare facilities over the next three to four years. The company is expected to invest INR 1,600 INR 1,800 crore, including the development of new hospitals in Guwahati and Raipur²⁵.
- Narayana Health in February 2025 has laid the foundation stone for its fifth hospital in East India; the hospital is expected to have a capacity of 1,100 beds²⁶.

Retail Segment: The Indian Retail Industry is a key driver of the economy. The Retail Segment includes various sub-segments such as clothing, textiles, fashion accessories, jewelry, watches, footwear, health and beauty products, pharmaceuticals, consumer durables, home appliances, cell phones, furnishings, utensils, furniture, food, grocery, catering, books, music, gifts, and entertainment.

The Retail Sector is witnessing unprecedented transformation through the introduction of newer formats, increasing institutional investment, and entry of new global brands. India requires 55 million square feet of Grade-A mall space over the next four years to keep up with the demand and align with other south Asian countries on the basis of Retail Space Per Capita (RSPC)²⁷. Growth in the Retail Segment is driven by factors such as increasing urbanisation, rising household income, changing demographic profiles, connected rural consumers, and increasing consumer spending. Current retail stock in India stands at 91 million square feet across seven cities (Delhi-NCR, Mumbai, Pune, Bengaluru, Kolkata, Chennai, and Hyderabad) and this is expected to reach 132 million square feet by CY2028, growing at a CAGR of 9.7%²⁸. Changing consumer preferences have paved way for personalised service, interactive displays, and other innovative approaches. This has led to the growth of experiential retail, where the shopping experience is as important as the products being sold.

Another prominent trend in the Retail Segment that is expected to drive the demand for Facility Management Services is the online only Indian brands opening their brick-and-motor stores to cater to wider audience and to also provide omnichannel platform. Key categories of online brands opening physical stores include jewellery, women's ethnic wear, footwear, and beauty & cosmetics. Driven by the demand, several homegrown Indian brands are expected to emerge and eventually open physical stores across the country. A few examples of such brands include HRX, Palette by Tata Cliq, Aachho, Giva among others.

²³ https://newsonprojects.com/news/aster-dm-healthcare-expands-capacity-with-new-430-bed-hospital-lease

²⁴ https://newsonprojects.com/news/medanta-to-operate-750-bed-super-specialty-hospital-in-new-delhis-pitampura

 $^{^{25}\} https://newsonprojects.com/news/new-hospitals-coming-up-as-ambuja-neotia-group-pours-1800-cr-into-health care-expansion$

²⁶ https://newsonprojects.com/news/narayana-health-expands-in-east-india-begins-work-on-fifth-hospital

²⁷ https://www.cushmanwakefield.com/en/india/news/2024/11/india-retail-set-for-expansion-55-million-square-feet-of-grade-a-malls-needed-till-2027

²⁸ https://www.squarefeetgroup.in/2/new-supply-of-retail-space-expected-to-increase-by-45-by-2028-report.html#:~:text=The%20operational%20retail%20stock%20across,with%20bigger%20malls%2C%20it%20said.

Highway retailing is another niche in the segment; India has the second longest highway network in the world and the governments focus to modernise the highways is a key factor contributing to the growth of highway retailing in India. Increasing passenger traffic, lower rent, advancements in highway infrastructure, increasing consumer spending power, brand awareness and prominent signage and visibility for the retailers attracting in-city and transit traffic are some of the key factors driving the demand for highway retailing. Today highway retailing is not just limited to small food joints and fuel stations but organised retail complexes or otherwise called as highway plazas. This trend was more prominent in the North and West, but today highways in the South are also experiencing it. The growth in this space will drive the demand for commercial spaces and Facility Management Services.

Key investment highlights:

- The Prestige Group is expanding their malls portfolio by developing 8.0 million square feet retail space projects across Mumbai, Delhi-NCR, Bengaluru, Chennai, and Hyderabad. Two malls, one in Mumbai and another in Delhi are expected to come online by 2028 or 2029.²⁹
- Realty firm Aparna Constructions and Estates Pvt Ltd has recently entered into shopping mall business in India and is expected to develop four new malls across Telangana and Andhra Pradesh, by 2027.³⁰

Commercial Offices Segment: Rapid urbanisation, growth in tourism and service sectors are driving the demand for commercial spaces in India. The demand for office space in the country is driven by flexibility, comfort, and convenience. Most businesses are intending to expand to new areas, open remote or satellite offices, or both, in order to explore their business opportunities. Increasing high-rise buildings and shared spaces are the current trends in the Commercial Office Segment and these are expected to drive the demand for Facility Management Services in this segment. New project completions in Q3 and Q4 of CY2024 were 13.84 million square feet³¹ and 16.03 million square feet³² respectively; Q3 was the highest in CY2024. Bengaluru, Hyderabad, Pune and Mumbai are some of the hotspots for commercial real estate in the country.

Within the Commercial Offices Segment, IT remains a key growth contributor since the last two decades. The IT industry accounted for 7.5% of the GDP in FY2023 and is expected to contribute around 10.0% of the GDP by FY2025. The major sub-segments of this industry are IT Services, Business Process Management, Software Products & Engineering Services and Hardware. Software Products is a key sub-segment of this industry and the market size is expected to reach USD 100.0 billion³³ by 2025. Growth in exports, adoption of cloud and digital transformation, increasing investments in the industry, and government support such as the PLI Scheme 2.0 for IT hardware with an allocated budget of INR 17,000 crores are the major drivers for the growth of the IT industry in India. Rise in investments would create the demand for built spaces and this would create the demand for Facility Management Services.

²⁹ https://www.constructionweekonline.in/projects-tenders/prestige-group-to-construct-malls-spread-over-8-million-sq-ft-across-india#:~:text=In%20Bengaluru%2C%20three%20malls%20are,under%20construction%20in%20North%20Bengaluru.

 $^{^{30}\} https://www.indiaretailing.com/2024/05/28/aparna-construction-invests-rs-284-cr-to-enter-into-shopping-mall-cinema-businesses/$

³¹ https://www.jll.co.in/content/dam/jll-com/documents/pdf/research/apac/india/jll-india-office-market-dynamics-q3-2024.pdf

 $^{^{32}\} https://www.jll.com/en-in/insights/market-dynamics/india-office$

³³ https://www.ibef.org/industry/information-technology-india

Today, there is growing demand from Banking, Financial Services and Insurance (BFSI), Manufacturing, Engineering, E-Commerce etc. BFSI is expected to be a key growth area driving demand in the long-term. The Indian banking system consists of 13 public sector banks, 21 private sector banks, 44 foreign banks, and 12 small finance banks³⁴. Government schemes such as Pradhan Mantri Jan Dhan Yojana and Post Payment Banks have enabled in increasing the reach of the banking sector. Also, reforms such as digital payments, neo-banking, rise in Indian Non-banking Financial Company (NBFC) and fintech companies have significantly enhanced the country's financial inclusion. Key factors driving the growth in the BFSI segment are a large untapped credit population, the increasing consumption of a growing middle class, an openness to credit, and an increasing ability of players to offer credit through both offline and digital expansion. The Financial Services sub-segment is poised to witness high growth in the coming years owing to innovative lending practices, instant loan disbursals, and no-cost Equated Monthly Instalments (EMI).

Key investment highlights:

- DLF Cyber City Developers Ltd (DCCDL), is expected to invest around INR 6,000 crore to develop 7.5 million square feet of premium office and retail spaces in Gurugram³⁵.
- Larsen & Toubro has signed a Memorandum of Understanding (MoU) with the Gujarat government to set up an IT and IT-enabled Services (ITeS) Park in Vadodara at an investment of INR 7,000 crore³⁶.
- The Tamil Nadu government has planned to develop a 2 million square feet IT hub in Coimbatore through a Public-Private Partnership (PPP) model. This IT Park would focus on AI, as per the State's growth strategy³⁷.

Hospitality/ Hotels Segment: The Indian Hotel Industry's contribution to the GDP is estimated to reach USD 1 trillion by 2047 as per Hotel Association of India's Vision 2047 report. This would be driven by significant increase in domestic and international tourists in India. Beyond leisure travel, demand from meetings, incentives, conferences and exhibitions (MICE), including weddings, and business travel have driven demand for hotel rooms in CY2024 and this trend is expected to continue in CY2025 and CY2026. Revenues for the Indian hospitality industry is expected to increase by 7-9% in FY2025 and 6-8% in FY2026³⁸. Domestic tourism has been the prime driver for the demand in CY2024. The Vision 2047 report also states that in the mid-term (2027-2037), domestic tourist visits are expected to increase from 677 million in 2021 to 1.5 billion by 2030 and are further expected to jump to 15 billion by 2047 in the long term (2037-2047). Business and recreational activities are the key reasons for the increase in tourists and this has created demand for hotels and Facility Management Services.

Medical tourism is another factor contributing to the growth of the Hotels Industry in India. While medical tourism is well established in the country, wedding tourism is a niche and the government is focus on wedding tourism currently by launching the Wedding Tourism Campaign "India says I do". Through this campaign the Ministry of Tourism aims to showcase India as a premier wedding destination. The campaign was developed in consultation with various stakeholders such as industry experts, associations, and

³⁴ https://www.ibef.org/industry/banking-india

³⁵ https://www.newsonprojects.com/news/dlf-to-invest-6000-cr-in-75-lakh-sq-ft-office-retail-spaces-in-gurugram

³⁶ https://www.newsonprojects.com/news/lt-inks-pact-with-gujarat-govt-to-establish-it-ites-park

³⁷ https://www.newsonprojects.com/news/tn-to-build-2-million-sq-ft-ai-focused-it-hub-in-coimbatore-via-ppp-model

³⁸ https://www.hotelierindia.com/operations/india-hospitality-industrys-revpar-to-reach-decade-high-in-fy2025-driven-by-strong-demand-says-icra

wedding planners. The campaign has short-listed 25 key destinations and these locations would be pitched across the world. Royal weddings, beach weddings and himalayan weddings are some of the key themes expected to be promoted in this campaign. All these initiatives are expected to drive the demand for hospitality services and Facility Management Services.

Key investment highlights:

- Marriot is expanding into Tier 2 and Tier 3 cities with projects lined up in Jaipur, Surat, Shimla, Jalandhar, and Coorg³⁹.
- Hilton's Waldorf Astoria in Jaipur is under development and is expected to come online by 2027⁴⁰.
- Hilton's LXR Hotels and Resort brand is expected to be launched in India with its first property expected to come online by 2026 in Bengaluru⁴¹.
- Lemon Tree Hotels is expanding in India with "Keys Select" project, which is under development in Bokaro. This is expected to be completed by FY2027⁴².
- IHG Hotels & Resorts has announced its plan to expand its footprint in India with a pipeline of 60 new hotels scheduled to open over the next three to five years⁴³.
- Sangu Chakra Hotels Pvt Ltd, known by Sangam Hotels brand, has announced an ambitious INR
 400 crore expansion project to double its room inventory over the next four to five years⁴⁴
- Fratelli Wines, a prominent player in India's wine industry has announced its plan to invest INR 55
 60 crore in a 40 room high-end resort in its vineyard in Akluj, Maharashtra⁴⁵.
- Mahindra Holidays & Resorts India is expected to expand their presence with the development of three new resorts in Tamil Nadu with an investment of INR 800 crore in the next five – six years⁴⁶.
- Indian Hotels Company Limited (IHCL) has relaunched Gateway brand with plans to expand to 100 hotels by 2030⁴⁷.
- Indian Hotels Company Ltd (IHCL) has rebranded its Sea Rock Hotel to Taj Bandstand and is expected to start the construction of a luxury hotel in H2 CY2025⁴⁸.
- Sangu Chakra Hotels, known for its Sangam Hotels brand, has announced its INR 400 crore expansion plan to double its room inventory by 2029 2030⁴⁹.

Airports: India is investing heavily in its airport infrastructure to meet its growing demand. India has a target of 220 operational airports by 2025, up from the 148 in 2023. Navi Mumbai International Airport and Noida International Airport are expected to be operational in 2025.

 $^{^{39}\,}https://www.hotelierindia.com/development/marriotts-record-breaking-2024-with-42-deals-7000-rooms-and-20000-room-pipeline-in-south-$

asia#:~:text=Marriott's%20premium%20brands%20strengthened%20their,Shimla%2C%20Jalandhar%2C%20and%20Coorg.

⁴⁰ https://www.hotelnewsresource.com/article134131.html

⁴¹ https://newsonprojects.com/news/hilton-eyes-luxury-surge-aims-to-double-india-footprint-in-five-years

⁴² https://www.newsonprojects.com/news/lemon-tree-hotels-expands-footprint-with-new-property-in-bokaro

⁴³ https://www.newsonprojects.com/news/ihg-plans-to-add-60-hotels-in-india-over-next-3-5-years

⁴⁴ https://www.newsonprojects.com/news/supreme-power-equipment-and-danya-electric-win-20-crore-orders-2

⁴⁵ https://newsonprojects.com/news/fratelli-vineyards-to-invest-60-crore-in-luxury-resort-tapping-into-hospitality-boom

⁴⁶ https://newsonprojects.com/news/mahindra-holidays-plans-800-crore-expansion-for-construction-of-three-new-resorts-in-tamil-nadu

⁴⁷ https://newsonprojects.com/news/ihcl-launches-gateway-brand-with-goal-of-100-hotels-by-2030

⁴⁸ https://newsonprojects.com/news/sea-rock-hotel-rebranded-as-taj-bandstand-construction-set-for-h2-2025

⁴⁹ https://newsonprojects.com/news/supreme-power-equipment-and-danya-electric-win-20-crore-orders-2

- Ude Desh ka Aam Naagrik (UDAN) or Regional Connectivity Scheme (RCS): UDAN-RCS is a
 regional airport development program of the Government of India, with the goal of letting the
 common citizen of the country fly, to boost inclusive national economic development, job growth,
 and air transport infrastructure development of all regions and states of the country.
 - The UDAN program aims to provide connectivity to the country's under-served and unserved airports by revitalizing existing airstrips and airports. It would result in a win-win result for all stakeholders involved by improving affordability, increasing connectivity, and providing more jobs. Under the program, Government intends to create additional routes and more passengers for incumbent airlines, while there was the possibility of fresh, scalable business for start-up airlines.
 - Government of India has approved INR 1,000 crore⁵⁰ for the development of 50 additional airports, heliports, and water aerodromes under the UDAN scheme in FY2025.
- <u>NextGen Airports for Bharat (NABH)</u>: The government unveiled a new initiative in February 2018, called NABH Nirman, under which it plans to increase airport capacity in the country by more than fivefold to handle a billion trips each year. The three most important features of NABH Nirman are:
 - Land acquisition that is fair and equitable
 - o A long-term master plan for airport and regional development
 - o Economics that is balanced for all stakeholders

Key investment highlights:

- Cabinet Committee on Economic Affairs approved the Airports Authority of India's proposal to develop a New Civil Enclave at Bagdogra Airport in Siliguri, West Bengal. The project has an estimated budget of INR 1,549 crore. The airport is expected to feature a 70,390 square meter terminal designed for 3,000 Peak Hour Passengers and an annual capacity of 10 million passengers.
- Adani Airports is expected to invest USD 7.0 billion in expanding its airport operations in India, focusing on improving its current portfolio and landside developments⁵¹.
- Magellan Aerospace and Aequs have signed a MoU to jointly develop an aircraft engine MRO facility in Belagavi, Karnataka.
- New integrated terminal building, apron, and associated works at NSCBI Airport, with an estimated cost of INR 1,400 crore⁵².
- Construction of new domestic terminal at Bhubaneswar Airport at an estimated project cost of INR 9,55 crore.

Government of India is privatising airports in India to improve their operational efficiency, boost infrastructure development and to provide world-class services on par with international standards. The government is expected to privatise 20 - 25 airports in India between 2022 and 2025 under the National

⁵⁰ https://www.civilaviation.gov.in/sites/default/files/2025-

^{03/}Annual%20Report%20Civil%20Aviation%20for%20the%20year%202024-25%20English 0.pdf

⁵¹ https://www.ibef.org/industry/indian-aviation

⁵² https://www.civilaviation.gov.in/sites/default/files/2025-

^{03/}Annual%20Report%20Civil%20Aviation%20for%20the%20year%202024-25%20English_0.pdf

Monetisation Pipeline, across Tier 1, Tier 2 and Tier 3 cities across India. This privatisation effort, along with the increasing average size of the airports are expected to increase the outsourcing of airport management services and drive the business potential for Integrated Facilities Management Market during the forecast period.

Railways: This segment has been a key contributor for Facility Management Services Market recently as the outsourcing from this segment has been on the rise. India has the fourth-largest railway system in the world, following the USA, Russia, and China. In the FY2026 budget, the capital allocation to the segment is at INR 2.65 trillion⁵³ and this fund is expected to be utilised for the development of infrastructure, modernization of stations and trains, enhancement of connectivity, safety and comfort for the passengers. Other key highlights of the budget include

- Allocation of INR 322.35 billion in FY2026 for construction of new railway lines.
- Indian Railways is expected to introduce 50 new Namo Bharat trains connecting cities located 100 to 200 kilometres apart.
- 100 Amrit Bharat trains will be launched under the affordable segment.
- 200 Vande Bharat trains to be introduced to further enhance the high-speed travel network.

Exponential rise in passenger and freight traffic is expected to be a key driver for investments in assets in the Railways segment. Railway passenger traffic is projected to reach more than 12 billion per year by 2031.⁵⁴ Government initiatives such as the Viksit Bharat, dedicated freight corridor, mordernisation of existing railway stations, railway electrification and diamond quadrilateral network of high-speed rail to connect major metros and business centers in India are expected to drive the growth opportunities for Facility Management Services.

Metro Rails are also playing a pivotal role in enhancing quality of life and economic growth of the cities in India. India has the third largest metro rail network in the world with around 1,000 kilometers⁵⁵ of metro rail network operational by the end of December 2024. Metro Rail projects in Bengaluru, Chennai, Delhi, Mumbai, Kanpur, Pune, Noida, Lucknow, Kolkata, Kochi, Jaipur, Hyderabad etc., are under development and once completed are expected to provide growth opportunities for IFM service providers. Manpower shortages, specialised skill sets required to maintain these systems and government's focus to enhance operational efficiency and customer experience are expected to drive the outsourcing of Facility Management Services in Railways and Metro segment, which would create tremendous growth potential for Facility Management solution providers.

<u>Amrit Bharat Station Scheme:</u> Through the scheme, the Indian Railways is redeveloping more than 1,300 stations⁵⁶ to provide better travel experience to the passengers. Some of the amenities being developed include access, waiting halls, toilets, escalators, Wi-Fi, and multimodal connectivity. Of the proposed 1,300, only five has been completed while works on 1,100 stations are on-going; around 400 - 500 are

⁵³ https://pib.gov.in/PressReleasePage.aspx?PRID=2099337

⁵⁴ https://www.investindia.gov.in/sector/railways

⁵⁵ https://timesofindia.indiatimes.com/life-style/travel/news/indias-metro-network-expands-to-1000-km-becomes-worlds-third-largest/articleshow/117077795.cms

⁵⁶ https://infra.economictimes.indiatimes.com/news/railways/et-infra-rail-show-indian-railways-to-see-completion-of-400-500-amrit-bharat-stations-in-2024-says-anil-khandelwal-member-infrastructure-railway-board/111281241

expected to have been completed in 2024 and the rest of the stations are targeted to be completed by 2025. The scheme also anticipates to redevelop around 4,000 stations by 2047.

Key investment highlights:

- Western Railway has launched the redevelopment of 124 railway stations across its network, focusing on providing passengers with modern and efficient facilities. Key stations include 30 stations in the Mumbai Central Division, 18 in the Vadodara Division, 19 in the Ratlam Division, 20 each in the Ahmedabad and Bhavnagar Divisions, and 17 stations in the Rajkot Division⁵⁷.
- Rajasthan government is contemplating the expansion of Jaipur Metro network to connect towns and cities within a 45 - 50 kilometer radius of the state capital⁵⁸.
- Indian Railways has proposed a 69.04 kilometer railway line from Kokrajhar in Assam to Gelephu in Bhutan to enhance cross-border connectivity⁵⁹.
- In 2024, India's Cabinet Committee on Economic Affairs (CCEA) approved eight new Indian Railways projects across the country to be implemented in seven states and increase the existing network of Indian Railways by 900 kilometers⁶⁰.

Industrial – Automotive: India is the third largest Automobile Market in the world and the top producer of 3-wheelers, passenger vehicles and tractors. The country is also the second largest manufacturer of 2-wheelers in the world. The industry contributes to about 6.0% to India's GDP. The Automobile Market in India is dominated by the 2-wheeler and passenger cars segments. The 2-wheelers segment dominates the volume market and is driven by the growing middle-class and young population of India. Other trends such as the growth in Tier II and rural markets further aid the growth in 2-wheeler segment. Growth in logistics and transportation sector is driving the demand for commercial vehicles. Apart from the demand, strong policy support from the government has remained a key growth enabler for the Automobile Market.

- <u>Automotive Mission Plan 2016-2026:</u> This is a mutual initiative by the Government of India and the Indian Automotive Industry to target four-fold growth in the sector by 2026.
- Production-linked Incentive Scheme (PLI Auto): PLI Scheme for the Automobile and Auto Components Sector has an outlay of INR 25,938 crores⁶¹. This scheme provides an incentive of up to 18% to increase domestic manufacturing of advanced automotive technology products and attract investments in the manufacturing value chain. Incentives are applicable for determined sales of products manufactured locally from the 1st of April 2022, and for a period of five consecutive years.
- <u>Production-linked Incentive Scheme for Advanced Chemistry Cell (PLI ACC):</u> This has a budgetary outlay of INR 18,100 crore and was launched by the Ministry of Heavy Industries to incentivise

⁵⁷ https://www.newsonprojects.com/news/western-railway-launches-redevelopment-initiative-for-124-railway-stations

⁵⁸ https://www.newsonprojects.com/news/rajasthan-government-sets-metro-network-expansion-in-motion

⁵⁹ https://www.newsonprojects.com/news/6904-km-railway-line-to-link-assams-kokrajhar-with-bhutans-gelephunfr-cpro

⁶⁰ https://www.railwaypro.com/wp/eight-new-indian-railways-projects-approved/

⁶¹ https://static.investindia.gov.in/s3fs-public/2024-12/gazette_notification_15.03.2024.pdf

- manufacturers of advanced chemistry cells. This scheme aims to develop local manufacturing capacity of 50 GWh.
- <u>Faster Adoption and Manufacturing of Electric Vehicles (FAME):</u> This was launched under the
 National Electric Mobility Mission in 2015 to provide subsidies to support the State Transport
 Authorities to transition to electric buses. The Phase II of the scheme (FAME II) was launched in
 2019 with an outlay of INR 11,500 crore. The scheme provides upfront subsidy to buy EVs to
 reduce their cost of acquisition.
- PM E-Drive Scheme: This was launched with a budget of USD 1.30 billion (INR 10,900 crore)⁶² for the period October 2024 to March 2026, with the objective of increasing the adoption of Electric Vehicles (EVs), establish charging infrastructure, and develop an EV manufacturing ecosystem in India

Exports from India is another major driving factor for the growth of the industry. 2-wheeler exports is the largest in the country and stood at 3,458,416 units in FY2024.

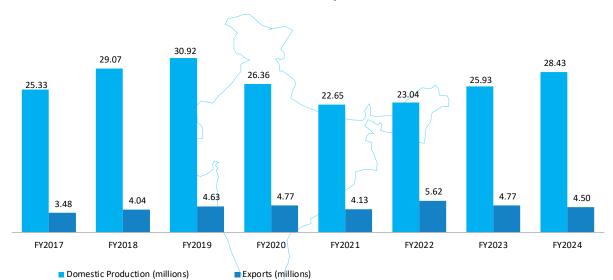


Exhibit 2.24: Automobile Production and Exports, India, FY2017 to FY2024

Source: Society of Indian Automobile Manufacturers and IBEF Automobiles November 2024 report

Key investment highlights:

- Honda Motor Japan has announced plans to build a dedicated electric 2-wheeler production facility in India by 2028. The new plant is expected to be operational by 2028 and manufacture a wide variety of electric two-wheelers⁶³.
- In March 2024, Tata Motors Group signed a facilitation Memorandum of Understanding (MoU)
 with the Government of Tamil Nadu to explore setting-up of a vehicle manufacturing facility in the
 state.

⁶² https://www.ibef.org/industry/india-automobiles

⁶³ https://www.ibef.org/industry/india-automobiles

- Hyundai Motors has revealed its plan to invest INR 32,000 crore between 2023 2033 in expanding its EV range and enhancing its current passenger car and SUV segments.
- Volvo Group has announced a plan to invest INR 1,500 crore to expand its Bengaluru manufacturing facility to increase its production capacity to 20,000 units annually⁶⁴.
- Maruti Suzuki is expected to expand its service touch points to 8,000 by 2030 in India⁶⁵.

Industrial – Pharmaceuticals: India is the largest manufacturer of generic drugs globally and is known for its affordable vaccines and generic medications. The Indian Pharmaceutical industry is currently ranked third in pharmaceutical production by volume. Generic drugs, over-the-counter medicines, bulk drugs, vaccines, contract research & manufacturing, biosimilars, and biologics are some of the major segments of the Indian Pharmaceutical Industry.

Increase in launch of patented drugs, medical infrastructure, over-the-counter drugs etc. have all contributed to the growth of the Pharmaceutical Market in India. The Indian pharmaceutical industry includes a network of 3,000 drug companies and around 10,500 manufacturing units. The Indian Pharmaceutical Market was valued at USD 49.8 billion in CY2023 and is expected to reach USD 130.00 billion by 2030. Increasing investments and government initiatives are expected to be the major drivers for this growth.

42.0 49.8 65.0 130.0 CY2021 CY2023 CY2024P CY2030P CY2047P
P - Projections

Exhibit 2.25: Pharmaceutical Market Size and Forecasts, India, CY2021, CY2023, CY2024, CY2030 and CY2047

Source: Department of Pharmaceuticals, Make in India, Invest India, Frost & Sullivan Analysis

Several government policies and initiatives are favouring the growth of the Pharmaceutical Segment in India. The major ones are:

⁶⁴ https://economictimes.indiatimes.com/industry/auto/auto-news/karnataka-volvo-to-invest-rs-1500-cr-to-expand-hoskote-facility-to-add-2000-jobs/articleshow/118211169.cms

⁶⁵ https://www.thehindubusinessline.com/companies/maruti-suzuki-to-expand-service-touchpoints-to-8000-by-2030/article68972423.ece

- <u>Strengthening of Pharmaceutical Industry:</u> The Ministry's "Strengthening of Pharmaceutical Industry (SPI)" is a programme to provide support to existing pharmaceutical clusters and Micro, Small and Medium Enterprises (MSME) across the country to improve their productivity, quality and sustainability with an outlay of INR 500 crore⁶⁶.
- Scheme for Development of Pharmaceutical Industry: This is an umbrella scheme launched by the
 Department of Pharmaceuticals with five sub-schemes such as Assistance to Bulk Drug Industry
 for Common Facilitation Centres, Assistance to Medical Device Industry for Common Facilitation
 Centres, Assistance to Pharmaceutical Industry, Pharmaceutical Promotion and Development
 Scheme and Pharmaceutical Technology Upgradation Assistance Scheme
- <u>Ayushman Bharat Digital Mission (ABDM):</u> This programme targets to create Ayushman Bharat Health Account for citizens and the digital health records could be linked to this account. This will enable creation of longitudinal health records for individuals across various healthcare providers and improve clinical decision making by healthcare providers.
- <u>PLI Scheme for Pharmaceuticals</u>: This has a financial outlay of INR 15,000 crore⁶⁷ for FY2023 FY2028 to boost domestic manufacturing.
- <u>PLI Scheme for Bulk Drugs:</u> To achieve self-reliance and reduce import dependency in essential bulk drugs, the Department of Pharmaceuticals initiated the PLI Scheme to promote domestic manufacturing by setting up greenfield plants with minimum domestic value addition with a cumulative outlay of INR 69.40 billion from FY2021 to FY2030.

Exhibit 2.26: Key Investments under PLI in Bulk Drugs Segment, India, FY2025

S.No.	Name of Approved Applicant	Committed Production Capacity (Metric Tons)	Committed Investment (INR Crores)
1	Natural Biogenex Private Limited	12	31.43
2	Natural Biogenex Private Limited	10	26.19
3	Natural Biogenex Private Limited	15	39.29
4	Symbiotec Pharmalab Private Limited	15	5.00
5	Macleods Pharmaceutical Limited	200	198.36
6	Optimus Drugs Private Limited	200	35.00
7	Optimus Drugs Private Limited	200	57.00
8	Sudarshan Pharma Industries Limited	50	30.00
9	Saraca Laboratories Limited	3,000	50.00
10	Emmennar Pharma Private Limited	1,500	21.94

⁶⁶ https://www.ibef.org/download/1736234735_Pharmaceuticals-November-2024.pdf

 $^{^{67}}$ https://manufacturing.economictimes.indiatimes.com/news/life-sciences/centres-rs-15k-cr-pli-scheme-for-pharma-to-boost-domestic-manufacturing/116068071

11	Hindys Lab Private Limited	3,000	37.60
12	Aarti Speciality Chemicals Limited	4,000	77.87
13	Meghmani LLP	13,500	55.06
14	Sadhana Nitro Chem Limited	36,000	197.27

Source: DPIIT⁶⁸

Residential: Rapid urbanisation, changing consumer behaviour, and regulatory reforms are driving the growth in the residential real estate segment in India. Residential unit sales in top 7 cities – Bengaluru, Chennai, Delhi NCR, Hyderabad, Kolkata, Mumbai and Pune during CY 2024 stood at 302,867 units, which is 11.4% higher than the total units sold during CY2023. The growth in unit sales was propelled by the preference for home ownership, quality supply from reputed developers and healthy economic conditions.

65,801 62,582 59.448 53,223 52,601 49,724 38,407 35.414 32,530 18.005 13,492 11.564 Bengaluru Mumbai Pune Delhi NCR Hyderabad Kolkata Chennai CY 2024 CY 2023

Exhibit 2.27: Residential Unit Sales across Major Cities, CY2023 & CY2024, India

Source: JLL Residential Market Dynamics Report, Q4 2024.

The premium residential units with price tag of above INR 3.0 crore, contributed to 13.3% of the total sales during January – September 2024; this segment also recorded a year-on-year growth rate of 103%. There is a growing demand for larger homes with good amenities and support infrastructure. The rising demand for amenities in the residential segments would bode well for the facilities management market in the long-term, especially for organised service providers.

Delhi NCR, Mumbai and Bengaluru were the top three cities that recorded the greatest number of new project launches, accounting for around 58% of the total new launches in January – September 2024. Property developers are shifting their focus to premium segment, which is evident from the 117% year-on-year growth for premium housing unit launches in January – September 2024.

Exhibit 2.28: Key Investments in Residential Segment, India, FY2024 and FY2025

⁶⁸ https://www.ibef.org/download/1736234735_Pharmaceuticals-November-2024.pdf

S.No.	Name of the Project	Developer	Location
1	DLF Mumbai	DLF Group	Andheri, Mumbai
2	Birla Sector 31	Birla Real Estate	Gurugram, Delhi NCR
3	Prestige E-City	Prestige Group	Bengaluru
4	Brigade Citrine	Brigade Group	Bengaluru
5	Prestige Magadi	Prestige Group	Bengaluru

Source: News Articles⁶⁹ & Frost & Sullivan Analysis

Educational Institutions: India's education industry is among the largest in the world and plays a significant role in balancing the socio-economic attribute of the nation. India's educational industry is vast and diverse, with institutions established to service the educational needs of each age band, covering the preschool period, the K-12 school years, and higher education and research. E-learning is an emerging segment that witnessed exponential growth in the past couple of years due to the COVID-19 pandemic. Between April 2000 and June 2024, the industry received equity foreign direct investment of USD 9.55 billion⁷⁰. Government initiatives such as the 100% foreign investments in educational segment, National Educational Policy 2020, Education Quality Upgradation and Inclusion Programme (EQUIP), New India Literacy Programme for FY22 – FY27 are all expected to bridge the gap in infrastructural demand, particularly in the government sector. STEM-based edtech companies are partnering with Niti Aayog to develop the STEM ecosystem in India. With the increase in infrastructure assets and technology adoption in the education segment, the demand for IFM Services is expected to increase in the long-term and create opportunities for service providers. Sophistication of assets in the segment is expected to drive the outsourcing of Facility Management, creating opportunities for service providers.

Competitive Landscape:

Competitive Structure:

Indian Facilities Management Market is highly fragmented with close to 400 - 500 companies operating across the country. There are around 10 large companies comprising of Tier 1 category and have their presence across geographies and control about 27.0% of the total market in FY2025. Tier 1 companies have country-wide presence and serve almost all the end-user segments and have a vast client base. Around 100 companies belong to Tier 2 and have regional presence while more than 400 companies belong to Tier 3 category and operate in a small geographic zone, for example a single city or town. The market also witnesses the presence of both international and domestic companies. International companies sub-contract majority of their services to gain access to various markets, manpower and customers in the region.

⁶⁹ https://vocal.media/journal/top-residential-projects-set-to-launch-in-2025, https://www.bangaloreupcomingprojects.com/

⁷⁰ https://www.ibef.org/industry/education-sector-india

Exhibit 2.29: Facility Management Market: Key Competitive Insights, India, FY2025

Attributes	Facilities Management Market					
Number of Companies	• Close to 500					
Major Market Participants	 BVG Compass India Support Services ISS Facility Services Krystal Group Bluspring Enterprises (previously known as Quess Corp) Rentokil Initial SIS Limited Sodexo Facilities Management Services Tenon Facility Management Updater Services India Limited (UDS) 					
Other Notable Market Participants	 CLR Embassy Services FFServices Impressions OCS Group 					
Facility Management Consultants/ Managing Agents	 JLL CBRE Knight Frank Cushman & Wakefield Others The above companies sub-contract facility management projects to companies like BVG, ISS etc. 					

Source: Frost & Sullivan Analysis

Facilities Management Market in India is highly fragmented and unorganised. Small and medium-sized companies dominate majority of the market. Driven by the need for an organised approach and demand for professional Integrated Facilities Management services, there is an on-going shift in the market towards consolidation. This is also an outcome of increase in customer awareness about the risks associated with unorganised service providers that are not compliant with the quality and safety standards. There is growing awareness about service level agreements (SLA) among the large customers since SLAs are output-based in which their purpose is specifically defined on what the customer will receive. Clients in India have started preferring integrated players that provide a one-stop-shop solution for facilities

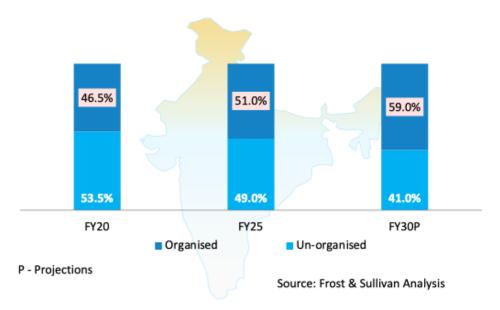
management needs, rather than unorganised companies that are incapable of providing integrated services and do not have a satisfactory track record of compliance.

Number of **Revenue Range** Companies 10 INR 5 billion (BVG, UDS, Bluspring, SIS Limited, Tier 1 and above Sodexo, ISS, Compass, Krystal, Tenon, and Rentokil) ~ 100 INR 1 - 5 billion Tier 2 (Embassy, CLR, OCS Group, Impressions, FFServices etc.) Tier 3 <INR 1 billion > 400

Exhibit 2.30: Outsourced Facility Management Market: Competitive Structure, India, FY2025

Source: Frost & Sullivan Analysis





Note: Organised segment consists of companies that are regulatory and tax compliant. Unorganised segment companies are not compliant with regulatory and tax requirements.

Capital expenditure, compliance, capability expansion etc. are some of the critical challenges faced by small and regional companies to scale up their businesses. The introduction of Goods and Services Tax (GST) in India is expected to bring in transparency, where clients are expected to use formal banking channels to pay for their services and manpower requirements, which would again enable growth of the organised segment.

In addition to this, the growing demand for integrated and single contact for all Facility Management Services, energy efficiency, stringent quality and compliance standards, and the increased need for mechanised cleaning, is anticipated to drive demand for organised Facilities Management, which is expected to result in market consolidation. There are new revenue streams emerging (for example, specialised soft services) in the market and contracts are likely to get restructured in favour of facility management companies to accommodate additional services. This would amplify the growth opportunities for organised service providers such as Sodexo, Bluspring Enterprises, SIS Limited, BVG, UDS, ISS, Krystal etc.

Market Share Analysis:

The top five companies in the Facilities Management Market are BVG, SIS Limited, Sodexo, UDS and Bluspring Enterprises. They have a combined market share of 19.8% of the total market in FY2025.

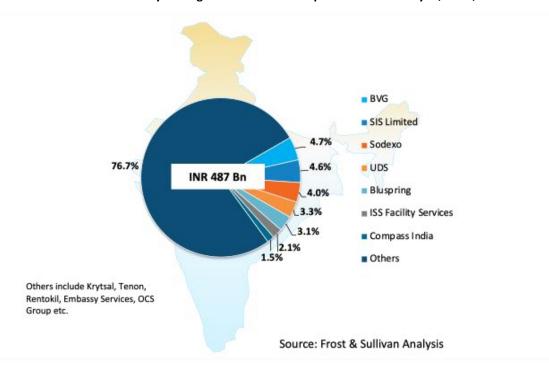


Exhibit 2.32: Outsourced Facility Management Market: Competitive Share Analysis, India, FY2025

BVG was founded in 2002 and is the largest and leading IFM provider in India, with a market share of 4.7% in terms of market revenues in FY2025 and more than 85,000 employees across 2,218 active operating sites as of 31st March 2025. BVG provides a comprehensive range of integrated service offerings across multiple sectors and is among the select companies that offer a wide portfolio of soft and hard integrated services. They are one of the few companies in India to provide integrated services with the capability to

also provide value-added/ specialised services. BVG's specialised soft services include clean room maintenance, airport maintenance including runway cleaning, production support & factory relocation services, railway & metro coach & station cleaning (CTS/OBHS/PIT & Platform), temple maintenance with mechanised housekeeping, landscaping and garden maintenance, indoor & outdoor advertising, solid & liquid refuse removal & cleaning, complete city cleaning, waste collection & disposal, beach & lake cleaning, drainage storm water cleaning, cleaning dust-sensitive paint shops and nationalised sports event management. BVG's other business lines include Emergency Response Services, Environment and Sustainability Services. The company focuses on a wide range of end user segments such as automotive, healthcare, banks, chemicals, pharmaceuticals educational, commercial complexes, shopping malls and government. They have a very strong presence in educational, healthcare, industrial and government segments. They have a proven ability to deliver quality services across various sectors. BVG has recorded the highest revenue among their key competitors in FY2025.

- BVG is a dominant player in the government facilities management segment, serving
 establishments such as central and state governments, as well as local authorities, with expertise
 in infrastructure management services. Key clients in the government segment include
 Rashtrapati Bhavan, Parliament House, income tax offices, residences of key constitutional
 functionaries, supreme court among others.
- BVG is also among the select few integrated services companies that offer specialised services to
 hospitals including mechanised housekeeping and sanitation, medical waste management,
 specialised cleaning of intensive care units, facility attendant services, patient care and hygiene,
 security services, staffing of ward attendants, nurses and health assistants, specialised equipment
 maintenance and emergency medical response services.
- BVG is among the first few companies in India to provide railway station management services including station upkeep, lounge assistance, wheel chair assistance, ticketing, landscaping, waste management, medical emergencies and energy management.
- They have a strong presence in the education sector and continue to provide various services
 including mechanised housekeeping, manpower supply, facility attendants and management,
 landscape and gardening services to a number of educational institutions in India.
- It is also one of the few companies to serve religious establishments in India.

Their key strengths include quality, technology, training, and sustainability focus. Long-term customer retention has been a critical factor for BVG's strong performance – 80.0% of the customers served by BVG in FY2024 continued with them in FY2025. Some of the key developments in the past couple of years include

• BVG is one of the few companies in India providing technical maintenance operations at retail fuel outlets, and through their presence in outlets across India, they have developed a reputation for being a trusted, end-to-end service partner for India's fuel retail industry. In 2023, BVG India started technical maintenance operations at 5,200+ retail fuel outlets in 17 territories spread across eight states, supported by a skilled team of more than 400 technical professionals. This project was a forerunner in privatisation of fuel retail outlets. This segment remains a niche and

BVG along with a very few players are catering to these demand opportunities. Delivering a comprehensive range of solutions, the company ensures seamless operations through expert maintenance of fuel dispensers, electrical systems, and fire safety equipment, as well as structural inspections, leak detection, metering calibration, and fuel quality testing. Subsequently, in 2025, they have also started similar services at an additional 2,100+ retail outlets, adding nine territories and now present in 12 states.

- BVG operates and maintains the Kilambakkam Bus Terminal (285,000+ sq. meters) in Chennai under a 15-year Public-Private Partnership (PPP). BVG is responsible for all aspects of operations, maintenance, and revenue generation, including cleaning, security, waste management, and system upkeep. It also manages service coordination, minor repairs, and customer support, while making concession fee payments to the government. This is the largest bus terminal in Asia and this project is one of the first of its kind in India, as it offers a fully integrated terminal management model.
- BVGI Arabia Operation and Maintenance Company (Mixed Limited Liability Company) was
 established in Saudi Arabia in November 2023. The company's activities include integrated
 solutions to support facilities, general building cleaning, external building cleaning, other
 specialised & industrial cleaning services, solutions related to site beautification service and
 maintenance, integrated office administrative services, swimming pool maintenance, landscaping
 & design services, maintenance of public parks for housing purpose, residential gardens, rooftop
 gardens, private building facades, sports fields and golf courses, laundry and dry cleaning for all
 types of clothing, food service contracting and also ensuring end-to-end solutions for diverse
 client needs.

SIS Limited is second largest facility management company in India providing cleaning, housekeeping, technical and pest control services under Integrated Facility Management contracts. The Facility Management services are provided through Dusters Total Solutions Services, SMC Integrated Facility Management Solutions Limited, RARE Hospitality, Adis and TerminixSIS. The company provides best-inclass technology solutions, have developed robust processes, Standard Operating Procedures (SOP) guidelines and compliance, and is led by an experienced management team. They are prominent in healthcare, education, manufacturing, IT/ IteS, retail, pharmaceutical and data center segments.

Sodexo is the third largest player in India. Their major service offerings are food related solutions and facilities management. Their focus segments are corporates, healthcare organisations, manufacturing locations, and educational institutions. Service innovations, technology adoption, industry experience, global service knowledge, customer-focused solutions are some of the unique competitive advantages of Sodexo.

UDS is a leading, focused, and integrated business services platform in India offering Facility Management Services and Business Support Services with a pan-India presence. UDS has developed a unique strategy for growth through both organic and inorganic routes. UDS has expanded its services portfolio over the years by venturing into higher margin businesses through multiple acquisitions and integrated the companies seamlessly. The company has the widest service offering in the industry, making it a unique

and differentiated player in the market. UDS has witnessed strong growth over the years and is today, regarded as a leading company in many of its business areas.

Bluspring takes the fifth spot in FY2025 in the Facilities Management Market in India. Bluspring was demerged from Quess Corp during FY2025. Their FM services are provided through their Facility & Food vertical. They have diversified business offerings under Facilities Management, similar to all the major companies in this market. Industry experience, technology driven solutions, designing bespoke solutions for their clients, employee training and skill enhancements are some of the competitive advantages of Bluspring.

Growing investments in end user segments, increasing outsourcing from government sector, widening scope of facility services are all expected to favour the business growth of the organised companies in Integrated Facilities Management Market in the long-term. All major companies are equipping themselves to capitalise on this growth opportunity by adopting technology, enhancing skills and service delivery, focusing on customer experience among others.

Competitive Benchmarking:

Competitor Service Mapping:

Exhibit 2.33: Outsourced Facility Management Market: Competitor Service Mapping, India, FY2025

Company Name	Soft Services	Hard Services	City Maintenance Services	Production Support Services	Catering Services	Staffing Services	Manned Guarding Services
BVG	✓	✓	✓	✓	✓		✓
Bluspring	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	✓
SIS Limited	✓	✓		✓		✓	✓
Sodexo	\checkmark	\checkmark			\checkmark		
UDS	✓	✓		✓	\checkmark	✓	

Source: Frost & Sullivan Analysis

Key Competitor Insights:

Exhibit 2.34: Outsourced Facility Management Market: Competitive Insights, India, FY2025

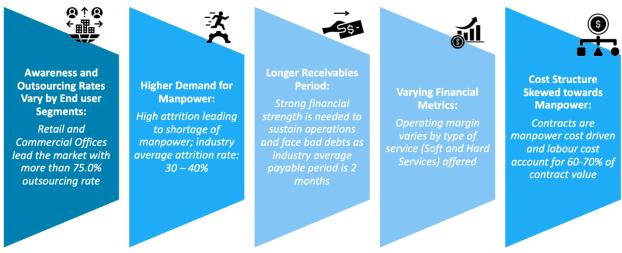
Sl.No.	Company Name	Total Revenues, FY2025, INR Bn	Revenues from Soft and Hard Services, FY2025, INR Bn	Revenue CAGR from Soft and Hard Services for FY2023 – FY2025	Total Employee Strength	Total Number of Clients
1	BVG	33.02	23.11	22.5%	85,000 +	1,200+
2	Bluspring	29.69	15.20	15.5%	87,000 +	1,000+
3	SIS Limited	131.18	22.09	8.8%	300,000 +	22,000
4	Sodexo	40.62	19.50	28.5%	50,000 +	350
5	UDS	27.56	16.00	8.4%	70,000 +	2,600 +

Source: Company Websites, Annual Reports, Financial Statements from ROC, Investor Presentations and Frost & Sullivan Analysis

Key Market Characteristics:

The Facility Management Market in India is highly fragmented with an on-going shift in business towards organised and integrated players who ensure high standards in compliance and service delivery. Local and unorganised service providers have the advantage of providing services at a low cost due to non-compliance in regards to statutory requirements and compliances. End users are also preferring to work with single vendor who can provide a one stop solution for Facility Management Services, rather than dealing with multiple vendors that are incapable of providing integrated services and do not have a good track record of compliance. The Facility Management Market in India is characterised by several attributes such as the outsourcing rates, availability of manpower, receivables or payment period, financial metrics and cost structure.

Exhibit 2.35: Outsourced Facility Management Market: Key Market Characteristics, India, FY2025



Source: Frost & Sullivan Analysis

Awareness and Outsourcing Rates Vary by End User Segments: Facility Management outsourcing has become an integral part of the Retail ecosystem, which a decade ago was just limited to a very few basic services such as cleaning. Awareness on outsourcing and penetration levels of Facility Management are high in the Retail segment followed by Commercial Offices and Airports. Healthcare and Government Segments including Schools, Hospitals, Railways and Public Administration such as Government Offices, Museums, and other assets are steadily outsourcing their Facility Management requirements. Premium residential homes and apartments with the Residential segment is a key growth opportunity in the Facility Management Market.

Exhibit 2.36: Outsourced Facility Management Market: Awareness Levels and Outsourcing Rates by End User segments, India, FY2025 & FY2030

End User Segments		Awareness Levels		Market Outsourcing Rate,	
		FY2025	FY2030	FY2025	
Ä	Retail	•	•	80.0%	
IJ	Commercial Offices	•	•	75.0%	
	Airports	•	•	63.0%	
\$ 1	Educational Institutions	•	•	55.0%	
	Hospitality	•	•	55.0%	
,	Hospitals & Healthcare		•	52.0%	
	Railways	•	•	45.0%	
<u> </u>	Industrial	•		43.0%	
À	Infrastructure & Government	•	•	37.0%	
•••	Residential	•	•	35.6%	
Legend: Very High High Medium Low Source: Frost & Sullivan Analysis					

Higher Demand for Manpower: Demand for Facility Management Service is consistently growing with increasing awareness among end-users. While demand remains strong, the supply side is witnessing several challenges and the most important among them is the attrition rate in the Facility Management Market which hampers service delivery. Although there is no shortage of manpower in the economy, there is a dearth in supply of qualified and well-trained manpower. Additionally, competitive salary and remuneration for quality manpower continue to influence the attrition rates. The Facility Management companies are basing their costing on minimum wages and pay the manpower employed minimum wages only because of which the skilled workers shift to other high paying jobs. Hence there is a challenge in recruiting quality manpower and retention of trained and skilled labour.

Longer Receivables Period / Elongated Working Capital Cycle: With industry average receivables of two months, the requirements for funding of operational expenses means, only players with strong financials will be able to ensure high standards of compliance even while scaling up. This in fact acts as an entry barrier preventing small players from achieving meaningful size. However, the payment delays and realisation make it unattractive for many Facility Management companies. On average, 10 to 15 % of invoices are delayed to around three months (90 days credit period) beyond the industry average receivables. High inventory such as equipment and fleet are also impacted by longer receivables period. Therefore, financial strength is an important factor in this industry as bad debts could affect resource mobilisation and service delivery.

Varying Financial Metrics: Industry margins are amongst the most attractive ones in the country's service sector. Operating margin (revenues after paying for variables costs such as wages and consumables) is

estimated at 6-8% but goes up to 10-15% in some cases. The margins differ based on client's requirement on the type of services offered and deployment of technical manpower with Hard Services attracting a premium over Soft Services. BVG's EBIDTA margin (as a percentage of revenue from operations) of 11.0% in FY2025 is higher than the industry average of 5.0 - 6.5%. The company has also recorded EBITDA margins (as a percentage of revenue from operations) of 12.2% and 12.6% in FY2024 and FY2023, respectively, which is higher than a few of their competitors.

Exhibit 2.37: Outsourced Facility Management Market: Insights on Operating Margins by Key Service Providers, India, FY2023 – FY2025

Company Name		EBITDA Margins		
	FY2023	FY2024	FY2025	
BVG	12.6%	12.2%	11.0%	
Bluspring *	NA	NA	-2.5%	
SIS Limited	4.4%	4.4%	2.5%	
UDS	4.4%	5.5%	6.1%	

EBITDA margins represent the overall company margins and does not represent only the Facility Management business.

Companies are listed in alphabetical order

Source: Annual Reports, ROC, Frost & Sullivan Analysis

Cost Structure Skewed Towards Manpower: Facility Management companies incur a labour cost of 60 to 70% of the overall earnings or cost of contract. Consumables would cost an additional 5%. Mechanised equipment owned or hired would cost about 10 to 15% of the overall earnings. Certain variations are found in the cost structure in the industry, for example, HVAC and Electricity is a component which is usually included as a part of the overall costing in North and Western parts of India. In South India it is usually charged separately. In the West, the costs will add another INR 5 to 6 as a property tax per square feet in terms of commercial establishments. Facility Management industry also witnesses 5 to 6% cost escalation annually, which are eventually passed on to customers.

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025. NA – Not available

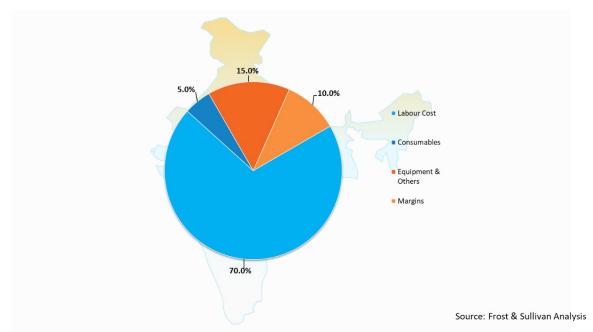


Exhibit 2.38: Outsourced Facility Management Market: Industry Average Cost Structure, India, FY2025

Key Market Trends:

Outsourced versus In-house Market:

Outsourcing of Facility Management Services has steadily grown in the past. The Integrated Facility Management outsourcing model, particularly for Soft Services, MEP and HVAC Services, has advanced significantly and can currently deliver additional value well beyond mere cost savings.

Today, outsourcing is a critical component of achieving desired performance and is successfully employed by forward-thinking companies to improve employee performance. It is anticipated that infrastructure projects and international organisations investing in India would continue to fuel demand for Facility Management Services. Growing awareness among domestic companies, digitalisation of buildings, focus on sustainability and reduction in carbon emissions, and other building maintenance services are expected to widen the scope of Facility Management solutions in the future.

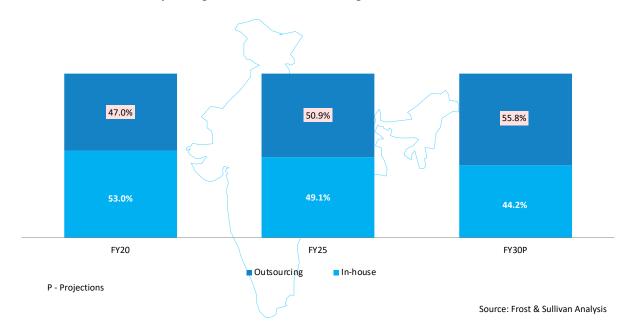


Exhibit 2.39: Total Facility Management Market: Outsourcing Trends, India, FY2020, FY2025 and FY2030

Strategy, Cost, Functions and Environment are the major factors impacting the decision on Facility Management outsourcing.

- Strategic factors include core capabilities, critical knowledge, lack of internal resources/ manpower, and impact on quality & flexibility.
- Cost optimisation was the main motivation behind outsourcing Facility Management Services a decade ago. But currently, it is about being able to free up in-house resources and allowing them to deliver strategic value associated with the core business services.
- Functional parameters are complexity, degree of integration, structure, and asset specificity.
- Environmental functions include the internal and external environment faced by companies.

Small businesses need integrated Facility Management knowledge and assistance to reduce the costs and complexity of hiring an internal team. The ideal outsourcing "partner" will give a local, bespoke service supported by the knowledge and expertise of a professional service provider. Cost control and effectiveness are the priorities for larger organisations that have complicated real estate assets. Customers that are more progressive want the Integrated Facility Management Services to assist them in creating a business environment where their service offerings are competitive. Obtaining a steady service benchmarked at the best price for the best result is their objective.

The most critical factors driving service outsourcing are:

- Optimisation and control over operational cost in built environment.
- Greater concentration on company's core business activities/ free internal resources for core business purposes.
- Gain access to greater service quality.

• Risk distribution among stakeholders.

Facility Management Outsourcing from Government Sector:

The government sector is expected to provide high growth opportunities for Facilities Management in the long-term. The key segments contributing to this opportunity are Industrial, Public Administration (State government entities, municipal bodies and other government offices), Airports, Public Schools and Hospitals, and Railways & Metros. Shortage of skilled manpower, the need to improve operational efficiency of assets, improved service delivery etc. are some of the key factors expected to drive the outsourcing of Facility Management Services from the government sector. The government sector is getting more stringent with its quality and delivery parameters. This is a welcome change for the professional Facility Management service providers as it opens up more avenues for growth from the government sector.

Contract Period in Government Sector: Generally, government contracts are one to three years, depending on the terms negotiated between the public entity and the service provider. Based on the performance of the service provider, the contract tenure may get extended on yearly basis, for a maximum of five years. The price escalation is addressed through minimum wages, cost indices etc., as approved by both parties.

Facility Management Service Procurement Process and Contract Types: There are mainly four types of procurement/tendering process such as:

- Open Tendering: An Open Tendering process is an invitation to tender by public advertisement.
 There are no restrictions placed on who can submit the tender. However, service providers are required to submit all the required information and are evaluated against the stated selection criteria.
- **Select Tendering:** A Select Tender is only open to select number of service providers. The companies may be short listed through pre-qualification process or be a compilation of companies that the public organisation has worked with previously.
- Multi-stage Tendering: Multi-stage Tendering is used when there are a large number of respondents. At each stage in the process, the suppliers are evaluated and selected on a set of pre-determined parameters.
- **Invited Tendering:** An organisation contacts a select number of service providers directly and requests them to perform the contract. It is generally used for specialist work, emergency situations or for low value, low risk and off the shelf options.

The government has moved away from the manual tendering process and today only e-tendering and e-procurement process are adopted across all government bodies. This move was enforced to enable transparency in the system. In the e-tendering process, advertising for bids to receiving and submitting tender-related information is done online, for example through The Central Public Procurement Portal (CPPP). The online system provides information about all aspects of procurement, including vendor registration, tender preparation, tender upload, tender document purchase, bid preparation, bid submission, bid evaluation, bid comparison, and tender award. Publicly-available aspects include

information relating to tender notices and tender awards, with the name of the successful bidder, nature of work, and the winning bid.

The current procurement methodology is not structured and is largely dependent upon the requirements of the principal end user. In the past, a majority of the end users preferred single service contracts based on head counts, defined machines, material etc. There were certain penalties for not providing the defined resources as per the contractual agreements. Today, Hard and Soft Services are combined in the Facility Management Contract and still manpower based rather than Service Level Agreement (SLA) based.

Globally, and particularly in advanced Facility Management Markets, the contracts are SLA based and they define the level of service expected from the service provider. The SLA is a management tool put in place to monitor the key service elements required by the client. It will be reviewed by the supplier and client together on a periodic basis. The defined service levels will be measured, on a line-by-line basis, against agreed criteria, and given a score. This scoring process will indicate how the individual elements of the contract are performing, and build a picture of the contract as a whole. For any service element falling below par, actions will be agreed and objectives would be set for improvement. These will receive ongoing scrutiny. Operational reports will be produced frequently (weekly/ monthly), and where possible, exception reports will be produced whenever an SLA has been broken (or threatened, if appropriate thresholds have been set to give an 'early warning'). Periodic reports will be produced and circulated to concerned team a few days in advance of SLA reviews, so that any queries or disagreements can be resolved ahead of the review meeting. The periodic report will incorporate details of performance against all SLA targets, together with details of any trends or specific actions being undertaken to improve service quality. An SLA Monitoring (SLAM) chart will be used at the front of the report to give a dashboard overview of how achievements have measured up against targets. Given the advantages of SLA based contracts, there is an anticipated shift towards SLA based contracts in the long-term, in the government sector in India. There is a growing awareness about SLA contracts among large government entities and clients are expected to start focussing on SLA based contracts to measure service quality. This anticipated transition is expected to provide several advantages to the Facility Management Service providers, particularly from the organised segment.

Vendor Evaluation and Selection in Government Sector: Government contracts are usually awarded to L1 bidder and not to a service provider with much more sophisticated resources or professionalism that may be costlier than L1. This customer preference is changing towards Combined Quality cum Cost-Based Selection (CQCBS) basis that entails evaluation based both on the cost committed and the technical qualifications of the bidder. CQCBS is a selection process to determine the most appropriately qualified service provider based on Quality-cum-Technical Competitiveness attributes, leading to a negotiated award of services on a fair and reasonable basis. The most important quality-based attributes by which to judge a service provider's suitability to carry out a particular project, regardless of the selection process stages, generally are professional competence, managerial ability, availability of resources, and professional integrity. The evaluation of the proposals in this model are also carried out in two stages: first the quality, and then the cost. Like the L1 regime, the evaluators of technical proposals do not have access to the financial proposals until the technical evaluation is concluded. The total score is obtained by weighting the quality and cost scores and adding them. The weight for the "cost" is chosen, taking into

account the complexity of the assignment and the relative importance of quality. The proposed weights for quality and cost are specified in the bid document. The service provider obtaining the highest total score is invited for negotiations.

Parameters to Short-list Service Provider:

The potential benefits of outsourcing Facility Management Services could be achieved only when the capable solution provider is selected. The service provider needs to demonstrate the ability to provide skills, processes and resources that can exceed the in-house capabilities. For evaluating or selection the Facility Management services providers, the following major criteria are considered across end user segments.

Exhibit 2.40: Selection Parameters, India, FY2025

Calastian Dansus sta						
Selection Parameter	Weightage	Insights				
Skills and Experience	High	Any Facility Management services provider should, as a baseline, have skills that go beyond basic operating system maintenance and management. Facility Management service providers should have the capability to scale up manpower with specialised skill sets as per client requirements. They should also have deep expertise across all delivery models, from managed services to traditional IT and strategic outsourcing. This way, the service provider is able to help clients achieve an integrated multisourcing strategy that is structured to meet individual enterprise needs.				
Service Quality	High	A quality-oriented Facility Management service provider is expected to deliver value through expertise, efficiency, customer service, innovation, and smooth operations. Working with a quality-oriented service provider not only helps client to meet goals like sustainability and satisfying customer experience, but also keep costs under control. Focus on quality over costs will result in cost reduction and improved efficiency in the long-run.				
Price	High	A vast majority of the clients are price sensitive and have a natural tendency to pass on any financial pressure to the service provider, which results in lower profits. This increases the stress on the Facility Management solution provider who in turn work to optimise costs to be on par with their competitors. Pricing is a key determinant for success, but the rising operational expenses may make it extremely difficult for Facility Management companies to balance costs while meeting emerging client requirements. Competitive pricing needs careful planning as this might affect returns in the longer term. FM companies' common predicament				

		is not only to manage their own operating costs but also managing their client costs in order to rationalise and increase their operational efficiency.
Technology and Innovation	Medium	Facility Management service providers should be capable of contributing towards organisational success when given the opportunity to exploit new ideas and perform innovative activities that are regularly measured and integrated within the overall business goals or an organisation. To achieve this, it is essential that innovation in Facility Management is given appropriate empowerment and a platform within the boundaries of the organisation's total innovation agenda. Moving forward Facility Management companies need to transform how they operate if they are to remain competitive, and are able to manage larger, more integrated contracts. Digital technology is central to this transformation. Facility Management companies are continuing to use technology for vital measuring and operational reporting, and moving forward more companies would leverage technology in their service delivery to stay competitive.

Source: Frost & Sullivan Analysis

Apart from the above criteria, financial stability (especially in government segment), compliance, certifications, workforce strength and training, service customization, sustainability practices etc. are also evaluated.

Technology Trends:

Technology is evolving at a rapid pace, and it is important for IFM companies to keep up to the evolving requirements. From wearables to artificial intelligence, new tools are emerging every day to help facility managers manage their responsibilities more effectively. The increase in internet and cloud connected devices has led to tools like mobile apps that enable FM managers to see what is happening with different systems in a building from anywhere (on- or off-site) and take actions or make changes with the press of a button.

Increased connectivity is also providing Facility Managers the ability to quickly collect and analyse all sorts of building data. This data can be used to show which equipment will need proactive maintenance and when, or to predict and manage energy consumption in various parts of a facility. Some of the key technology trends which will have high impact on organised players include the following:

A. IoT and Big Data Analytics:

 loT is used to connect all the sensors and devices, through building automation and to exchange and analyse information and optimise controls automatically. This would help in visibility and control over their assets.

- Installations could benefit from up to 25% energy savings through proactive energy management programs.
- Big Data analytics have evolved to assist the building technologies industry in providing personalised analytics to end users.
- IoT creates opportunities for service providers to offer improved support to end users.

B. Remote Monitoring:

- Building Information Modelling (BIM) is typically used in conjunction with cloud architecture for remote monitoring.
- This approach allows contractor participants to access and review building information remotely, further increasing the collaborative potential and efficiency gains.

C. Cloud Solutions:

- Facility Management Software which are cloud-based, brings in opportunities for the remote servicing of equipment and systems enabled by connectivity and helps to access from any location/any device.
- This trend is depicting a growing shift to meet the mobile needs of facilities management.
- Workers are on the move and in order to access systems and information online, facility managers are increasingly depending on mobile applications.

D. Deployment of Artificial Intelligence and Robots in IFM:

- Assigning robots to complete complex cleaning and simple repair task helps to free up time.
- This shall enable to focus on strategic aspects of IFM such as workplace management ensuring compliance, etc.
- Still at a nascent phase, implementation of Robotic solutions on smart cleaning and security & surveillance is yet to be explored fully in India.

E. Enterprise Asset Management Systems:

These systems have all core asset management features to efficiently manage the buildings. This
includes applications to schedule and monitor maintenance, leasing, capex planning, and overall
customer experience.

F. Computerised Maintenance Management Systems:

• This is a software that centralises maintenance information of assets/ facilities. This helps in optimizing the utilisation of resources.

G. Automated Facility Maintenance:

- Unorganised work environment leads to complex situations leads to poor management and underutilisation of resources.
- Automation of the process makes everything easy to manage.
- These systems also help in automatically assigning tasks to employee and monitor his activities.

• Automation also helps in maintaining an organised work environment.

Value Added Services:

Facility Management companies have the prime responsibility of the operational excellence of the built asset under their maintenance contracts. Key competitive factors to maintain a competitive edge in the market are developing established systems and processes, manpower training programs, technology adoption including Computer Aided Facility Management (CAFM), Remote Monitoring, and Energy Management and capability to manage SLAs efficiently by meeting Key Performance Indicators (KPIs).

Built environment is evolving rapidly, given that the buildings are major sources of carbon emissions and several technological solutions are made available to improve operational efficiency and to achieve netzero buildings or carbon neutral buildings. This is inevitability driving business transformation among Facility Management companies to respond to the dynamic requirements of end users and to stay relevant in the competitive landscape. Facility Management companies with standard service offerings in the market run the risk of losing out of the growth opportunities and eventually market revenues. Given the current digital revolution across end suer segments, the global Facility Management market is already witnessing multiple partnerships or mergers and acquisitions towards energy management, digital solutions and workplace management among others. In India, the business transformation is in the form of value-added services provided the Facility Management companies, that enables to differentiate from the competition and scale-up their businesses. Some of the niche value-added services provided or that have potential in the long-term in India include Senior Citizen Assisted Living Services, Specialised Soft Services, Energy Management Services, Green Facility Management, Building Management Systems, and Remote Monitoring Solutions.

Assisted Living & Care Management Services: Shifting demographics in India towards senior citizens is driving the demand for Assisted Living & Care Management Services in India. According to the United Nations' Department of Economic and Social Affairs, India's demography is undergoing a shift, with the share of senior people aged 60 and above expected to increase from 11.0%⁷¹ of the population in 2024 to 21.0% by 2050. The spending power of senior citizens in India is also expected to increase in the long-term and this is expected to support the growth of the Assisted Living & Care Management Services Market in India. The Assisted Living & Care Management Services Market in India is estimated between USD 11.5 – 12.0 billion⁷² in CY2024. This market size includes services around assisted living, independent living, memory care and nursing care. The Assisted Living & Care Management Services Market is driven by the increasing elderly population, growth in life expectancy, rise in nuclear families, financially independent and educated senior citizens, increasing medical needs of the senior citizens, and NRIs coming back to India after retirement. Indian Government has also launched several initiatives to support the growth of the Assisted Living & Care Management Services Market in India. To meet the demand for senior living, the government launched Atal Vayo Abhyuday Yojana (AVYAY) scheme in FY2022. Under this programme, the government offers a society in which senior citizens could live a healthy, happy, empowered, dignified, and self-reliant life, along with strong social and inter-generational bonding. Several stakeholders are providing a wide range of services in this market and Facility Management companies are also part of the

 $^{^{71}\,}https://www.asli.org.in/wp-content/uploads/2024/11/ASLI_Elevating-the-Golden-Years.pdf$

⁷² Association of Senior Living India (ASLI) and Frost & Sullivan Analysis

key stakeholders group. The Facility Management Service Providers business model is to take up built space on lease and to provide to Facility Management Services such as Hard and Soft Services, 24x7 monitoring, providing necessary medical support such as nurses, ambulance services, doctors on call, tieups with nearby hospitals, food services, recreational services among others thereby addressing the housing and medical needs of senior citizens in India. BVG, the leading facility management company in India founded Amrut Anand with a vision to redefine senior living in India, addressing the unique challenges faced by the elderly and fostering a life of dignity, joy, and well-being. With a deep understanding of the growing isolation issues and limited access to quality care, Amrut Anand offers a compassionate sanctuary where residents can thrive physically, emotionally, and socially. This initiative reflects BVG India's unwavering commitment to humanity and social responsibility, embodying its mission to create meaningful impact and enrich lives. Amrut Anand ensures that every elder is treated with the respect, care, and fulfilment they deserve, making their golden years truly rewarding and serene.

Specialised Soft Services: The major specialised services provided in the market today are Automotive Paint Shop Maintenance, Hygiene Solutions for Hospitals, Marble & Stone Care and Carpet, and Chair & Sofa Cleaning Services.

Automotive Paint Shop Maintenance Services: Automotive production process has a paint shop where the products are painted and this paint shop is a very critical space in the whole process. Any amount of dust inside the paint shop can ruin the paint and product quality, resulting in rusting of the product soon. Most of the automotive companies have an in-house paint shop maintenance team. However, in the past five years, automotive companies have started to outsource their paint shop maintenance. Pain shop maintenance services are very niche, where the service provider is mandated to maintain dust levels as per industry standards that are on par with international standards in India. The standard followed in India is the International Organisation for Standardisation (ISO) Class 5 standard. Dust is measured in microns and as per the dust free environment standards for paint shop, 5-micron particles should be below 300 per cubic metre. The Government of India is also aiming to make automobiles manufacturing the main driver of 'Make in India' initiative, and several automobile brands have set up or are in the process of establishing their manufacturing bases in India. This is expected to drive the opportunities for specialised maintenance services in this segment. BVG has established itself as a trusted leader in the paint shop cleaning and maintenance sector and ensures full compliance with relevant regulations in maintaining a dust-free environment for the painting process of cars and machinery. BVG is among the very few companies in India to provide specialised services for auto ancillary segment, they aim to leverage their expertise in specialised services such as paint-shop cleaning, factory relocation services, logistics, production support services and relationship with companies including Fiat India Automobiles Private Limited, Hindustan Aeronautics Limited and an Indian automobile manufacturer to increase their market share in this sector. BVG's major clients in the automotive sector include Hindustan Aeronautics Limited, Force Motors, Bajaj Auto, Fiat India, Skoda Volkswagen, Plastic Omnium Auto Exteriors, Hyundai Motor, Seoyon E-HWA Summit Automotive, Tata Motors and Tata Hitachi Construction Machinery, among others. BVG offers comprehensive services, from equipment, tank, and tunnel maintenance to facility housekeeping,

all aimed at optimising performance and safety. With meticulous attention to detail, down to the micron level of paint, BVG helps clients maintain the highest standards, ensuring ultimate satisfaction for their end customers.

Exhibit 2.41: Dust Free Environment Standards for Automotive Manufacturing, India, FY2025

Dust Particles	Dust Acceptable	
25 Micron Particles	Zero	
10 Micron Particles	Under 100 per cubic metre	
5 Micron Particles	<300 per cubic metre	

Source: Frost & Sullivan Analysis

- Hygiene Solution for Hospitals: Hospital Acquired Infections (HAIs) are a major threat to healthcare environment and therefore hospitals take extreme care for their hygiene needs. Hospital management have started to outsource these services currently. Some of the solutions offered by Facility Management companies for Hospitals include Steam Cleaning and Green Cleaning, that are bacteria free hygiene solution for hospital floors, intensive care units and operation theatres. Steam Cleaning solutions are widely accepted by the hospital management and the key reasons are:
 - Steam is rapidly effective against a wide range of pathogens, notable VRE, MRSA & Gramnegative bacilli
 - The total surface bio burden from hospital surface is decreased by more than 90%, along with almost complete elimination of pathogens
 - o Reduces water consumption by 90%
 - o Environment friendly and odour free

Most of the major Facility Management Companies such as BVG, UDS, ISS, SIS Limited and Sodexo are providing hygiene solutions to healthcare segment. BVG's Green Clean hospital cleaning solutions are one of the safest and quickest way to sanitise floors, hands, beds, table tops & countertops. Apart from this, BVG also provides mechanised cleaning of hospitals, medical waste management, specialised cleaning of intensive care units, facility attendant services, providing manpower for nurses, ward boys, and health assistants, ambulance staff such as doctors, EMTs, and drivers and other technical maintenance of hospitals. Some of their clients in this space are AIIMS, D Y Patil Hospitals, Max Healthcare, Fresenius Kabi, AstraZeneca, Safdarjung Hospital, and Bharati Hospital & Research Centre.

 Marble and Stone Care Solutions: Stone flooring is brittle and therefore vulnerable to strains and scratches that could make them look dull over a long period of time without any maintenance.
 Facility Management companies provide stone care solutions for diverse stone types such as Italian marble, granite, sandstone, Indian marble etc. The services include professional floor polishing and restoration.

Energy Management Services: Energy Management which was a disparate service is now being included under the purview of Facility Management contract. Growing awareness on environmental sustainability and India's commitment to carbon neutrality would pave the way for a better regulated Energy Management Services Market in the long-term. There is a high growth potential for Facility Management companies in this space. Facility Management companies with sound understanding of the needs of the property being managed are well-positioned to capitalise on the opportunities for energy related services.

Green Facility Management: Green buildings are the future of infrastructure across the world. The adoption of eco-friendly building practices has far-reaching benefits for the health of the people who occupy them, the natural resources and the environment. Indian Green Building Market gathered momentum post 2007 and has witnessed tremendous growth in the past decade. Currently, there are more than 14,500 registered green building projects with 12. 31 billion square feet of green footprint registered with the Indian Green Building Council (IGBC) as of October 2024⁷³. As per the U.S. Green Building Council (USGBC), India holds the third place in the list of Top 10 Countries and Regions for LEED certification in CY2024, after China and Canada. LEED certifications were awarded to 370 projects in 2024 that had a cumulative space of 8.5 million gross square meters⁷⁴. With the continued investments in Green Buildings, the demand for Green Facility Management Services is expected to increase in the long-term. Green Facility Management Services involves the usage of environment-friendly solutions, reducing energy consumption and other sustainable strategies to improve building efficiency. Facility Management companies should develop capabilities and build expertise in specialised technical services around energy efficiency, thermal audits and green building concepts, to capitalise on this opportunity.

Building Management Systems (BMS): BMS is a computer-based control system installed in buildings that controls and monitors the building's mechanical and electrical equipment such as ventilation, lighting, power systems, fire systems, and security systems. Building Analytics is the current trend and there are a lot of independent analytic systems being placed over BMS to automate diagnostics to find problems with mechanical and other systems before they affect the buildings conditions. Most BMS systems are using more and more sophisticated analytics directly within their own system management software to do automated responses to problems before expensive breakdowns occur and before energy is wasted. A few of the major Facility Management companies are providing BMS solutions currently and in the long-term many of the companies are expected to add BMS into their service portfolio to get a competitive edge.

Remote Monitoring System (RMS): RMS is a solution which facilitates monitoring a cluster of equipment or systems in a building from a remote location. Using RMS, one can monitor and control one or more geographically dispersed buildings from a single remote location. It helps facility managers to proactively manage the various equipment and systems in a building over the cloud, providing a cost effective and more productive work environment. It also assists in predictive and proactive maintenance and helps reduces downtime due to disruption or system failure. Remote data management of BMS and data analysis

⁷³ https://www.business-standard.com/industry/news/aim-to-have-10-billion-square-feet-of-green-buildings-in-10-years-igbc-124102401360_1.html#goog_rewarded

⁷⁴ https://www.gbci.org/india-retains-third-position-globally-leed-green-building-certification-2024

to increase building efficiency are gaining popularity and is expected to make its presence felt in India. Some of the prominent Facility Management companies are focusing on technology-based services in line with the upcoming demand. Facility Management companies have also started to incorporate IoT solutions, that can provide assistance to facilities personnel through data analytics, multi-system management, fault detection, and smart system alerts.

Industry Risks and Challenges:

Despite its high growth prospects, the Indian Integrated Facility Management Services Market is facing a few challenges. One of the main issues the market is now dealing with is a lack of skilled and non-skilled manpower. After a project has been successfully contracted, the lead times for mobilising resources and workers have increased due to a lack of skilled personnel. Customers have been compelled to switch out long-term contracts for medium-term ones due to rising inflation and manpower costs. Medium- and short-term contracts are easier for many clients to keep up than long-term ones because the latter will result in price increases.

Exhibit 2.42: Industry Risks and Challenges, India, FY2026 - FY2030

Industry Risks and Challenges	Description	Impact on Growth FY2024 – FY2029
Stiff competition	The market is highly competitive with the presence of large number of domestic and few international companies. It is also noted that some big domestic companies having principal business in real estate are entering into this market by forming a subsidiary, thereby increasing competition.	Medium to High
Retention of workforce	High attrition rate mainly because of high demand for quality manpower and competitive remuneration, is making it difficult to retain skilled workforce, especially in soft services segment.	Medium to High
Price sensitivity	Customers are highly price sensitive, and this has resulted in increasing preference for companies who are non-compliant with regulations related to Provident Fund (PF), Employees' State Insurance Scheme (ESIC) etc.	Medium to High
Rising operational costs	Increasing wages, compliance costs, material expenses etc. create pressure on profit margins. Higher energy and maintenance costs affect operational efficiency.	Medium to High
Payment delays	Extended receivables period from customers creates cash flow challenges for FM companies.	Medium to High

Lack of	The Indian market lags in areas such as market maturity and	Medium
market	appreciation for high standards of service delivery	
maturity		

Source: Frost & Sullivan Analysis

Key Success Factors:

Facility Management Market is anticipated to see significant growth over the next decade driven by the investments in end user segments and improvements in outsourcing rates. As the industry evolves, the service delivery in terms of quality and customer experience are also expected to see significant enhancements – technology adoption is expected to increase and the business models are expected to move away from being labour-centric. Some of the critical success factors to gain competitive advantage in the market include:

Exhibit 2.43: Key Success Factors in Facility Management Market, India, FY2025

Factors	Impact	Insights
Ability to adopt advanced technologies	High	The Facility Management Market is embracing technology to effectively manage their service delivery. Technology has become critical for the success of Facility Management service providers. Some of the cutting-edge technologies include: Smart building technology that is also used to monitor environmental factors such as temperature and humidity as well as asset performance. Facilities managers can easily access and use to identify opportunities to improve how the facility is run. Wearable technology that helps facilities managers improve the security of personnel and data by restricting access to a building or parts of a building to only certain individuals. Wearables also enable facilities managers to collect data about employee work patterns, space occupancy and resource utilisation.
Retention of skilled workforce	High	Facility Management Service is currently revolving around manpower and man hours and therefore by its very nature it's important for any service provider to have enough skilled personnel. Different skill sets will be needed to support the new environments rising with new technologies. It is critical for any service

		provider to train the manpower and retain them instead hiring new workforce which is difficult in the competitive environment		
Pan India presence	High	Factors such as rising population across Tier 1 cities, continuing growth in IT/IteS and banking sectors in Tier 2 cities, increasing government initiatives like provide housing for all citizens and development of smart cities etc. across India favour the service providers. This offers opportunities in facilities management services, including specialized services such as HVAC maintenance, ATM maintenance, horticulture, and transportation. Having pan India presence is an added advantage to increase reach and gain market share.		
Competitive pricing	High	Due to presence of many low-cost unorganised service providers and price sensitive customers across end user segments, pricing and margins are always stressed for the organised companies. Competitive pricing strategies are very critical to win contracts in this market.		
Differentiated services/ Value-add services	Medium	Facility Management companies offering innovative and differentiated services or specialised services through their ability to integrate manpower and client's business requirements will gain competitive advantage.		
One stop solution	Medium	The industry is moving towards one stop solution service providers that offer benefits of having all outsourced Facilities Management Services under one roof. This reduces the number of contact points between the outside company and the service provider which is essential to the company as well as facilities team to focus on actual facility needs and customer service. Integrated services allow an outside company to streamline and combine services when appropriate to decrease costs to the enterprise.		
Customer retention	Medium	In Integrated Facilities Management business, the most common form of contract is annual and therefore		

		companies with the ability to retain clients have a competitive advantage.		
Forging value chain partnerships	Medium	Due to the fragmented nature of the market, evolving customer requirements and the dynamic buildings market, forging value chain partnerships to provide bespoke solutions in a short period of time is a critical factor to stay ahead of competition. Partnerships would make it easier for the companies to provide easy access to the customer network, increase manpower strength, widen their service portfolio, and expand their geographic footprints to increase brand visibility		
Brand reputation	Medium	Brand reputation is critical component for the success of the business. Creating brand awareness and complying to quality standards will enhance brand recall and eventually result in client retention.		
Alliances with real estate developers	Medium	The real estate developer plays a major role in influencing the Facility Management service provider. Therefore, it is recommended to maintain consistent relationship or to have a tie- up with a civil contractor /developer to execute a Facility Management project. Key industry alliances can also be leveraged by participating in /organising major events and conferences.		

Source: Frost & Sullivan Analysis

As the market witnesses increased adoption of technology, buildings are expected to become smarter, intelligent, environment-friendly, and energy efficient. Hence it is imperative for Facility Management solution providers to understand the intricacies of fully "networked", "converged", and "intelligent" building solutions and identify this business as a niche opportunity beyond Hard and Soft Services.

Corporate Catering Services Market Analysis

Market Overview:

Growth in the Indian economy and rising investments in Services, Industry, Education and Tourism sectors have played a crucial role in the growth of Corporate Catering Services Market. India's high growth trajectory has resulted in industries and offices moving to semi-urban area of cities and this has fueled the demand for on-site kitchens to serve employees who must travel long distances to reach office locations.

The growth in Meetings, Incentive, Conferences and Exhibitions (MICE) tourism has also propelled the growth of the catering industry in India. The country's infrastructure facilities are improving consistently

and are on par with the developed countries that enable India to host world-class events. The Ministry of Tourism has formulated the National Strategy for MICE industry, which is expected to bolster growth in the long-term and this would eventually drive the demand for catering services.

Market Size and Forecast:

The Corporate Catering Services Market in India is estimated at INR 210.00 billion in FY2025. The market grew at a CAGR of 4.1% from FY2020 – FY2025. This low CAGR is due to the global pandemic and its impact on the market.

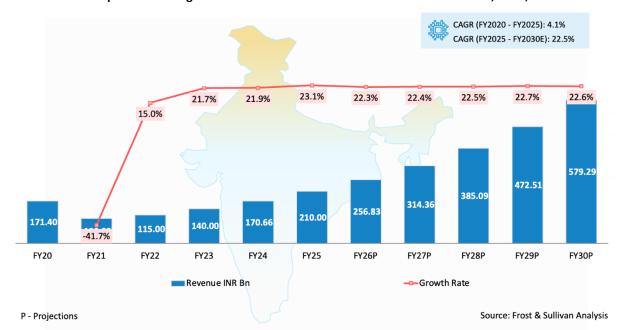


Exhibit 2.44: Corporate Catering Services Market: Historic and Forecast Revenue Trend, India, FY2020 - FY2030

Note: The market size does not include catering services provided for weddings and other private/personal functions, railways and in-flight catering.

Hybrid work models are the trend today and were influenced by the COVID-19's social distancing norms, the catering companies introduced packed meals – these are freshly cooked nutritious meals cooked at central kitchens and packed for employees. This replaced the traditional on-site food serving, which resulted in large gatherings during lunch breaks. Today the industry is seeing several technological advancements including online platforms for food orders, mobile applications introduced by catering companies to customise client meals, cafeteria automation and digital feedback tools are all leading to service efficiency and enhanced user experience.

Factors such as the growth in the offices segment, including events and celebrations, change in lifestyles, dual earning families that prefer eating at office premises, shift in real estate trends and increase in disposable incomes to afford a leisure lifestyle are the major demand drivers. The market is expected to reach INR 579.29 billion by FY2030 growing at a CAGR of 22.5% from FY2025 — FY2030. Within the Corporate Catering Services Market, Commercial Offices, Healthcare and Educational segments are expected to witness high growth which would be driven by the growth in Services segment.

Market Segmentation by End User Segments:

Industrial Segment is the largest segment with a market share of 40.5% of the total market in FY2025 followed by Commercial Offices at 34.0%. Post the global pandemic, there is an increasing focus on emotional health and overall health. This is seen particularly in Education segment where the relevant stakeholders want to imbibe the habit of healthy eating from the early stages of child's growth. To this extent, several companies in the market are developing bespoke meal plans to create unique food experiences, which are not just healthy and tasty but visually appealing too, to meet the emotional, functional and social requirements for students at educational institutions.

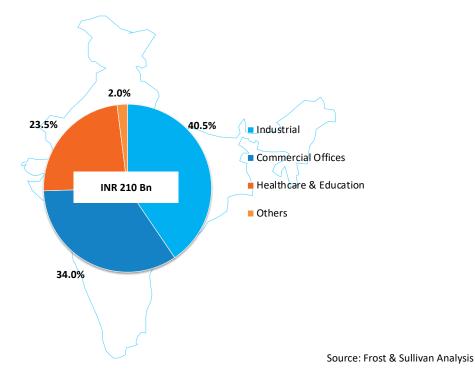


Exhibit 2.45: Corporate Catering Services Market: Segmentation by End User Segments, India, FY2025

Market Trends:

- Industrial corridors lead to increased demand for industrial catering: The industrial customers
 guarantee food orders of minimum predefined sizes, have higher consumption and presence at
 remote places, and provide price subsidisation for employees. The growth of industries with
 introduction of Industrial corridors and push by Make in India 2.0 and PLI Schemes will lead to higher
 demand for food services from industrial segment.
- Individual preferences and menu innovations will create need for customisation: There is a widespread
 focus on health among the youth of India and this would impact the Food Services and Catering market
 moving forward. There is a growing demand for healthier food options that also comply with safety
 norms. The market is also seeing a growing preference for multi-regional, vegan, green foods etc. and
 this is driving innovation in food menus. Customisation trend would have higher implications in the

- healthcare and institutional segments where diet-specific menus, food with nutritional value and food quality would be critical criteria for vendor selection.
- Sustainability and eco-conscious food choices: Sustainable practices are being called for in the industry
 by both the suppliers and consumers. For example, eco-friendly packaging, organic ingredients, and
 minimal food waste are some of the green practices in the Catering Market in India.
- <u>Integrated service providers to boost organised sector:</u> In the coming years, customers will mostly prefer integrated service providers with good compliance and food safety track record to avoid the risk of non-compliance. This will help the organised segment to penetrate the market faster as compared to the unorganised sector.
- <u>Macroeconomic trends:</u> Increase in nuclear families and growing number of women joining the workforce in India is also driving the demand for catering and food services in the long-term.
- <u>Sustainable sourcing and like-minded vendor network:</u> Catering companies are promoting local sourcing of farm products and networking with vendors who are climate change conscious as a unique selling proportion to lure customers particularly the millennials and Gen-Z customers.

Market Drivers and Restraints:

Exhibit 2.46: Corporate Catering Services Market: Drivers and Impact, India, FY2026 - FY2030

Market Drivers		Impact	
	1-2 Years	3-4 Years	5-7 Years
Growth in Disposable Incomes	High	High	High
Increasing Investments in Commercial Segments such as Corporate Offices and Growth in Corporate Events	High	High	High
Growth in Manufacturing Segment	High	High	High
Growth in Dual Income Families	Medium	High	High

Source: Frost & Sullivan Analysis

Growth in Disposable Incomes: Increasing share of disposable/ discretionary income among the households, especially among the middle-class are driving the demand for catering services, particularly among the Commercial Segment.

Increasing Investments in Commercial Segments such as Corporate Offices and Growth in Corporate Events: A high growth in the number of commercial business activities, driven by the investments in various end user segments would be a key growth enabler in the upcoming years. This will fuel the growth of the Corporate Catering Services Market.

Growth in Manufacturing Segment: Due to the large number of employees, the industrial segment guarantees a minimum threshold for the size of food order. The growth of the industrial segment backed by initiatives like Make in India and PLI Schemes are expected to drive the demand in the long-term.

Growth in Dual Income Families: India has witnessed a significant growth in dual income families and this has been a crucial driver for the demand of catering services.

Market Restraints	Impact		
	1-2 Years	3-4 Years	5-7 Years
Compliance and Statutory Requirements	Medium	Medium	Low
Absence of Minimum Food Guarantee in the Office Segment	Medium	Medium	Low

Source: Frost & Sullivan Analysis

Compliance and Statutory Requirements: Strict food safety laws and their inspection do not bode well for the unorganised sector and prevents them from scaling up operations. It also poses a challenge for players in the organised sector but they have developed systems and processes that enable them to comply with the statutory requirements.

Absence of Minimum Food Guarantee in the Office Segment: The number of employees in the office segment is quite low as compared to the industrial segment. Therefore, there is no minimum food guarantee and this does not bode well for the growth in the long-term.

Industry Risks and Challenges:

Exhibit 2.48: Corporate Catering Services Market: Industry Risks and Challenges, India, FY2026 – FY2030

Industry Risks and Challenges	Description	Impact on Growth FY2023 – FY2028
In housing and the emergence of Unorganised Companies	 Several small-scale end users prefer to inhouse their requirements for Catering Services, which limits the expansion of this segment. The number of unorganised companies are increasing in the Tier 2 cities and building tough competition for the organised companies. The major reason for this is that the small and medium scale industries and corporate parks in sub-urban areas prefer services from small companies from the unorganised sector to minimise their costs. 	High
Price Sensitivity	 A vast majority of the end users are highly price sensitive and their decision making is driven by the price of the contract. Many companies from the unorganised segment take advantage of this price sensitivity and offer lower prices when compared with the organised companies. Unorganised companies are able to achieve this as they do not comply with the official standards and statutory requirements. 	High

Source: Frost & Sullivan Analysis

Competitive Landscape and Major Players:

The Corporate Catering Services market is highly fragmented with close to 60-70% of the total market is dominated by the un-organised companies and the remaining 30-40% of the market is with organised companies. Within the organised segment, Sodexo, ISS, CRCL, Proodle Hospitality, Comprehensive Support Services, ISG Hospitality Service, Compass, BVG and Bluspring Enterprises are some of the major players. Sodexo, and Compass are the top two companies with a combined market share of 18.4% of the total market in FY2025.

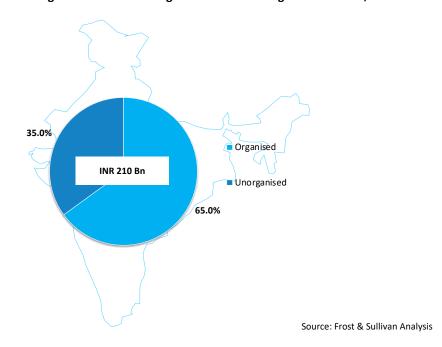


Exhibit 2.49: Corporate Catering Services Market: Organised versus Unorganised Market, India

Electric Buses Operations and Maintenance Services Market Analysis

Market Overview and Outlook:

India's agenda towards sustainability and electrifying public transportation sector is providing several business opportunities for Facility Management companies and one such opportunity is the Operation and Maintenance Services for Electric Buses (E-buses) in public sector. India is grappling with severe air pollution problems, particularly in its major cities. It's the second most polluted country globally, according to the Air Quality Life Index, and average life expectancy is reduced by 6.3 years due to air quality. The adoption of E-buses is seen as a crucial step towards addressing this issue, as they do not produce tailpipe emissions, thereby reducing greenhouse gas emissions and improving public health.

The Indian government has launched several initiatives towards the adoption of electric vehicles and the most recent ones are the PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme and the PM e-Bus Seva-Payment Security Mechanism (PSM) scheme. The first programme to accelerate the adoption of E-buses was the Faster Adoption and Manufacturing of Electric (FAME) Vehicles

Scheme. The other initiatives include National E-Bus Program, PM E-Seva Scheme, and Global Biofuels Alliance.

Faster Adoption and Manufacturing of Electric Vehicles (FAME) Scheme:

The FAME scheme was launched under the National Electric Mobility Mission in 2015 to provide subsidies to support the State Transport Authorities in procuring E-buses. The first phase of the scheme ran for four years until 2019 and 425 E-buses were procured by different states. Phase II of FAME scheme (FAME II) was launched in April 2019 with an outlay of INR 100.00 billion for a period of three years. Its objective was to create demand for around 7,000 electric and hybrid buses, 500,000 lakh electric three wheelers, 55,000 electric four wheeler passenger cars, and 1 million electric two wheelers. While FAME I supported the procurement of the E-buses, the State Transport Authorities lacked the technical manpower to operate and maintain the buses. To address this challenge, FAME II introduced Gross Cost Contract (GCC) procurement model, which is also known as the opex or wet lease. Under this model, the State Transport Authority floats the tender as per their requirement to lease E-buses depending on the population and topography of the city. Only manufacturers are allowed to participate in the bidding process. In this model, the State Transport Authority would pay the contractor on a per-kilometer basis. The State Transport Authority handles the scheduling of buses, route planning, fare collection, and keeps the bus fare revenues. They also set the service standards for bus operators. The bus operators are responsible for the operation and maintenance of the E-buses. With respect to risks, the State Transport Authority assumes the revenue risk while the bus operator assumes the financial, technology, and operational risks. Procurement through GCC model was mandated to be eligible for FAME II subsidy for E-buses. Around 6,862 E-buses were allotted under the FAME II Scheme and more than 4,900 E-buses have been delivered and are operational as of August 2024⁷⁵. FAME II scheme was extended until 31st March 2024 to give more opportunity to cities to utilise the subsidies.

Exhibit 2.50: E-buses Sanctioned and Deployed under FAME II, India, FY 2025

State / UT	# of E-buses Sanctioned	# of E-buses Received and Deployed*	
Andhra Pradesh	100	100	
Bihar	25	25	
Dadra & Nagar Haveli	25	25	
Delhi	1,321	1,321	
Telangana	300	0	
Gujarat	800	625	
Karnataka	1,121	924	
Maharashtra	830	817	
Odisha	50	50	
Uttarakhand	30	30	
Uttar Pradesh	600	600	
West Bengal	1,230	40	
Goa	150	64	
Chandigarh	80	80	

⁷⁵ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2043645

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Jammu & Kashmir	200	200	
Total	6,862	4,901	

^{*} as of August 2024

Source: PIB⁷⁶

National E-Bus Program (NEBP):

Government of India launched this programme in June 2022 with an objective of deploying 50,000 E-buses across the country by 2027 in a phased manner. The NEBP has a budget outlay of USD 10.00 - 12.00 billion. It also targets to achieve 40% penetration rate for E-buses in India by 2030. Convergence Energy Services Limited (CESL) is the nodal organisation for electrification of buses in India. CESL collectively works with the State Governments to aggregate the demand for E-buses and then floats tenders to procure E-buses.

CESL is adopting a two-pronged strategy to achieve its target. The first path is to aggregate demand from the states and negotiate competitive prices for E-buses by leveraging economies of scale. The second method is to lease E-buses from original equipment manufacturers. The sourcing model adopted by the CESL in their first tender for E-buses used GCC Model. The contract period is about 12 years. In the second tender by the CESL, dry lease model has been proposed and this means that the bus operators would supply the buses and the state agency is responsible for appointing drivers and conductors. This lease model was enabled in the NEBP to maintain employment within the State Transport Authorities.

PM E-Seva Scheme:

To address the concerns of the original equipment manufacturers on payment delays from the state authorities, federal government approved PM E-Seva Scheme in 2023 to deploy 10,000 E-buses across 169 cities over the next ten years, with an estimated cost of INR 576.13 billion. Of the total cost, the federal government would contribute INR 200.00 billion and this includes operational support for 10 years.

This would be based on public-private partnership model. Cities with 300,000 to 500,000 population are expected to receive 50 E-buses, cities with 500,000 population would receive 100 E-buses and cities with 2-4 million population would receive 150 E-buses.

Global Biofuels Alliance:

In order to facilitate faster adoption of E-buses in India, the USA and India have come together under the Global Biofuels Alliance launched in July 2023, to create a payment security mechanism to give assurance to bus manufacturers, who were reluctant in bidding for the e-bus lease tenders due to delayed payments and insecurity in payments.

PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme:

The Union Cabinet in September 2024 approved the PM E-DRIVE scheme, which allocates funding for electric vehicles (EVs) across many segments, including INR 4,391 crore⁷⁷ for subsidies/demand incentives

⁷⁶ https://pib.gov.in/PressReleaselframePage.aspx?PRID=2043645

⁷⁷ https://theicct.org/facilitating-electric-bus-adoption-by-private-bus-operators-across-india-nov24/

that support procurement of 14,028 electric buses in nine cities over a period of two years (October 2024 – March 2026).

PM e-Bus Seva-Payment Security Mechanism (PSM):

The Government of India launched this scheme in October 2024 with a budget of INR 3,435.33 crore⁷⁸. This scheme will support a deployment of 38,000 E-buses in India. This scheme will support the deployment of electric buses from FY2025 till FY2029 and their operation for a period of up to 12 years from the date of deployment. The scheme includes a payment security mechanism to ensure timely payments to OEMs and bus operators. If a STU defaults on payments, CESL will cover the payments using the scheme funds.

All the above initiatives have resulted in CSEL launching several tenders over the past three-five years. The details of the tenders and their status are presented below:

- First tender (Grand challenge): 5,450 E-buses were tendered for in this tender. As of FY24, 1,489 E-buses have been deployed.
- Second tender (NEBP I): This tender was based on GCC model for 6,465 E-buses. As of FY24, only 405 E-buses have been deployed.
- Third tender (NEBP II): This tender was based on a dry lease model for 4,675 E-buses. This was later cancelled due to the poor participation of bidders.
- Fourth tender (PM e-Bus Seva 1): This was floated for the deployment of 3,835 E-buses through GCC model.
- Fifth tender (PM e-Bus Seva 2): This was floated for the deployment of 3,332 E-buses through GCC model.

Market Opportunity Analysis:

As on date more than 5,000 E-buses are operational in India in the public sector and with the impetus provided by the NEBP and PM E-Seva Schemes, the penetration of E-buses is expected to remain high over the next five years. This would drive the demand for Operation and Maintenance Services across the major cities in India. The E-buses Operation and Maintenance Services Market opportunity is valued at INR 16.66 billion in FY2025 and is expected to grow at a CAGR of 46.8% from FY2025 – FY2030 to reach INR 113.69 billion.

⁷⁸ https://heavyindustries.gov.in/pm-e-bus-sewa-payment-security-mechanism-psm-scheme

CAGR (FY2025 - FY2030P): 46.8% 61.3% 52.9% 43.5% 41.7% 36.0% 113.69 24.9% 80.26 55.91 11.6% 34.65 22.66 16.66 11.95 13.34 FY23 FY24 FY25 FY26P FY27P FY28P FY29P FY30P Revenue INR Bn ---Growth Rate P - Projections Source: Frost & Sullivan Analysis

Exhibit 2.51: E-buses Operation and Maintenance Services Market Opportunity: Forecast Revenue Trend, India, FY2023 – FY2030

Competitive Overview:

Subsidiaries of E-bus manufacturing companies such as Tata Motors's TML Smart City Mobility Solutions and Ashok Leyland's Switch Mobility are the major players in this market and their prime responsibility is to own, operate and recover payments from State Transport Authorities/ Undertakings. The winners of the first tender by CESL were Switch Mobility, JBM Group, Greencell Mobility, Intact Transport, Pinnacle Mobility, and PMI Electro (in consortium with Greencell Mobility and Intact Transport).

The market is also witnessing the entry of small companies such as Olectra Greentech for the supply for E-buses in India. Small companies that have been awarded contracts in the past are Olectra Greentech, JBM Group and Eka Mobility (Pinnacle Mobility). A few of the recent project wins include

- JBM Group has won a contract for 1,021 E-buses under the PM e-Bus Seva Scheme-2 initiative in February 2025. The contract is worth INR 5,500 crore⁷⁹. The buses would be deployed in the states of Gujarat, Maharashtra and Haryana.
- Chartered Speed, an India bus operator has won a contract from CSEL to procure, operate and maintain 900 E-buses across 13 cities in March 2025⁸⁰.

BVG, the leading Facility Management company has forayed into the E-buses Operation and Maintenance Services Market. BVG operates over 1,000 buses across five states—Karnataka, Maharashtra, Jammu & Kashmir, Delhi, and Gujarat—offering end-to-end maintenance services including vehicle upkeep, charging infrastructure, and safety of drivers and passengers. The company also provides specialised driver training

⁷⁹ https://www.sustainable-bus.com/electric-bus/jbm-order-india-1000-electric-buses/

⁸⁰ https://auto.economictimes.indiatimes.com/news/commercial-vehicle/chartered-speed-bags-contract-to-operate-over-900-e-buses-across-13-indian-cities/119205519

and real-time bus tracking for efficient operations. With its presence across key regions, BVG is focused on delivering reliable and sustainable transportation solutions.

Beach Development and Cleaning Services Market Analysis

Market Overview:

The potential demand for Beach Development and Cleaning Services in India is driven by the presence of a vast coastline in the country. The Indian coastline is spread across 11,098.81 kilometers across nine states and four union territories, including the islands in the Arabian Sea, Bay of Bengal and Indian Ocean. The coastal environment plays an important role in India's economy by virtue of the resources, and rich biodiversity. Andaman and Nicobar Islands has the longest coastline with 3,083.50 kilometers followed by Gujarat with 2,340.62 kilometers and Tamil Nadu with 1,068.69 kilometers.

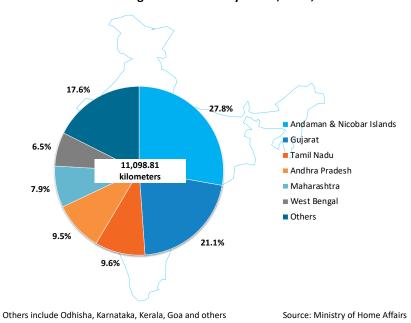


Exhibit 2.52: Length of Coastline by States, India, FY2025

The Indian coastline is also a key economic hub with substantial people involved in traditional fishing and allied businesses. India has 13 major seaports, 200 non-major ports⁸¹, around 30 major coastal cities and more than 200 beaches. In order to preserve this natural resource, the Ministry of Environment, Forests & Climate Change launched Integrated Coastal Zone Management (ICZM) project in India to protect and conserve the coastal and marine ecosystems and its environment through a holistic integrated coastal management. The ICZM project also aims to identify the infrastructure requirements and livelihood improvement means in coastal districts.

Beach Environment & Aesthetic Management Service (BEAMS) Programme:

The Beach Environment & Aesthetic Management Service (BEAMS) program was launched under the ICZM project in 2018 by Society of Integrated Coastal Management (SICOM). SICOM is the nodal agency for

⁸¹ https://www.data.gov.in/catalog/traffic-handled-state-wise-non-major-ports-india

strategic planning, management, execution, monitoring and implementation of ICZM project in the 13 coastal cities and union territories. BEAMS objectives are to

- Abate pollution in coastal waters
- Promote sustainable development of beach facilities
- Protect and conserve coastal ecosystems and natural resources
- Maintain high standards of cleanliness, hygiene and safety for beachgoers in accordance with coastal environment and regulations

Under this programme, basic facilities for beaches such as security and surveillance, changing rooms, toilets, water kiosk, solid waste management system, wastewater treatment plant, information centre, and information boards, etc. are being developed. The programme is also expected to create awareness on environmental education and importance of beaches.

Blue Flag Certification: BEAMS programme also promotes Blue Flag Certification for Indian beaches. Blue Flag is one of the world's most recognised certification for beaches, marinas and sustainable tourism boats, given by the Foundation for Environmental Education (FEE). The Blue Flag Certification means that the beach meets the highest level of environmental and safety standards. The certification process involves evaluation of every beach across 33 stringent criteria grouped under

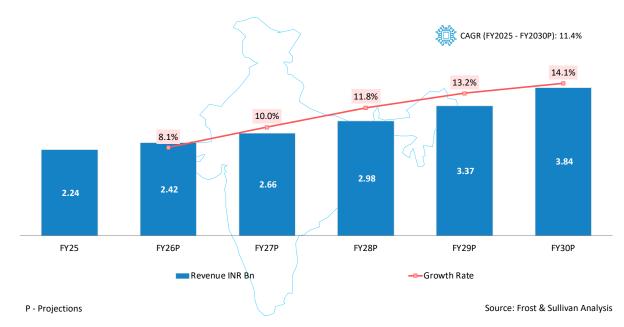
- Environmental educational and information
- Water quality
- Environmental management
- Safety

The nomination of Indian beaches for Blue Flag Certification is carried out by the respective states and union territories. As of CY2024, there are 12 Blue Flag Certified beaches in India. They are Minicoy Thundi Beach and Kadmat Beach in Lakshadweep, Shivrajpur in Gujarat, Ghoghla in Diu, Kasarkod and Padubidri in Karnataka, Kappad in Kerala, Rushikonda in Andhra Pradesh, Golden Beach in Odisha, Radhanagar Beach in Andaman and Nicobar Islands, Kovalam Beach in Tamil Nadu, and Eden Beach in Puducherry.

Market Opportunity Analysis:

SICOM awards the contracts for Beach Development and Cleaning Services in India. These turnkey projects involve the setting up of infrastructure facilities such as Toilet Blocks, Changing Rooms, Shower Panels, Drinking Water Facility, Seating Benches, Sit-out umbrellas, Watch Tower, Solid Waste Management Facility, Jogging Tracks, Outdoor Fitness Equipment, Off-grid Solar Power Plant, Street Lights, Beach Information Board, and Beach Map etc. Once the facilities are developed, they present the market opportunity for operation & maintenance.

Exhibit 2.53: Beach Development and Cleaning Services Market: Forecast Revenue Trend, India, FY2025 - FY2030



The Beach Development and Cleaning Services Market is valued as INR 2.24 billion in FY2025 and is expected to grow at a CAGR of 11.4% from FY2025 – FY2030 to reach INR 3.84 billion.

Government's initiatives through the BEAMS Programme are expected to remain a major growth driver for the demand of Beach Development and Cleaning Services in India. Tamil Nadu is expected to provide high growth opportunities in the long term with the State Government announcing an INR 24 crore⁸² initiative to develop beaches at Thiruvanmiyur, Palavakkam, & Uthandi in Chennai, Kulasekarapattinam (Tuticorin), Keezhputhupattu (Villupuram) and Samiyarpettai (Cuddalore). Detailed assessment on these beaches would be done to identify gaps as per the Blue Flag certification criteria. The state has already completed a comprehensive study to develop Marina, Silver Beach (Cuddalore), Rameswaram Beach (Nagapattinam) and Aryiyaman Beach (Ramanathapuram) as per the certification guidelines. Other states that are focussing on Beach Development and Cleaning Service Outsourcing are Odhisa, Andhra Pradesh, Goa, Gujarat, Kerala and Andaman and Nicobar Islands.

Competitive Overview:

Major companies in India providing Beach Development and Cleaning Services are BVG, Eureka Forbes and A2Z Infrastructure among others. BVG is one of the leading companies in this market and has been awarded the contract for Tannirbhavi Beach in Mangalore district and the company started services in 2022. Prior to this, two projects were awarded by SICOM - In July 2018, BVG was awarded the projects for cleaning Rushikonda Beach in Vishakhapatnam and Golden Beach in Puri, as part of BEAMS Progamme to achieve Blue Flag Certification. BVG carried out pollution abatement services and proper planning was undertaken for development of the beach. Infrastructure development of the beach was completed successfully by BVG in June 2019, post which the pollution abetment and safety services are been fully mobilised and are in the operational condition. Subsequently, BVG was awarded Radhanagar Beach in

 $^{^{82}}$ https://timesofindia.indiatimes.com/city/chennai/six-more-beaches-eye-blue-flag-tag-24-crore-initiative-announced/articleshow/119021231.cms

Andaman, for which the work was started in 2019. BVG is the front-runner in Beach Development and Cleaning Services Market and with its expertise and experience, it is ideally positioned to cater to cleaning services across wide range of beaches throughout India.

Sports Event Management Services Market Analysis

Market Overview and Outlook:

Sports are regarded as one of the largest industries globally in terms of employment and revenue. In developed countries, sports contribute to around 2% - 4% of the total employment. A diverse range of requirements such as athletes, coaches, trainers, event managers, coordinators of sports organisations, program and facility managers, sports event planners and managers, etc. are driving the demand for employment in the sports industry. The sports sector in India has witnessed a number of recent developments, which have contributed to its significant growth. Although cricket continues to be the leading sport in the country, other sports have also garnered sizeable interest over the past few years. Establishment of new leagues in Football & Hockey and the less recognised sports such as Kabaddi are changing the face of Indian Sports Industry with players getting a global stage to showcase their talent. Major Sports Events in India are:

- Indian Premier League: The Indian Premier League (IPL) is a men's Twenty20 (T20) cricket league that is held in India annually and represented by ten city-based franchise teams. The Board of Control for Cricket in India (BCCI) founded the IPL in 2008. The competition is usually held in summer every year and has an exclusive window in the International Cricket Council (ICC) Future Tours Programme due to fewer international cricket tours happening during IPL seasons worldwide. The IPL's brand value is valued at USD 12 billion in 2024, up from USD 2 billion in 2009⁸³. The IPL's franchises earned a combined revenue of INR 6,797 crore in FY24, up from INR 3,082 crore in FY23. The unprecedented success of IPL has led to the replication of this format in other sports such as Football and Kabbadi. BCCI introduced the women's version of IPL "Women's Premier League (WPL)" in 2023 and it was valued at INR 1,350 crore in 2024⁸⁴.
- Indian Super League: The Indian Super League (ISL) is the men's top division football league in India. It is the one among the two co-existing top tier football leagues in India along with I-League. The competition is contested by thirteen teams and is played in a span of seven months from September to March each year. It is organised by the All-India Football Federation (AIFF). Founded on 21st October 2013 in partnership with IMG, Reliance Industries, and Star Sports, the Indian Super League was launched with the goal of growing the sport of football in India and increase its exposure in the country.
- **Pro Kabaddi League:** Pro Kabaddi League is an Indian men's professional Kabaddi league. It was launched in 2014 and is broadcast on Star Sports. The creation of this league was influenced by the popularity of the Kabaddi tournament at the 2006 Asian Games.

⁸³ https://economictimes.indiatimes.com/news/sports/ipl-a-bigger-hit-revenues-surge/articleshow/116114612.cms?from=mdr

⁸⁴ https://www.moneycontrol.com/sports/wpl-trumps-ipl-value-of-womens-league-up-8-while-mens-league-sheds-10-article-12813876.html

India has witnessed massive growth of franchise-based sporting leagues. The "IPL-model" was replicated into other sports such as football, kabaddi, hockey, volleyball, and badminton among others and they have widened the scope of the Sport Events in the country. For a country that predominantly invested in Cricket, the private league formula has helped in improving an overall viewership count in other sports and has provided a new dimension for growth. Apart from this, government initiatives like Khelo India have also inspired many potential individuals to take up sports and contribute to the growth of the industry.

The overall Sports Industry Market is valued at INR 166.33 billion in CY2024 and this includes revenues from sponsorships, endorsements and media spending only. The market has witnessed a CAGR of 12.5% from CY2017 – CY2024. The rise in popularity of sports and the frequent hosting of large sporting events in India provide ample business opportunities for several stakeholders including Facility Management service providers.

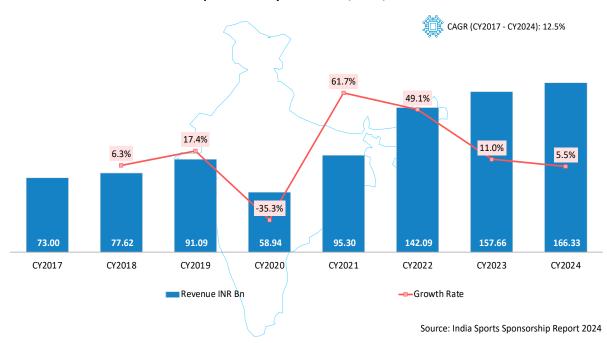


Exhibit 2.54: Sports Industry Market Size, India, CY2017 - CY2024

The Ministry of Youth Affairs and Sports is responsible for developing sports facilities and encouraging sporting talent in India. The Ministry is broadly responsible for creating infrastructure and capacity-building to enable international competitiveness. It has two departments: (i) the Department of Youth Affairs and (ii) the Department of Sports. The budget allocations are the key source of funds for the Department of Sports.

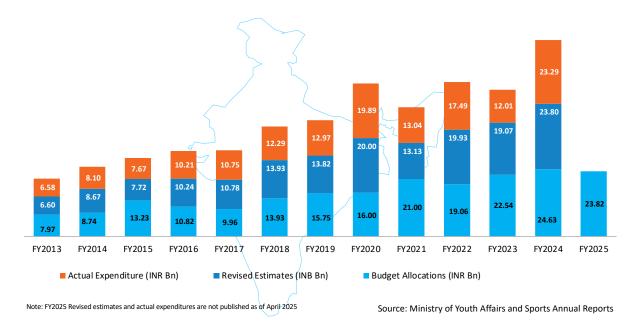


Exhibit 2.55: Historic Budget Allocations for Department of Sports, India, FY2013 - FY2025

Some of the prominent channels for spending the funds in India are Khelo India and the Sports Authority of India and these programmes under the Ministry have received the highest allocations, accounting for 72.7% of the budget in FY2025.

Khelo India: This is an umbrella scheme which aims to achieve the twin objective of broad basing of sports and achieving excellence in sports, which in turn will infuse sports culture in the country, thus allowing the population to derive benefits that sports offers through its cross-cutting influence, namely, holistic development of children and youth, community development, gender equity, national integration and nation building, healthy lifestyle, national pride and economic opportunities related to sports development. Khelo India programme aims to identify and nurture sporting talent, encourage mass participation of youth in annual sports competitions and to create of sports infrastructure.

To achieve the objectives of the scheme, it is divided into twelve verticals such as

- State Level Khelo India Centers
- Annual Sports Competition
- Talent Search and Development
- Utilisation and Creation/ Upgradation of Sports
- Support to National/ Regional/ State Sports Academics
- Physical Fitness for School Children
- Sports for Women
- Promotion of Sports Amongst People with Disabilities
- Sports for Peace and Development
- Promotion of Rural and Indigenous/ Tribal Games

Khelo India Youth Games, Khelo India University Games and Khelo India Winter Games are the top events under this programme. Khelo India Youth Games is an annual national level multidisciplinary grassroot games event. It is held in January or February for two categories, under-17 years school students and under-21 years college students. Every year, best 1,000 people are given an annual scholarship of INR 5 lakh for eight years to prepare them for the international sporting events. Khelo India University Games is another national level multi-sport event, where athletes from universities across the country compete in different sports disciplines. The Khelo India University Games are intended to identify and train capable athletes in the age group of 18 to 25 years for the Olympics and the Asian Games. Khelo India Winter Games are the national level multidisciplinary grassroot winter games of India. Events include skiing, alpine skiing, nordic skiing, snow rugby, ice stock sport, snow baseball, mountaineering, snowshoe running, ice hockey, figure skating and speed skating.

Sports Authority of India (SAI): Government of India established the Sports Authority of India in 1984 with the objectives of spotting and nurturing talented children in different age groups for achieving excellence by providing them with requisite infrastructure and equipment support, coaching and other facilities. SAI is also responsible for maintaining and utilising stadiums, which were constructed/renovated during the IX Asian Games in Delhi.

Exhibit 2.56: Budget Allocations for Various Schemes/ Activities, India, FY2024 - FY2026

Particulars	FY2024, INR Bn		FY2025, INR Bn		FY2026, INR Bn
	Budget	Revised	Budget	Revised	Budget
Rashtriya Yuva Sashaktikaran	0.71	0.81	0.82	0.63	1.55
Karyakaram					
Khelo India	6.42	6.30	6.04	5.04	6.45
Nehru Yuva Kendra Sangathan	4.01	4.02	4.26	4.12	4.24
Sports Authority of India	7.11	7.21	7.53	7.45	7.59
Assistance to National Sports	2.07	2.07	2.18	2.18	2.49
Federation					
Total	20.31	20.41	20.82	19.42	22.31

Source: Ministry of Youth Affairs and Sports⁸⁵

Market Opportunity Analysis:

The emergence of several professional sports leagues such as the IPL and ISL has helped grow the popularity of several sports in India. Government initiatives such as the Khelo India are also significantly contributing to the growth in number of sports events in India. This has led to the growth of services industry revolving around sports, particularly services such as Facility Management and Catering.

⁸⁵ https://yas.gov.in/sites/default/files/DDG%202025-26_Demand%20NO.102.pdf, https://yas.gov.in/sites/default/files/DDG%202024-25%20%28Regular%20Bud.%29.pdf

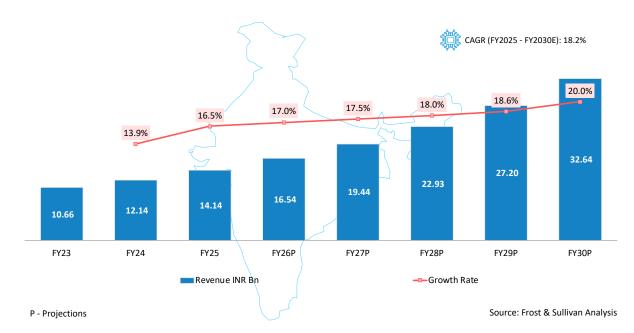


Exhibit 2.57: Sports Event Management Services Market: Forecast Revenue Trend, India, FY2023 - FY2030

Event Management companies or Facility Management companies are usually given the contract for the supervision of overall sporting event and end-to-end coordination of the following functional areas – accommodation, catering and transport, collectively called ACT with respect to the participants taking travel plans of various stakeholders, room allotment, creation of counters at railway station & airport, vehicle management etc. State governments will take care of the arrangements for hotel accommodation, vehicles & catering for players, technical officials & volunteers, and other dignitaries. SAI is the major stakeholder providing these contracts for the government sporting events.

Competition Overview:

Event Management and Facility Management companies are the major stakeholders providing Facility Management Services to the Sports Industry in India. BVG won the KIYG 2019 contract outbidding other leading players in the process. It won the bid despite participating for the first time, as its strength lies in managing transport services, accommodations and catering. It managed accommodation for 3,000 people per day and provided 300 vehicles per day. It also provided catering to over 8,000 people with 3 meals per day (breakfast, lunch and dinner). Apart from the KIYG contract, BVG also won the contract for providing services to Wankhede Stadium before IPL matches. At Wankhede, BVG manages cleaning of stands and public areas, pest control, glass and façade maintenance, toilet upkeep, waste management, and VIP zone services with a team of 200-250 personnel on match days.

Factory Relocation Services Market Analysis

Market Overview and Outlook:

Factory shifting is considered to be amongst the toughest and one of the most complicated types of shifting. Factory Relocation includes shifting of several things that are connected to it, and includes plant relocation, re-installation of machinery, raw material shifting, manpower relocation, by-product shifting,

and manufactured goods shifting. This is a time-consuming process that requires extensive knowledge and expertise, as the service should guarantee damage-free transportation of official objects throughout the transfer time.

The traditional approach to Factory Relocation in the past was a "lift and shift" approach but with the entry of professional service providers the mindset towards relocation has shifted; today the major service providers work with their clients to avoid disturbance and provide technical support such as mechanical installation, installation of supplementary equipment, fabrication and installation of floor plates, walkways and access platforms.

Safety is accorded the highest priority for all factory and plant relocation projects. The industry has developed certain standardised approach to minimise the risks involved in moving or installing large equipment; for example, service providers carry out thorough health and safety planning and audits which include Risk Assessment, Method Statement, Job Safety Plans, Process Validation, Weekly & Monthly Reporting, Inspection Tags & Pre-task Analysis, Internal Audits, Safety Awareness Training, Daily Safety Walks & Talks.

Technology is playing a major role in the defining the service delivery today. Major technology trends defining the Factory Relocation Services Market in India are:

- Moving Mobile Applications: The increasing penetration of smart phones in India has made
 movers and packers to leverage mobile applications, that provide an easy and hassle-free
 experience to clients. Mobile applications also provide flexible options for customers to book their
 services immediately, schedule them later and modify or cancel their bookings. This technology
 adoption has made it easier for clients to contact the service provider.
- <u>Artificial Intelligence:</u> Al based chatbots are used to provide active customer interaction and respond instantly to text or voice messages. Customers do not need to spend hours on a phone call for any queries or assistance. They will get quick and personalised customer support with the help of chatbots. This technology is proving to be a boon for the Factory Relocation Market in terms of operation, cost reduction and lesser requirement for physical manpower.
- <u>Digital Payments:</u> The incorporation of digital payment methods is another way technology has
 helped in the upliftment of Relocation businesses in India. Cash is not the primary method of
 transaction anymore. Nowadays, people are more comfortable in net banking or online transfers.
 This offers a seamless and secure payment experience to customers. Trusted and the best
 companies include payment gateways with QR scans, internet banking, card transfers, and more.

Market Size and Forecasts:

The Factory Relocation Services Market was valued at INR 5.75 billion in FY2025 and is expected to grow at a CAGR of 10.8% from FY2025 – FY2030 to reach INR 9.58 billion. Major factors expected to drive the demand are increasing shift towards relocating factories to special economic zones and industrial corridors. Growth of manufacturing industry is an added boon to the demand of these services. The concept of industrial relocation is nascent in the country and is expected to grow significantly in the forecast period, driven by companies looking to optimize production costs, enter new markets, or comply with regulatory mandates.

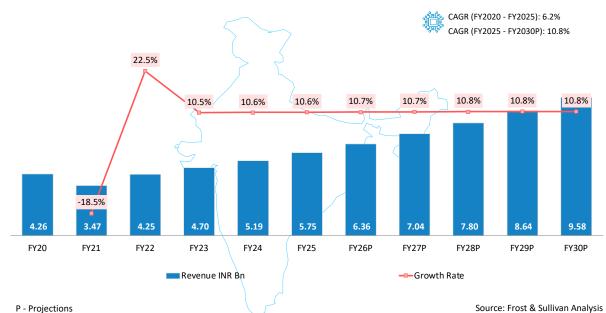


Exhibit 2.58: Factory Relocation Services Market: Historic and Forecast Revenue Trend, India, FY2020 - FY2030

Market Drivers and Restraints:

Exhibit 2.59: Factory Relocation Services Market: Drivers and Impact, India, FY2026 - FY2030

Market Drivers	Impact				
	1-2 Years	3-4 Years	5-7 Years		
Evolving Consumer Needs	High	High	High		
Preference Towards Special Economic Zones	High	High	High		
Creation of Industrial Corridors	High	High	High		

Source: Frost & Sullivan Analysis

Evolving Consumer Needs: The evolving need of consumers with respect to industrial packing and moving service has boded well for the players in the segment. Industrial consumers demand bespoke relocation solutions wherein the machinery is packed and handled by experts to avoid damage. Earlier there weren't any set guidelines for industrial relocation and more often the machinery and equipment were damaged. The service providers have addressed this issue by developing best practices in systems and processes to provide secure services which have resulted in increase in revenues.

Preference towards Special Economic Zones: Special Economic Zones are a key element expected to fuel India's economic expansion. Special Economic Zones are regions that have been geographically designated to encourage investments, export-oriented industry, and to make doing business easier. Businesses in these regions benefit from unique regulatory and financial advantages, including tax exemptions, duty-free exports, and investments in infrastructure, among others. The Indian government is shifting its attention to domestic markets and manufacturing with the passage of the Development Enterprise and Services Hub (DESH) Bill 2022 and by upgrading the Special Economic Zones to become World Trade Organisation (WTO) compliant. By incorporating several economic zone types, such as special economic

zones, coastal economic zones, and food and agriculture economic zones, the law is anticipated to bring about a paradigm change. Advantages provided by Special Economic Zones, such as the 100% income tax exemption on export income offered to SEZ units under Section 10AA of the Income Tax Act for first five years, 50% for the next five years afterwards and 50% of the ploughed back export profit for the next five years, have encouraged industries to move to such zones from their existing locations. This will lead to increased demand for Factory Relocation Services in the long-term.

Creation of Industrial Corridors: One of the key on-going initiatives driven by the government is the creation of Industrial Corridors. Government of India is developing eleven Industrial Corridor Projects as part of the National Industrial Corridor Programme in a phased manner. Companies would look to leverage the most of this development by shifting to Industrial Corridors for ease of management and to enjoy the benefits it offers. Industrial shifting and relocation services to such corridors will be in demand in the near future. The major projects are:

- Delhi Mumbai Industrial Corridor
- Chennai Bengaluru Industrial Corridor
- Amritsar Kolkata Industrial Corridor
- East Coast Industrial Corridor with Vizag Chennai Industrial Corridor
- Bengaluru Mumbai Industrial Corridor
- Extension of CBIC to Kochi via Coimbatore
- Hyderabad Nagpur Industrial Corridor
- Hyderabad Warangal Industrial Corridor
- Hyderabad Bengaluru Industrial Corridor
- Odisha Economic Corridor
- Delhi Nagpur Industrial Corridor

The Cabinet Committee on Economic Affairs recently approved 12 new project proposals under the National Industrial Corridor Development Programme, with an estimated investment of INR 28,602 crore⁸⁶, in the second half of 2024. The initiative aims to create a strong network of industrial nodes and cities, to drive economic growth and enhance the country's global competitiveness. These 12 industrial areas are strategically located across 10 states and planned along six major corridors.

Exhibit 2.60: Factory Relocation Services Market: Restraints & Challenges and Impact, India, FY2026 - FY2030

Market Restraints and Challenges	Impact			
	1-2 Years	3-4 Years	5-7 Years	
Rising Operating Costs	Medium	Medium	Medium	

Source: Frost & Sullivan Analysis

Rising Operating Cost: Increase in fuel prices, vehicle management and cost of staffs have minimised the profits and this is a major concern. Smaller companies find it difficult to compete in the market and stick to inter-city transfers.

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⁸⁶ https://pib.gov.in/PressReleasePage.aspx?PRID=2050136

Competitive Landscape and Major Players:

The Factory Relocation Services Market is fragmented and has the presence of Tier 1 players with pan-India coverage of their services and MNCs, Tier 2 players who focus on a particular region and the Tier 3 players that function within a city or have only one or two clients. MNCs such as Interem, Beck & Pollitzer etc. and pan India service providers like Aggarwal Movers are the key players in the market.

Tier 1
Companies
having pan
India presence,
providing comprehensive
services and a large workforce
in-house. (5 companies)

Tier 2

Companies are the mix of domestic OEMs
and some prominent 3rd party service
providers having presence in two or more
segments and cater to specific geographic area
of focus
(15 companies)

Tier 3

Companies are the ones that are specialized in single services who operate on a smallscale with few employees and cater mainly to one or two clients
(>100 companies)

Exhibit 2.61: Factory Relocation Services Market: Competitive Structure, India, FY2025

Source: Frost & Sullivan Analysis

CHAPTER 3: ENVIRONMENT AND SUSTAINABILITY MARKET ANALYSIS

Waste Management Services Market in India

Market Definitions:

Waste Management Services Market includes four segments as listed below:

- Municipal Solid Waste Management Services
- Waste Processing Services such as Bio-mining, Composting and Waste-to-Energy
- Hazardous Waste Management Services
- Water Waste Management Services

Municipal Solid Waste Management Services:

This refers to the door-to-door collection of domestic waste, treatment and transporting the waste to the landfills. This is primarily referred to as collection and transportation, waste treatment and disposal of waste. Excludes market for recycling and reuse of plastic, glass etc. as well as waste to energy market.

Municipal Solid Waste (MSW), commonly known as garbage or trash is a waste from everyday items that is discarded by us. Our daily activities give rise to a variety of solid wastes of different physicochemical characteristics, which harm the surroundings unless properly managed and processed. Urbanisation is a critical factor driving the municipal solid waste generation in the country. Changing lifestyle patterns, increasing disposable incomes, have paved way for consumerism, and have also contributed to waste generation in urban India. Municipal solid waste generation is expected to grow at a CAGR of 5.5% from FY2025 to FY2030 to reach 92.27 million metric tonnes per annum.

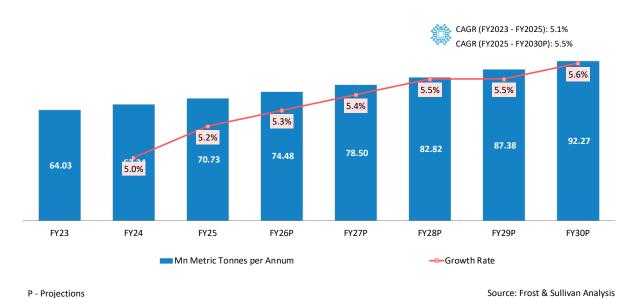


Exhibit 3.1: Municipal Solid Waste Generation Volume, India, FY2023 - FY2030

Different services provided under municipal solid waste management contracts include collection and transportation of waste, processing or waste treatment and disposal.

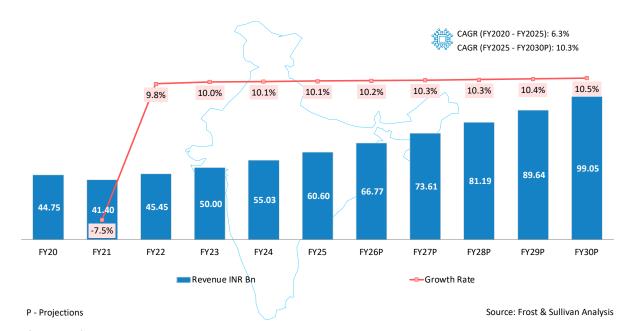
- As per the latest government data by CPCB, in FY2021, solid waste generated in the country stood at ~160,000 tons per day and of this, 152,749 TPD was collected (i.e., 95.4%). Of the collected waste, 79,956 TPD was treated (~50% of the total waste generation). The rest of the waste was either landfilled or unaccounted for.
- Currently the Indian market is tilted towards waste collection and transportation only. Use of
 digital platforms such as websites and mobile apps for on-demand waste collection is becoming
 increasingly common. Also, use of IoT in a few projects in India has been successful the penetration
 of technology is expected to increase during the forecast period.
- Waste processing / treatment is moderate currently and has higher potential for growth in the
 coming years. Waste Management Rules 2016 have given due importance to waste processing
 and treatment segment by mandating bulk waste generators to ensure their waste is processed at
 a common treatment facility located within a 75,000-kilometre range. Draft Waste Management
 Rules 2024 and several other initiatives are expected to facilitate the growth of this segment in
 India, which is currently at a developmental stage.
- Waste collected that does not undergo any treatment, rejects from compost, RDF and waste-toenergy plants are disposed in landfills. Few municipalities have adopted scientific landfills along
 with closure and post-closure maintenance of landfills. Majority of the municipal corporations are
 yet to adopt scientific landfills for waste disposal. Hence, this segment holds significant
 opportunity for growth in coming years.

There is a growing focus towards waste treatment and recycling in the recent years. Recycling of solid waste, particularly the plastic waste is gaining popularity in India and this segment is expected to witness higher demand in the long-term.

Market Size and Forecasts:

The Municipal Waste Management Services Market is valued at INR 60.60 billion in FY2025 and is expected to grow at a CAGR of 10.3% from FY2025 to FY2030 to reach INR 99.05 billion. There are tremendous opportunities lying in waste management services driven by increasing government budgets for waste management, sustainability initiatives by corporates, and growing awareness towards sustainable waste management methods are expected to be the major growth enablers. The Government of India is expected to spend more on the maintenance of public infrastructure, such as municipal parks and government-run schools, increasing impetus provided to cleanliness in these facilities in the form of government initiatives such as 'Swachh Bharat Abhiyan'. This is driving the need to outsource these services to professional organisations.

Exhibit 3.2: Municipal Waste Management Services Market: Historic and Forecast Revenue Trend, India, FY2020 – FY2030



Market Trends:

- <u>Smart Waste Management:</u> Smart technologies are playing a crucial role in today's waste management methods. For an efficient waste management system, focus on efficiency, economy, and traceability is critical. Knowing this, municipal corporations have started to deploy radio frequency identification (RFID) and Global Positioning Systems (GPS) technology in waste collection and transportation. These system enables real time visualisation of waste collection and transportation through a colour coding system. Mumbai, Navi Mumbai, and Ahmedabad city corporations have installed RFID readers and tags in waste bins and waste collection trucks. Such implementation of smart technologies in waste collection and transportation is also shifting the competition from logistic companies to professional waste management service providers, driving the opportunities for organised sector.
- <u>Smart Sorting and Separation of Waste:</u> IoT is a new generation technology which is adopted to automate the process of waste sorting and separation. These devices send signals through sensors and interact with the web-based system informing the waste segregators that process is completed. This increases efficiency in the long run.
- <u>Digital Technology Platforms for Waste Pickup and Trading:</u> Start-up companies in India are using digital technology platforms for waste pickup. Digital platforms provide hassle-free booking of waste collection and recycling services. Start-up companies, such as Banyan Nation, Waste

Ventures, and Pom Pom, are utilising smart and innovative digital technology platforms and systems like mobile apps and online websites for hassle-free, efficient waste collection bookings and recycling services. Additionally, such platforms are promoting source segregation as customers who segregate their waste into different types of recyclables are paid higher prices than customers who dispose mixed waste.

- Decentralised Waste Management: The Decentralised Solid Waste Management (DSWM) is widely adopted in recent years as it provides a clean environment and hygienic living condition by reducing the quantity of waste at source. Small waste management centres, known as Integrated Resource Recovery Centres (IRRC) are engaged in collecting, transporting and processing around 2 to 20 metric tons of waste from the locality. This is a sustainable and financially viable system that also helps to improve the quality of life and working conditions of the waste pickers. Many bulk waste generators such as large industries, hotels, IT companies and some forward-looking municipal corporations have adopted various decentralised waste management solutions as a part of their overall waste management strategies. This approach reduces the need for transporting solid waste to long distances, finding new disposal sites, and thereby avoids heavy expenditure.
- <u>Circular Economy Models:</u> The adoption of digital tools in waste collection is enabling source segregation, which in turn is driving the demand for recycling infrastructure and circular economy models.

Market Drivers and Restraints:

Exhibit 3.3: Market Drivers and Impact, India, FY2026 - FY2030

Market Drivers	1-2 Years	Impact 3-4 Years	5-7 Years
Government Schemes/ Budget Allocations	High	High	High
Government Regulations	High	High	High
Sustainability & Circular Economy Targets/ Initiatives	High	High	High
Environmental and Social Awareness	Medium	Medium	Medium

Source: Frost & Sullivan Analysis

Government Schemes/ Budget Allocations: Many developmental schemes to improve the standards of waste management in India have been announced in the past. The most prominent of them are the AMRUT Scheme, Swachh Bharat Mission, and Smart City Mission. Budget allocations through these programmes are the key driving factors for the development of waste management infrastructure in India. These programmes have also increased the private sector participation in projects in the Waste Management sector. Government's commitment to achieve net-zero by 2070 is another key factor expected to drive the demand for waste management services in the long-term. The budget allocations

under Swachh Bharat Mission – Urban 2.0 for 2021 – 2026 has been INR 101.683 billion and around INR 785.97 crore have been utilized up to February 2023⁸⁷.

Government Regulations – Draft Solid Waste Management Rules 2024: The Ministry of Environment, Forest, and Climate Change (MoEFCC) has released the Draft Solid Waste Management Rules 2024, aiming to revolutionise the municipal solid waste management infrastructure across India. These new rules are expected to be implemented from October 2025. The draft rules seek to integrate circular economy principles, strengthening monitoring and enforcement, enhance stakeholder engagement, and optimize waste management practices throughout the country. The new regulations are expected to accelerate the creation of the waste treatment infrastructure over the next five years, thereby creating opportunities for service providers.

Sustainability & Circular Economy Targets/Initiatives: Large corporations across industries in India have set sustainability targets/ waste reduction and recycling targets, as part of their ESG/circular economy campaign and this is also enabling the growth of the Waste Management Services market in India.

Environmental and Social Awareness: Environmental and social awareness about effective waste management has increased over the years. Municipal corporations have initiated programs to create awareness among households. Durg and Raipur Municipal corporations have included Information Education and Communication activities as part of the scope of services outsourced to private companies for municipal solid waste management. Such Information Education and Communication programs by municipalities and special campaigns conducted by non-governmental organisations and social activists are anticipated to create more awareness about the effects of improper waste disposal. Citizens are increasingly involving themselves in waste segregation and recycling programs, along with the need for innovative waste management services

Exhibit 3.4: Market Restraints and Impact, India, FY2026 – FY2030

Market Restraints	Impact			
	1-2 Years	3-4 Years	5-7 Years	
Limited Infrastructure	High	High	High	
Influence of the Unorganised Segment	High	High	High	

Source: Frost & Sullivan Analysis

Limited Infrastructure: Currently, India is facing numerous challenges across every stage of the solid waste management value chain. Challenges faced at generation, collection, and transportation are relatively manageable as compared to the ones faced at treatment and disposal. The most pressing need is at the downstream value chain which refers to the scientific treatment and safe disposal of solid waste; including the one present in existing old dump yards (legacy waste). The emphasis on waste treatment in the past decade have resulted in the development of waste treatment plants across technologies; yet, there is a need for substantial investment in waste infrastructure to increase waste treatment levels in India.

 $^{^{87}\} https://www.data.gov.in/resource/phase-wise-details-budget-allocated-and-spent-utilized-under-solid-waste-management-swm$

Influence of the Unorganised Segment: A large proportion of the recyclable waste are collected by the informal sector, which limits the waste available for processing at formally establishment waste treatment plants. This results in revenue loss and inefficiencies for stakeholders.

Industry Risks and Challenges:

Exhibit 3.5: Industry Risks and Challenges, India, FY2026 – FY2030

Industry Risks and Challenges	Description	Impact on Growth FY2025 – FY2030
Issues in Household (Source) Segregation of Waste	 Most common households and establishments discard their waste in mixed form without any source segregation into biodegradable waste, and recyclables such as paper, plastics, glass, metals etc. 	High
Poor Secondary Storage of Waste	 Waste depositing sites are not evenly distributed in cities and towns. These sites are often very poorly designed and are not synchronised with the primary collection system. Waste depots are not emptied on a regular basis. 	High
Limited Use of Technology	 Many of the waste management processes are manual and semi-automated, with low levels of technology adoption. High cost of latest and advanced technologies and low awareness of it prevent the fast adoption of technology in waste management 	Medium - High
Delayed Payments and Cash Flow Issues	 There are often delays in payments from ULBs and municipal corporations, which result in process inefficiencies and limits scalability. 	Medium

Source: Frost & Sullivan Analysis

Competitive Landscape and Major Players:

There are about 80 -100 companies in the Municipal Waste Management Services Market across the value chain in India. Several stakeholders, including facility management companies are capitalising on the opportunity and are considering including waste management as one of the top service offerings. Many infrastructure and environmental services companies are present in this market. Logistics companies are also present in this market providing only transportation and fleet management services. The market is dominated by local companies but also has the presence of several MNCs. International companies operate through partnership models.

Exhibit 3.6: Municipal Waste Management Services Market: Competitive Structure, India, FY2025

Attribute	Municipal Waste Management Services Market
Number of Companies	• 80 - 100
Major Companies	 A2Z Infra Engineering Limited Antony Waste Handling Cell Limited BVG Re Sustainability Limited (formerly known as Ramky Enviro Engineers Limited) SPML Infra Urban Enviro Waste Management Limited
Types of Stakeholders	 Logistics Companies Waste Management Companies Infrastructural Companies Facility Management Companies Technology Developers
Tiers of Competition	 National Environment Solutions Focused Companies MNC with Focus on Waste Management Start-ups
Key End User Groups	 Municipalities Fertiliser Companies Cement Companies Power Plants Road Construction Companies
Key Competitive Factors	 Local presence facilitates ease in operations, better situation handling, and smooth interaction with the local bodies. Experience in managing large infrastructure projects in water, power, and other environmental sectors. Project management and execution capabilities as MSWM service provider involves collection and transportation, treatment and disposal, and recycling. Financial capability for high capital investment such as heavy equipment and machinery.

Source: Frost & Sullivan Analysis

Organised sector companies offer a wide range of services including collection and transportation, treatment and disposal and integrated waste management services. Waste pickers, traders and junk dealers form the unorganised sector and are engaged in collection of recyclables such as paper, plastic, glass etc. and sell them to the recycling industry. A2Z Infra Engineering, Anthony Waste, BVG, Re Sustainability and SPML Infra are the top companies. Other notable players are Urban Enviro Waste Management, Rollz India Waste Management, among others. BVG is one of the key players in this market and offers end-to-end environment and sustainability solutions with extensive capabilities in agriculture, horticulture, garden development and farm management and it manages 3,000 tons of waste every day as of 31 March 2025. Some of the major clients served by BVG in solid waste management include Pimpri-

Chinchwad Municipal Corporation (PCMC), Prayagraj Municipal Corporation, Nagpur Municipal Corporation and Goa Waste Management Corporation.

Waste Processing Services:

Bio-mining:

Bio-mining is a technique of segregating already-accumulated urban legacy waste; the loosened layers of legacy waste are sprayed with composting bio cultures and them formed into conventional aerobic windrows on the site. The waste in then sterilised, and readied for segregation using machinery as organic and inorganic substances to be later sent for recycling, re-using or composting. The segregated waste is being consumed by several stakeholders such as cement companies, road construction companies, and furnace companies for usage in their production process. Bio-mining technique is getting popular across India, especially after its success in Tamil Nadu. Today, several municipal corporations are adopting Biomining to manage their legacy waste in dump yards, for example, Delhi, Mumbai, Kollam, Kolkata, Chennai, Thoothukudi, Villupuram, Ahmedabad, Trichy, etc. A few examples of the recent Bio-mining projects in India are:

- Okhla Bio-mining Project, Delhi: In December 2024, Municipal Corporation of Delhi sanctioned the second phase of the bio-mining project in Oklha. The legacy waste at this site is 2 million metric tonnes⁸⁸.
- Bhalswa Landfill Bio-mining Project, Delhi: The phase 1 of the project processed 4.5 million metric tonnes of legacy waste through bio-mining and was completed in August 2024 and the full landfill is expected to be levelled by March 2026⁸⁹.

Driven by the success of these Bio-mining projects, several other municipal corporations are expected to adopt Bio-mining process to tackle their legacy waste, thereby driving the opportunities across Metros, Tier 1 and Tier cities. For example, the Berhampur Municipal Corporation has recently called for request for proposals for bio-mining of legacy waste at Chandania Hill dumpsite (in October 2024⁹⁰). Such project announcements are expected to attract more investments in the segment and make it lucrative for organised companies to enter this market.

Composting:

Composting involves the breakdown of organic waste by microorganisms in the presence of air, heat and moisture. This can be carried out on a small scale in households or on a large scale depending upon the quantity of waste to be processed and space available. Bacteria, fungi and actinomycetes act upon the waste to convert it into sugars, starch, and organic acids which in turn, are acted upon by high-temperature loving bacteria, resulting in a stable product called Compost. This compost is used as an organic fertiliser in agriculture.

⁸⁸ https://timesofindia.indiatimes.com/city/delhi/mcd-set-to-launch-phase-2-of-biomining-at-okhla-landfill-in-january-2024/articleshow/115941327.cms?utm_source=chatgpt.com

⁸⁹ https://timesofindia.indiatimes.com/city/delhi/54000-trees-to-come-up-on-reclaimed-part-of-landfill/articleshow/118716398.cms

⁹⁰ https://www.berhampur.gov.in/wp-content/uploads/2024/10/Biomining_BeMC_04.10.2024.pdf

Different types of organic waste such as farmyard/agricultural waste, livestock waste, organic matter from municipal solid waste can all be converted into compost using several technologies such as Windrow Composting, Aerated Static Pile Composting, In-vessel Composting, Vermi Composting and others.

Compost produced from MSW is called City Compost and the government has launched several initiatives such as the Swachh Bharat Mission and Policy on Promotion of City Compost by Ministry of Chemicals and Fertilisers for the development of City Compost Market. Growing preference for organic farming, deteriorating soil conditions, and increasing demand for agricultural products favor the demand for City Compost. Subsidies from government in the form of market development assistance to fertiliser companies in India to sell City Compost is also complementing the market development. Private sector also plays a crucial role in the demand for Composting Technologies and Services. Bulk waste generators are mandated to compost their organic waste in-house and this has contributed to the market growth.

The organic content in MSW is estimated to be between 40 - 50% and this results in a large volume of waste available for composting. Given the low penetration of Composting Technologies, India has immense potential for Composting Technologies and Services in the long-term.

Waste-to-Energy:

Waste-to-Energy is the process of converting solid waste into heat and electricity, thereby providing renewable energy. Waste-to-Energy is considered to be one of the potential technologies to process waste and reduce reliance on landfills in India. India has around 53 operational Waste-to-Energy plants with an installed capacity of 22,360 tonnes per day as per the SBM-U mission progress dashboard⁹¹. India has a potential to generate around 1,600 MW from urban solid waste and urban liquid waste as per the Ministry of New and Renewable Energy.

There are several Waste-to-Energy technologies available globally and the most prominent ones are Thermal, Chemical, Biological and Mechanical Waste-to-Energy Technologies. Thermal technologies include incineration, chemical technologies include pyrolysis and gasification, biological technologies include anaerobic digestion and fermentation and mechanical technologies include RDF. Thermal technologies are expected to dominate the Indian market due to its relatively easier process and lower capital expenditure, as it eliminates the need for waste pre-treatment.

Plastic waste, another major environmental concern, can be treated using pyrolysis technology to produce pyrolytic oil, which has several applications such as combustion in boilers, feedstock for chemicals, commercial industrial fuel and transportation fuels. The penetration of pyrolysis technology for plastic waste-to-value is limited currently, but has huge market potential. Plastic waste is also recycled using mechanical technologies to produce new plastic products and this is another niche market opportunity in India.

While several initiatives have been implemented in the past, the most recent one is - The Ministry of New and Renewable Energy's National Bioenergy Programme, Phase 1 for a period 01.04.2021 to 31.03.2026 with an outlay of INR 858 crore. Under the programme, there are three sub-schemes such as Waste to energy programme, Biomass programme and Biogas programme. Through the Waste to energy

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⁹¹ https://sbmurban.org/swachh-bharat-mission-progess#

programme, Central Financial Assistance shall be made available to projects for setting up of large Biogas, BioCNG and Power plants (excluding MSW to Power projects). Financial assistance is being provided under the programme as follows:

- Biogas generation: INR 0.25 Crore per 12,000 cubic meters/day
- BioCNG generation: upto INR 4.0 Crore per 4,800 kilograms/day
- Power generation based on Biogas: Upto INR 0.75 Crore/MW
- Power based on bio & agro-industrial waste (other than MSW): INR 0.4 Crore/MW
- Biomass Gasifier: Upto INR 15,000 per kWe
- Key investments include
 - Deonar Waste-to-Energy Plant, Maharashtra: The plant is under development with a capacity of 20 MW biopower, expected to be commissioned by October 2025. The plant is being developed by Chennai MSW Private Ltd⁹².
 - Pyaranagar Waste-to-Energy Plant, Telangana: This is a15 MW biopower project expected to be operational by 2025. The estimated project cost is INR 600 crore⁹³.

Over the long term, increasing waste generation and favorable government policies are expected to drive the market opportunities for Waste-to-Energy.

Hazardous Waste Management Services:

Hazardous Waste Management Services refers to Bio-medical Waste Management only. Bio-medical Waste refers to any waste generated during diagnosis, treatment or immunisation of human beings or animals. Management of Bio-medical Waste is an integral part of infection control and hygiene programs in healthcare environment. Bio-medical Waste can be categorised based on the risk of causing injury and/or infection during handling and disposal. Hazardous Bio-medical Waste include sharp needles or scalpel blades, pathological wastes (anatomical body parts, microbiology cultures and blood samples) and infectious wastes (items contaminated with body fluids and discharges such as dressing, catheters and I.V. lines). Other wastes generated in healthcare facilities include radioactive wastes, mercury containing instruments and polyvinyl chloride plastics. Bio-medical Waste is generated primarily from health care establishments, including hospitals, nursing homes, veterinary hospitals, clinics and general practitioners, dispensaries, quarantine centres/ camps, sample collection centres, blood banks, animal houses and research institutions.

Growing population, increasing access to healthcare and recent pandemic such as the COVID-19 are contributing to the growth of the Bio-medical Waste and creating market opportunities for Bio-medical Waste Management Services in India. About 15-20% of the waste generated in healthcare and associated facilities are classified as hazardous and requires appropriate collection, treatment and disposal. Depending on the type of Bio-medical Waste, the treatment and disposal can be done in-house or in common bio-medical waste treatment facilities. The most common form of treatment and disposal in India is common treatment facilities, which are being developed, operated and maintained by private

⁹² https://www.power-technology.com/data-insights/power-plant-profile-deonar-waste-to-energy-plant-india/?cf-view

⁹³ https://www.bioenergy-news.com/news/hyderabad-turns-to-waste-to-energy-solutions/

sector companies. There are around 215 common bio-medical waste treatment facilities operational in India and 35 under installation at the end of FY2023 as per the FY2023 annual report from Central Pollution Control Board⁹⁴.

This market is highly regulated in India and government compliance is a key growth enabler for the demand for these services. Biomedical Waste Management Rules 2016 and Guidelines for Handling, Treatment and Disposal of Waste generated during treatment, diagnostics and quarantine of COVID-19 patients in March 2020 are the major regulations driving the demand for Bio-medical Waste Management Services in India. There is also a growing awareness on Bio-medical Waste and its safe disposal, which is also propelling the market growth. Increase in hospital capacity in India and lifestyle changes such as regular health checkups are expected to create demand for additional Bio-medical Waste treatment capacity and waste management services in the long-term, thereby creating business opportunities for service providers.

Water Waste Management Services:

This refers to services such as lake cleaning, water reclamation, water body rehabilitation etc. and the market does not include sewage treatment. Surface water cleaning is the most prominent services provided in this space. Growing drinking water crisis, deteriorating water sources and government initiatives to restore water bodies in India are the major drivers for the demand of Water Waste Management Services in India. Initiatives such as the Clean Ganga Mission, Jal Shakti Abhiyan, AMRUT, etc. are the most prominent programmes that are creating demand for Water Waste Management Services. Apart from the government initiatives, several NGOs, funds from corporate social responsibility activities etc. are also contributing to the growth of this market.

Landscape Developmental Services Market:

Market Overview and Outlook:

Increasing urbanisation, construction of roads and gated communities present an opportunity for the growth of the Landscape Developmental Services in India. India is home to a young population and the country is witnessing changing lifestyles with increasing preference towards leisure and awareness about protecting the environment. Construction of landscapes on roadsides, play area/parks on gated communities and gardens/green spaces in urban areas to improve living standards will bode well for the market.

The World Health Organisation (WHO) has set the international minimum standard for open space per person at 9 square meters per city dweller. India's Urban and Regional Development Plans Formulation and Implementation (URDPFI) guidelines recommend a target at 10 -12 square meters of green space per person within 800 meters from their residence. Some of the cities in the country have astonishingly poor open space per person ratio and this presents the opportunity for the development of open and green spaces and thereby the demand for Gardening and Landscaping Services.

⁹⁴

https://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvMTY2OV8xNzI3NDE0NTc1X21IZGlhcGhvdG8yOTAyNy5wZGY=



Exhibit 3.7: Comparison of Open Space per Person - Select Indian Cities versus Select Global Cities, India, FY2025

Atal Mission for Rejuvenation and Urban Transformation: The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme was launched in June 2015 with the focus to establish infrastructure that could ensure adequate robust sewage networks and water supply for urban transformation by implementing urban revival projects. The mission's thrust areas are:

- Water Supply
- Sewage Management
- Storm Water Drains
- Creating and Upgrading Green Spaces and Parks
- Non-motorised Public Transport Spaces

The mission includes selected 500 cities and towns in India. One of the key focus areas of AMRUT is the creation of parks and gardens in cities with a population of over 100,000 people. Every state is mandated to prepare a State Annual Action Plan (SAAP), that would be approved by the Ministry of Housing and Urban Affairs.

AMRUT mission has been subsumed under AMRUT 2.0, which was launched on 1st October 2021 for the period FY2022 – FY2026. The total indicative outlay for AMRUT 2.0 is INR 2,990.00 billion and the Central Assistance is INR 767.60 billion for five years. Of the INR 667.50 billion allocated for projects, INR 639.77 billion shad been approved until November 2024 Under AMRUT 2.0, urban local bodies/ municipalities need to develop a detailed City Water Balance Plan and City Water Action Plan that would include projects for universal coverage of water supply, sewage management, recycle/ reuse of treated water, rejuvenation

⁹⁵ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2078409

of water bodies and creation of green spaces. The funds for green spaces and parks are capped at 1.0%⁹⁶ of the total projects cost for the sub-segment and based on this, INR 0.39 billion is anticipated to be invested in the development of green spaces and parks, which would in turn create demand for Gardening and Landscaping Services over the next five years. Maharashtra, Uttar Pradesh and Tamil Nadu are the top beneficiaries of the budget allocations under AMRUT 2.0.

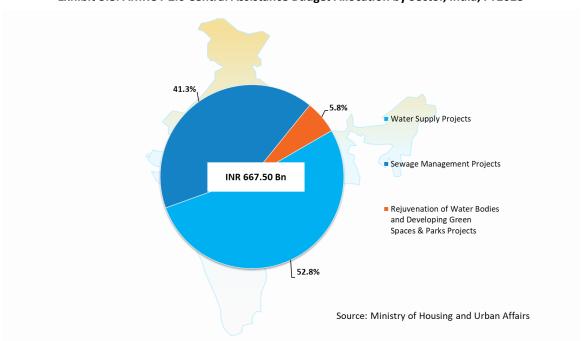


Exhibit 3.8: AMRUT 2.0 Central Assistance Budget Allocation by Sector, India, FY2025

⁹⁶ https://mohua.gov.in/upload/uploadfiles/files/AMRUT-Operational-Guidelines.pdf

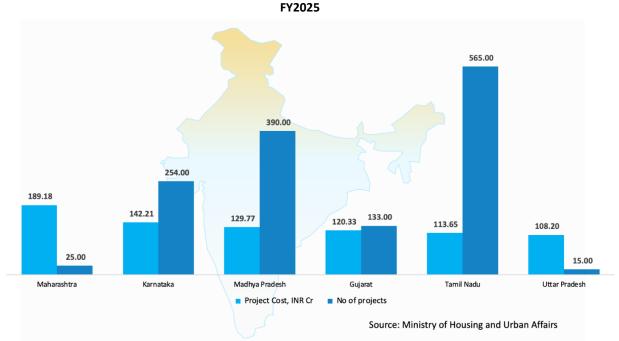


Exhibit 3.9: AMRUT 2.0 List of Parks and Green Spaces Development Projects Approved by Major States, India,

City level municipalities play a key role in planning, developing and implementing gardens and landscaping projects. The municipalities are also responsible for the projects under the AMRUT scheme. Apart from the Central Assistance every municipal authority has also a budget allocated for parks and its maintenance activities. Municipal corporations in Tier 1 cities offer highest growth potential owing to the higher share of budget allocations when compared with Tier 2 and Tier 3 cities. Lack of open spaces for development of gardens and parks will hinder growth in the long term however maintenance of existing parks will create demand. Green space is one of the key criteria in most of the planned Smart Cities Project, and Tier 2 cities also offer huge potential since the scope for landscape and gardens is high. Public leisure spaces have gained popularity in Tier 2 and Tier 3 cities and will present growth opportunity in the long-term.

Beyond AMRUT, other government schemes such the Bharat Mala infrastructure scheme for construction of roads are also expected to increase the need for development of gardens and landscapes in India. Apart from the government projects, the demand for Gardening and Landscaping Services comes from the Residential and Commercial Segments, where recreation facilities are a growing trend since there is lack of greenery in urban cities. The growth of residential segment will subsequently lead to increase in gardens and landscaping projects since gated communities include recreational parks and gardens in their project outlay. Other segments that create demand for Gardening and Landscaping Services are Educational Institutions, Religious Spaces, Historic Places and Highways. An increase in residential spending and investments in infrastructure indicate significant potential for Gardening and Landscaping Services in India. Facility Management Services related to Gardens and Landscapes in India is largely undeveloped and does not have a clear structure.

Competitive Landscape:

Landscape Developmental Services Market is highly fragmented and dominated by un-organised companies. Apart from specialised Landscaping companies, Facility Management companies are also

playing a key role in the development of this market. BVG has extensive capabilities in horticulture, garden development, afforestation, lake rejuvenation, water body beautification and beautification under smart city projects. BVG also executes turnkey projects focused on green infrastructure and environmental conservation and operation and maintenance of the above projects. As at 31 March 2025, BVG maintains over 2.25 lakh square meter of landscaping and gardens daily. BVG has experience of developing over 15 type of gardens, 5 lakes and has maintained 4.25 lakh plants. As at 31 March 2025, the BVG horticulture department has completed more than INR 1.5 million worth of garden development works. BVG has developed 4.25 lakh plants for government and private clients.

Renewable Energy Services Market:

Market Overview and Outlook:

India has witnessed significant growth in the Renewable Energy sector, driven by the government policies and initiatives, technology advancements and significant FDI. The country has set a Renewable Energy Target of 500 Giga Watts (GW) by 2030 and this includes 280 GW of Solar Power and 140 GW of Wind Power. India has an installed capacity of 190.57 in FY2024, including hydro, solar, wind, bio-power and small hydro power renewables.

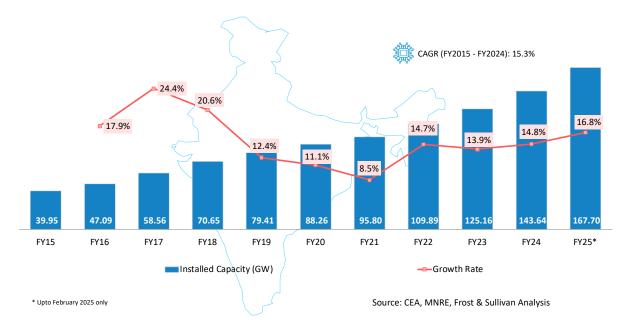


Exhibit 3.10: Renewable Energy Installed Capacity, India, FY2015 - FY2025

Note: the above renewable energy installed capacity only includes solar, wind, bio-power and small hydro power

Solar Renewable Energy Market Outlook:

Indian renewable energy sector is the third most attractive renewable energy market in the world, which is a key part of the energy transition. Markets are ranked on attractiveness on the basis of their renewable

energy investment and deployment opportunity. With the Indian government's increased support and improved economics, the Indian solar power sector has become attractive from an investor's perspective.

The use of solar power in India is growing at a rapid rate. The country's solar installed capacity has gained pace over the past few years. India's installed cumulative solar energy capacity stood at 81.81 Giga Watts (GW) at the end of FY2024, representing 57.0% of the overall installed renewable energy capacity of 143.64 GW. Solar power installed capacity has increased by more than 11.5 times, from 7.12 GW in FY2016 to 81.81 GW at the end of FY2024. India has added nearly 15 GW of solar power in FY2024 and 20.75 GW in FY2025, up to February 2025.

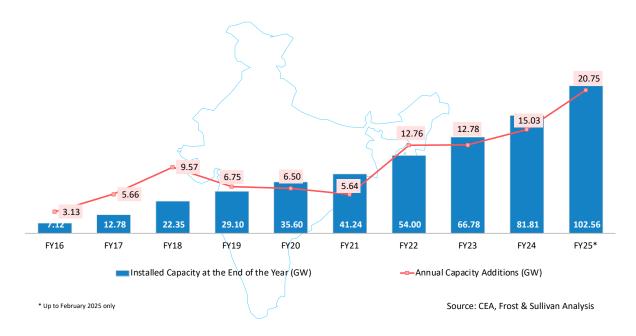


Exhibit 3.11: Installed Solar Power Capacity, in MW, India, FY2016 - FY2025

Solar Power Technology: There are two prominent types of solar power technology used globally, one is the Photovoltaic (PV) and the other one is the Concentrated Solar Power (CSP). Of the two, Solar PV is widely used in India.

- Photovoltaic (PV) Solar: The majority of solar installations, both utility-scale and rooftop, utilise
 PV technology.
- Concentrated Solar Power (CSP): CSP technology has limited adoption in India compared to PV.
 At the end of CY2021, India's CSP capacity was relatively small, and most solar projects are PV-based.

Key Market Drivers to Solar PV Deployment in India:

 The country plans to tap the vast potential for solar PV in the region to achieve its different climate goals, notably:

- Installing 500 GW of non-fossil fuel electricity generation capacity by CY2030, from which
 280 GW should come from solar PV
- Sourcing 50% of energy demand from non-fossil fuel sources by CY2030
- Reduce the emission intensity of GDP by 45% by CY2030, from CY2005 levels.
- Budget allocations in FY2026: The Union Budget 2025-26 has earmarked INR 26,549 crore⁹⁷ to the renewable energy sector. The National Manufacturing Mission was launched with a focus on solar PV cells, EV and grid scale batteries, wind turbines and electrolysers. This mission has been allocated a budget of INR 24,100 crore in FY2026. This budget would support infrastructure development for large-scale solar projects, research and innovation in solar energy, and subsidy programs to encourage rooftop solar installations.
- Reduction in Basic Custom Duty: The custom duty was reduced from 25% to 20% for solar cells
 and from 40% to 20% for solar modules. This is expected to increase affordability and market
 competitiveness.
- Pradhan Mantri Surya Ghar Muft Bijli Yojana: This was launched in February 2024 to provide solar power to approximately 1 crore households and offering 300 units of free electricity for every month. Beneficiaries receive a fixed one-time subsidy directly into their bank accounts, with additional provisions for concessional bank loans⁹⁸.
- India is supporting local PV manufacturing through PLI. Up to October 2024, around INR 35,000 crore⁹⁹ have been invested through PLI Scheme for High Efficiency Solar PV Modules. The PLI Scheme has supported the PV module capacity growth from 2 GW to 70 GW in the past decade¹⁰⁰.

Key Market Restraints to Solar PV Deployment in India:

- The purchasing of modules is currently limited to specific manufacturers that are included in the ALMM. While the objective of the policy is to foster the domestic manufacturing capacities, this comes at a price for developers, who can only buy from domestic suppliers, whose equipment prices can be costlier than foreign manufacturers.
- The largest renewable power purchaser in India are power distribution companies (DISCOMs).
 They are involved in long-term Power Purchase Agreements (PPA) with solar and wind power generation companies. However, in several instances DISCOMs tried to renegotiate or to cancel a PPA contract invoking financial difficulties. This context of unreliable buyers is so far not favourable for the development of a PPAs market in India.

Measures Taken by the Indian Government to Promote Domestic Manufacturing of Solar Cells and Modules: As India is moving swiftly towards achieving its target of emerging global leader on the solar front, positive steps are to be taken to resolve the imports of important components like solar cells,

⁹⁷ https://energy.economictimes.indiatimes.com/news/renewable/budget-2025-a-deep-dive-into-the-measures-for-the-energy-sector/118015037

⁹⁸ https://www.soleosenergy.com/6-top-solar-epc-companies-in-india-guidance/#government-policies-incentives-for-solar-epc-companies-in-india

⁹⁹ https://sansad.in/getFile/loksabhaquestions/annex/183/AU1418 Edvm7x.pdf?source=pgals

¹⁰⁰ https://energy.economictimes.indiatimes.com/news/renewable/solar-pv-module-capacity-rises-to-70-gw-in-10-years-pli-scheme-drives-growth-pm-modi-at-iew-2025/118143797

modules, and solar inverters that the Indian solar industry is considerably dependent upon. Certain measures taken by the Indian government include the following:

- **PLI Schemes:** The PLI Scheme was introduced by the Indian government, as an attempt to boost India's manufacturing capabilities and exports. Under the provisions of this scheme, manufacturers receive support from the government for establishing integrated manufacturing units of high-efficiency solar photo voltaic modules.
- **Bureau of Indian Standards (BIS) Certification**: The Indian government mandated the requirement of BIS certifications on all solar products, which will help set higher quality parameters for domestic manufacturers, ultimately benefiting end customers.
- Approved List of Models and Manufacturers: To protect the interest of customers and to also
 ensure the manufacturing of reliable PV modules, the Ministry of New and Renewable Energy
 had also introduced an Approved List of Modules and Manufacturers (ALMM) of solar PV cells
 and modules. All government projects are required to use locally made modules. By June 2026, a
 cells list is expected to produced and post that government projects would be mandated to use
 locally assembled cells and modules¹⁰¹. The above actions are expected to help India emerge as a
 leading global supplier of solar products, along with meeting its domestic requirements.

The growth in the Solar Energy Projects provides a host of market opportunities such as solar module manufacturing, EPC/ turnkey projects, tolling job works and operation & maintenance services.

Competitive Landscape and Major Players: The Solar Energy Market has the presence of several stakeholders such as manufacturing companies, engineering companies and services companies. The EPC/turnkey projects market is dominated by companies such as Tata Power Solar Systems, Shreeji Infrastructure, Svaryu Energy, and Adani Solar.

A few Facility Management companies such as BVG and UDS have forayed into this market as well. BVG, the leading facility management services company in India entered the Renewable Energy Services Market in 2016. The company provides a wide range of services to Solar Power Projects, BESS, Green Hydrogen projects. BVG also specialises in assembling the solar PV modules and also provides turnkey services to the OEMs. Others service providers in Solar Energy Projects are Illios Power, Hartek Solar, Navya Technologies Renewables, Goldi Solar, SunSource Energy, Jackson, Alpex, Saatvik, Sova, and Patanjali among others.

Green Hydrogen Renewable Energy Market Outlook:

Green Hydrogen – Introduction from Indian Perspective: Addressing the nation on the 75th Independence Day, the Indian Prime Minister announced the National Hydrogen Mission with an aim of making India a hub for the production and export of green hydrogen. India is at a crucial juncture in terms of its energy landscape and green hydrogen has a critical role to play to make the nation self-reliant and energy-independent. On January 4, 2022, the National Green Hydrogen Mission was approved by the Union Cabinet.

¹⁰¹ https://www.infolink-group.com/energy-article/solar-topic-india-pv-regulations-policies-market-outlook

Currently, India imported more than 88% of its crude consumption during April 2024 – February 2025¹⁰²; The overall energy imports are likely to double in the next 15 years without remedial action. With National Green Hydrogen Mission approval, the stage is set for India to become a global champion in Green Hydrogen.

The initial outlay for the Mission is INR 197,440 million, including an outlay of INR 174,900 million for the Strategic Interventions for Green Hydrogen Transition (SIGHT) programme up to 2029-2030, INR 14,660 million for Pilot Projects, INR 4,000 million for Research & Development, and INR 3,880 million towards other Mission components. Ministry of New and Renewable Energy (MNRE) will formulate the scheme guidelines for implementation of the respective components.

National Green Hydrogen Mission Sub-Components:

- **SIGHT Programme:** Under the Strategic Interventions for Green Hydrogen Transition Programme (SIGHT), two distinct financial incentive mechanisms targeting domestic manufacturing of electrolysers and production of Green Hydrogen will be provided under the Mission.
- Pilot Projects: The Mission will also support pilot projects in emerging end-use sectors and production pathways. Regions capable of supporting large scale production and/or utilisation of Hydrogen will be identified and developed as Green Hydrogen Hubs.
- Research & Development (R&D) Projects: Public-Private Partnership framework for R&D (Strategic Hydrogen Innovation Partnership SHIP) will be facilitated under the Mission. R&D projects will be goal-oriented, time bound, and suitably scaled up to develop globally competitive technologies.
- Skill Development: A coordinated skill development programme will also be undertaken under the Mission.

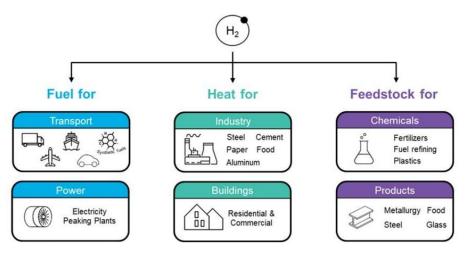
The Mission will result in the following likely outcomes by CY2030:

- Development of Green Hydrogen production capacity of at least 5 MMT (Million Metric Tonne) per annum by 2030, with an associated renewable energy capacity addition of about 125 GW in the country
- Over INR 8 trillion in total investments
- Creation of over six lakh jobs
- Cumulative reduction in fossil fuel imports over INR 1 trillion
- Abatement of nearly 50 MMT of annual greenhouse gas emissions

The Mission will support pilot projects in other hard-to-abate sectors like steel, long-range heavy-duty mobility, shipping, energy storage etc. for replacing fossil fuels and fossil fuel-based feedstocks with Green Hydrogen and its derivatives.

Exhibit 3.12: Application of Green Hydrogen

 $^{^{102}\} https://oilprice.com/Latest-Energy-News/World-News/Indias-Oil-Import-Dependence-Hits-All-Time-High.html$



Source: Bloomberg NEF, Frost & Sullivan analysis

Grey, Blue and Green Hydrogen: Hydrogen is the lightest and most abundant element in the universe. It is rarely found in nature in its elemental form and must always be extracted from other hydrogen-containing compounds. Depending on the nature of the method of its extraction, hydrogen is categorised into three categories, namely, Grey, Blue and Green.

- **1. Grey Hydrogen:** It is produced via coal or lignite gasification (black or brown), or via a process called steam methane reformation (SMR) of natural gas or methane (grey). These tend to be mostly carbonintensive processes.
- **2. Blue Hydrogen:** It is produced via natural gas or coal gasification combined with carbon capture storage (CCS) or carbon capture use (CCU) technologies to reduce carbon emissions.
- **3. Green Hydrogen:** It is produced using electrolysis of water with electricity generated by renewable energy. The carbon intensity ultimately depends on the carbon neutrality of the source of electricity (i.e., the more renewable energy there is in the electricity fuel mix, the "greener" the hydrogen produced).

Applications of Green Hydrogen: Hydrogen and Ammonia are envisaged to be the future fuels to replace fossil fuels. Production of these fuels by using power from renewable energy, termed as Green Hydrogen and Green Ammonia, is one of the major requirements towards environmentally sustainable energy security of the nation. Government of India is taking various measures to facilitate the transition from fossil fuel-based feed stocks to Green Hydrogen / Green Ammonia.

- Hydrogen in Indian Context: Increasing renewable energy use across all economic spheres is central to India's Energy Transition. Green Hydrogen is considered a promising alternative for enabling this transition. Hydrogen can be utilised for long-duration storage of renewable energy, replacement of fossil fuels in industry, clean transportation, and potentially also for decentralised power generation, aviation, and marine transport.
- Hydrogen for integrating renewable energy: Hydrogen provides a means for storage of variable renewable energy for stabilising its output. For long duration storage, running into several hours, converting excess available energy into hydrogen and utilising it for grid support and other applications is seen to be a suitable alternative.

- Hydrogen in Industry: In industry, hydrogen can potentially replace the coal and coke in iron and steel production. Steel manufacturing is one of the largest carbon emitters in the world, decarbonising this sector using hydrogen is expected to have significant impact on our climate goals.
- Hydrogen has the potential to reduce fossil fuel imports: At present, hydrogen produced from natural gas is widely utilised for production of nitrogenous fertilisers, and petrochemicals.
 Substituting this with Green Hydrogen could allow use of renewable energy in these important sectors and reduce import dependence.
 - India's annual Ammonia consumption for fertiliser production is about 15 million tonnes, roughly 15% of this demand (over 2 million tonnes per annum) is currently met from imports. Mandating even 1% Green Ammonia share is likely to save about 0.4 million standard cubic feet per day of natural gas import.
 - Use of hydrogen in steel industry could substitute imported coking coal. During FY2019, the total demand of coking coal for the steel industry was 58.37 million tonne (MT). Out of this, 51.83 MT was met through imports.
- Hydrogen based transport: Fuel cell electric vehicles (FCEVs) run on hydrogen fuel and have no
 harmful emissions. Battery Electric Vehicles (BEVs) may be suitable for light passenger vehicle
 segment for shorter driving range. For heavy duty vehicles with longer trip range, such as buses,
 trucks and other commercial vehicles, FCEVs are likely to become cost competitive in the coming
 years.
 - While BEVs are dependent on imported raw materials like lithium and cobalt for lithiumion batteries, the hydrogen fuel cell supply chain can be wholly indigenised, making India Aatmanirbhar in the clean transportation segment.

India's Hydrogen Demand Overview and Progress under the Mission:

- India's annual hydrogen consumption is estimated to be around 5 6 million tonnes per annum in 2024 and the same is forecast to reach 15 20 million tonnes by 2030¹⁰³. The demand for hydrogen would be driven by need to decarbonise key sectors such as steel and fertilizers, and from new applications in power, transport and residential segments.
- India has declared its ambition to become an exporter of hydrogen to Japan, South Korea, and Europe.
- Pilot projects on Hydrogen Fuelled Buses and Trucks: The government has initiated five pilot projects for using Hydrogen in buses and trucks. The pilot consists of a total of 37 vehicles (buses and trucks) and 9 hydrogen refuelling stations as of March 2025. The vehicles that will be deployed for the pilot include 15 hydrogen fuel cell-based vehicles and 22 hydrogen internal combustion engine-based vehicles. These vehicles will run on 10 different routes across the

 $^{^{103}}$ https://energy.economictimes.indiatimes.com/news/renewable/hydrogen-demand-to-hit-20-million-tonnes-by-2030-needs-8-10-trillion-investment-report/116384944?utm_source=chatgpt.com

country. These pilot projects are awarded to TATA Motors, Reliance Industries, NTPC, ANERT, Ashok Leyland, HPCL, BPCL and IOCL.

• Nine green hydrogen production projects have been awarded through the SIGHT Scheme, with a cumulative production capacity of 450,000 MT in February 2025.

Exhibit 3.13: Letter of Awards to Successful Project Bidders for Setting up Green Hydrogen Production Facilities under SIGHT Scheme (as on Feb 2025), India, FY2025

S.No.	Company Name	Awarded Annual Production Capacity (MT)
1	Oriana Power Limited	10,000
2	Suryadeep KA1 Project Private Limited	19,000
3	L&T Energy Green Tech Limited	90,000
4	GH2 Solar Private Limited	10,500
5	Green Infra Renewable Energy Farms Private Limited	90,000
6	Waaree Clean Energy Solutions Private Limited	90,000
7	AM Green Ammonia (India) Private Limited	90,000
8	Reliance Green Hydrogen and Green Chemicals Limited	49,000
9	Matrix Gas and Renewables Limited	1,500

Source:

https://nghm.mnre.gov.in/admin/uploads/174278747236728250317_RfS_Result_Mode1_Tranchell.pdf

India's distinct advantage in terms of low-cost renewable electricity, complemented by rapidly falling electrolyser prices, can enable green hydrogen to be not just economical compared to fossil-fuel based hydrogen but also compared to Green Hydrogen being produced around the globe.

With proactive collaboration among innovators, entrepreneurs and government, Green Hydrogen has the potential to drastically reduce CO2 emissions, fight climate change, and put India on a path towards net-zero energy imports. It will also help India export high-value green products making it one of the first major economies to industrialise without the need to "carbonise".

CHAPTER 4: EMERGENCY RESPONSE SERVICES MARKET IN INDIA

Emergency Response Services Market Overview and Outlook:

Emergency Response Service (ERS) is an essential part of the overall public infrastructure system in a country to save the lives and assets by providing care immediately. The most common form of this service is the Ambulance Services were one can avail the services by calling up a toll-free number. Through the Emergency Response Ambulance Services, trained technicians or paramedics provide first aid to the patient i.e., pre-hospital clinic care, and shift the patient to a suitable facility/ hospital. This service is being provided in two forms - pre-hospital services and in-patients' care. Pre-hospital medical benefits incorporate ambulatory services, transportation of the patients to or from spots of therapy etc. and also helps to transport in-patients during critical medical emergencies.

The creation of Emergency Response Services in India was not policy driven and did not have a centralised approach in the beginning; but evolved more through socio-economic needs and was driven by single or multiple institutions rather than a uniform centralised system. Apart from the government's Emergency Response Services, and other service providers ranging from individuals, charities, religious institutions, non-governmental organisations (NGO), political institutions, private funded hospitals and private service providers were involved in providing Ambulance Services, resulting in a disorganised growth due to the presence of large number of stakeholders.

The first step towards Emergency Response Services in India was initiated in 1985 in Mumbai when the Association for Trauma Care in India launched 15 ambulances connected to a central wireless dispatch centre. Later in 1991, the federal government launched the Centralised Accident and Trauma Services (CATS) with 13 ambulances in Delhi. This service was later expanded with the toll-free number 102, but failed to achieve nationwide centralisation, mainly due to the fragmented nature of stakeholders and each stakeholder providing similar services but limited to their business activities only. Between 1994 and 1996 the country witnessed vigorous work towards Emergency Care from the southern states such as Tamil Nadu.

A major step was taken by the federal government in 2005 through the launch of National Rural Health Mission towards a nation-wide Emergency Response System. In 2013, National Urban Health Mission was launched and together the mission was named as National Health Mission, which was the country's centralised approach towards healthcare delivery systems.

The budget allocation towards healthcare is the major capex for developing the Emergency Response Services System in the country. India is the world most populous country but the allocation of funds towards healthcare has been very low over the past years. Lower budgets have resulted in several challenges such as the low ratio of ambulance per person. Countries with lower incomes and lower GDP than India, such as Philippines and Malaysia allocate more funds towards healthcare. But with increased focused towards rural development and with the introduction of the National Health Mission, the situation is expected to improve gradually over the years.

United Germany France Japan Canada Austria United States

United States

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France Japan Canada Austria United Belgium Australia Spain Denmark Brazil Philippines Malaysia India World States

Exhibit 4.1: Healthcare Expenditure as a Percent of GDP, World, CY2022

Source: World Bank

National Health Mission:

The National Health Mission (NHM) encompasses two Sub-Missions, The National Rural Health Mission (NRHM) and The National Urban Health Mission (NUHM). The main programmatic components include Health System Strengthening, Reproductive-Maternal- Neonatal-Child and Adolescent Health (RMNCH+A), Communicable and Non-Communicable Diseases and Infrastructure Maintenance. The NHM envisages achievement of universal access to equitable, affordable & quality health care services that are accountable and responsive to people's needs.

Under the NHM, Government of India provides technical and financial support for emergency medical services in States and Union Teritories through a functional National Ambulance Service (NAS) network linked with a centralised toll-free number 108 and 102.

- **108 Ambulance Services:** This is an emergency response system designed for Basic Life Support and Advanced Life Support services to care for fatal emergencies such as patients of critical care, trauma, accident victims etc.
- 102 Janani Shishu Services: Patient Transport Services to pregnant women and newborns to reduce the infant and maternal mortality rate by increasing deliveries assisted by skilled birth attendants. This is a toll-free number that transfers patients to the nearest government hospital free of cost with trained paramedics on board.

Over the years there has been an overall improvement in ambulance services under National Health Mission mainly in availability and accessibility. With the advent of National Ambulance Services, the Emergency Response Services in India has expanded exponentially and geographically, shifting focus from being a "transport vehicle concept" to one that is a "lifesaving emergency medical transportation" and injury centric to covering all emergencies and urban-centric to being pan-India. All this has led to improved response time for every patient in reaching the hospital for timely care.

National Ambulance Services: As of June 2024, 36 States and Union Territories have the National Ambulance Service facility where people can dial 108 or 102 for calling an ambulance. The NHM provides assistance for capital expenditures and operational costs related to various types of ambulances such as Basic Life Support (BLS) and Advanced Life Support (ALS) vehicles. Additionally, innovative solutions such as bike and boat ambulances are also available to reach remote and hard-to-access areas, ensuring that emergency medical services are accessible to all citizens of India. As of June 2024, there are 15,283 BLS Units, 3,918 Patient Transport Vehicles and 3,044 ALS vehicles under the NHS¹⁰⁴.

- 104 Health Helpline Number: Medical assistance for several minor physiological illnesses, ailments, and mental distress, along with directory information, details on health schemes, a grievance redressal mechanism, and more to rural areas.
- Mobile Medical Unit: Free clinics staffed with a professional team to provide healthcare like
 medical check-ups, investigation facilities, awareness programmers, post-natal services,
 electrocardiography, and medication at the grass root level to ensure quality healthcare for all.

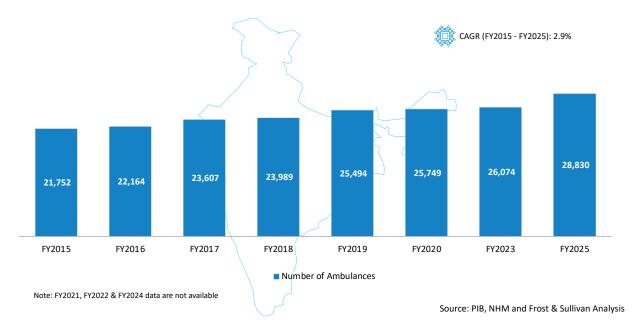


Exhibit 4.2: Number of Ambulances under the National Health Mission, India, FY2015 - FY2025

Fire Emergency Services and Disaster Recovery Services: This is highly underdeveloped in the country. The Fire Emergency Services is handled by the National Disaster Management Authority (NDMA) in India. The Standing Fire Advisory Committee has indicated that existing deficiencies with regards to fire stations, fire fighting vehicles and personnel in India are

- Fire Stations- 97.54%
- Fire Fighting and Rescue Vehicles- 80.04%

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¹⁰⁴ https://pib.gov.in/PressReleseDetailm.aspx?PRID=2110385®=3&lang=1

• Fire Personnel- 96.28%.

The NDMA has made a strong case to the central government to release more funds to bridge the huge need gap. There have been no substantial initiatives in this area and in order to overcome the present challenges public-private partnerships are expected to be introduced, similar to the Ambulance Services in India.

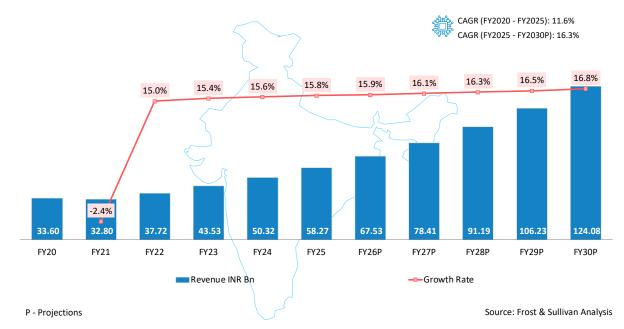
Police Emergency Response Services: The outsourcing of Police Emergency Response Services to private companies is at a nascent stage in India. Police Emergency Response Services in India is predominantly a state-run operation. Madhya Pradesh was the first state to outsource this service in 2015, through "Dial 100 project". The project set an example of collaboration with private players for emergency services, and helped the state achieve a police emergency response time of 28 minutes in urban areas and 38 minutes in rural areas. More states in India are expected to outsource this service which includes managing fleet of vehicles, operating emergency call centre, tracking and monitoring emergencies.

Emergency Response Support System: India lacked a consolidated Emergency Response System and this Emergency Response Support System (ERSS) is India's answer to the centralised and integrated solutions. The government is committed to the safety of its citizens, particularly women, and therefore Emergency Response Support System 112 helpline was launched. Emergency Response Support System is designed to address all emergency signals received from citizens through voice call, SMS, e-mail, panic SOS signal, dedicated web portal, mobile apps etc. This would be an automated facility and would be developed in capital cities of all States and Union Territories, and would be called the Public Safety Answering Point (PSAP). This is expected to handle all emergency signals and provide assistance within the best possible time with the help of Police, Fire & Rescue, Health services etc. This system tracks the rescue and service vehicles of all services (Police, Fire, Health etc.) in real-time on a digital map of the State and Union Territories, therefore enabling the right vehicles to reach the service requestor and provide necessary support immediately. It is an integration of police (100), fire (101) and women and child care (181) helpline numbers. The ambulance helpline (108) will be integrated with it soon. This ERSS is available in all 36 States and Union Territories in India as of 2024.

Market Size and Forecasts:

The Central Government funds the Emergency Response Services Market in India mainly in the form of providing capital expenditure, while the operating expenditure is borne by the states. The funds are channelled through the National Health Mission and private companies are contracted to operate and maintain the Emergency Response Service systems. The private players are paid for the services provided by them on a contractual basis. Post the implementation of the National Health Mission, the demand for Emergency Response Services has witnessed solid growth and the current market is estimated to be INR 58.27 billion in FY2025 and anticipated to grow at a CAGR of 16.3% from FY2025 to FY2030 to reach INR 124.08 billion. The key growth enablers would be the increase in government spending and higher budget allocations. Improving facilities within ambulances are also enabling higher prices for the services which are contributing to the growth in market revenues.





COVID-19 pandemic led to the increase in huge demand for ambulance services across the country and created new revenue opportunities through deep sanitation requirements. With the recent surge in COVID-19 cases in India in FY2026, the demand for emergency response services are expected to increase and the service providers are well equipped to provide the necessary services based on their prior experience.

Opportunities for Private Sector in Emergency Response Services Market:

The government has acknowledged the importance of involving private service providers for Emergency Response Services to meet the increasing demand. All ambulances under the organised market operate under the National Health Mission through 108 and 102 toll free numbers with the exception of volunteer service providers, hospital linked ambulances and unorganised service providers. The major step taken towards outsourcing of Emergency Response Services was with the formation of GVK Emergency Management and Research Institute (EMRI). Later, the market witnessed strong growth in outsourcing.

Outsourcing Benefits: Major challenges associated with providing Emergency Response Services in India by the government were delayed release of funds that impact cashflow for operations, lack of skilled personnel, slow implementation processes, lack of policy driven structure for handling the system and poor recruitment and staffing. Most of these challenges could be addressed by the private players. The private sector has better cash flow and the capability to develop structural approach towards Emergency Response Services. While the challenge remains for even the private players on recruiting and retaining skilled personnel, they allocate dedicated team to tackle this bottleneck quickly. The following are some of the key advantages the Indian government can leverage upon by private collaboration.

- Efficiency: The key problem with the current system is inefficiency due to a fragmented approach. Collaboration with a private player will help address the gap since they would be under obligation to deliver and could be held responsible for the service. The government does not have skilled manpower for this segment and this could be addressed by a private player who will use vigorous scanning to hire employees and deploy training programs. The partnership will enable access to more resources and will expand the reach through communication efforts.
- **Flow of Funds:** The roadblock for several healthcare associated initiatives in the country is the flow of funds from the government. Collaboration with private players will help address this problem if they are allowed to charge the end-user in a structured manner.
- Adequate Infrastructure and Technology: The emergency response centres, operated either locally or centrally, could be managed effectively with the adequate infrastructure and latest technology, as the private companies have knowledge and experience acquired through partnerships.
- Reachability: Public-private partnerships can enhance situational awareness and improve decision
 making. The reachability for the common public will be made easier due to promotional
 campaigns run by private firms.

Industry Challenges: The major industry challenges in this market are the fragmented nature of the market and low healthcare budget allocations when compared with advanced economies.

Exhibit 4.4: Emergency Response Services Market: Industry Challenges, India, FY2025

Industry Challenges Impact on the Market The lack of uniform toll-free number has caused chaos and confusion to the Fragmented nature of the system: general public. • The country has various toll numbers for This has led to inadequate functioning of different emergencies such as health/ the existing Emergency Response Service medical, fire, natural calamities etc. Systems. Also, different stakeholders have their This has also led to overcharging for own toll-free numbers. services by private players since public services does not meet the demand. Low health budget: India has one of the lowest healthcare Despite ambitious goals set by the budgets in the world. government, the execution falls short due Public expenditure towards healthcare to lack of financial support. does not even account for 2.0% of the This has led the government to outsource GDP. **Emergency Response Services to private** More than 70% of the total health players. expenditure in the country comes from the private sector.

Competitive Landscape and Major Players:

Key companies providing Emergency Response Services in India are EMRI Green Health Services (previously known as GVK EMRI) and BVG. Other prominent players in this segment include Medulance Healthcare and Ziqitza Health Care Limited. EMRI Green Health Services is synonymous to 108 service and operates the largest ambulance network in India with a cumulative fleet size of more than 17,444 vehicles.

- BVG is one of the major players offering Emergency Response Services in India. The company operates in Maharashtra and Jammu & Kashmir with a fleet of over 1,400 ambulances as of March 2025. BVG is also the only company in India to offer value-added services as part of their emergency medical response services. Their other credentials in this market include, being the first in India to equip ambulances with defibrillators, blood pressure monitoring equipment, pulse oximetry and medical grade oxygen delivery systems as part of their emergency medical response services. They are also the first in India to provide doctors in the ambulances that they deploy and providing basic periodic health screening facilities to the tribal communities in Maharashtra between 2018 to 2021. BVG's homologated ambulances are certified by the Automotive Research Association of India (ARAI).
- BVG was part of a consortium of companies that was the only qualified bidder in offering emergency medical services in CY2024.
- BVG provides ambulances with world-class equipment in Maharashtra, as part of a consortium, and it is the only state in the country which has dedicated doctors for each ambulance. The company is also one of the few to implement a centralised command centre.
 - Maharashtra Emergency Medical Services (MEMS) is a project of the Government of Maharashtra under National Health Mission (NHM), implemented and operated by BVG India Ltd. from February 2014 till March 2024 and continues to operate as part of consortium. Citizens across Maharashtra can avail free ambulance service in case of any medical emergency by dialling toll free number '108'. As of March 2025, BVG had implemented a network of close to 1,000 ambulances across the state of Maharashtra, well equipped with medicines, life-saving equipment and a doctor on call 24 x 7. Emergency Response Centre (ERC) operates 24 x 7 and all calls dialled to 108 from any mobile or landline across Maharashtra is received by the ERC, from where the expert call handlers assess the emergency, connect the patient with the doctor in the ambulance and dispatch the nearest ambulance to assist the patient. This emergency toll free 108 number also serves as the point of first contact for police and fire related emergencies. Emergency Response Centre Physician (ERCP) provides on-line medical direction for the doctors on ambulance during emergency calls. ERCPs also provide on-line pre-arrival instructions to the callers or patients if needed. Nearly 1,000 advanced ambulances are operational across Maharashtra, delivering expert care for emergencies. All ambulances are manned by Maharashtra Medical Council Registered Doctors who are trained for Emergency situations. These EMS professionals respond to emergency calls, provide medical care and transport patients to appropriate hospitals as needed. All doctors working with MEMS are certified by Symbiosis International University. Training is imparted to all professionals including Doctors, Drivers and all other ERC personnel. The

training centres are equipped with advanced training material, including State-of-the-Art Infrastructure, simulated manikins and world-class equipment. These trained professionals provide calming reassurance to distressed patients, relatives and bystanders prior to and during transportation to hospital's casualty room. Thus providing 24/7 pre-hospital emergency medical service across the state during which most fatalities occur.

MEMS 108	Total Count
Number of Ambulances	937
Number of Calls Handled till 31 March 2025	31,644,287
Number of Patients Served till 31 March 2025	10,825,571
Number of Childbirths in Ambulances till 31 March 2025	40,964
Average Response Time in Rural Region till 31 March 2025	0:23:07
Average Response Time in Urban Region till 31 March 2025	0:18:24

Source: BVG

Jammu & Kashmir	108	102
Number of Ambulances	203	286
Number of Calls Handled till 31 March 2025	2,418,572	2,257,699
Number of Patients Served 31 March 2025	378,796	71,259
Number of Childbirths in Ambulances till 31 March 2025	1,261	NA
Average Response Time in Rural Region till 31 March 2025	00:18:19	NA
Average Response Time in Urban Region till 31 March 2025	00:12:48	NA

Source: BVG

• BVG is also the first company to be awarded the contract for providing emergency police response services in India, which was outsourced in the state of Madhya Pradesh. The contract was entered into in May 2015 for a five year term and was subsequently extended till August 2025.

Medualnce Healthcare and Ziqitza Health Care Limited are other notable players offering wide range of services with a fleet size of 15,000 and more than 3,600 respectively. Falck is another company focused on formulating Public Private Partnerships (PPP) for Ambulance services by participating in state government tenders. It provides Ambulance Services and Fire Services. Other key players in the market are AmbiPalm Health Private Limited, Stanplus Technologies Private Limited (RED Health), EMSOS Medical Pvt. Ltd., and MUrgency.

Key Success Factors and Best Practices:

• **Government Framework:** Establishing strong public private partnerships at the inception of the system is important to operate and be successful in the ERS industry. The Central and State Governments fund the private players to operate and maintain ERS on contract basis. Drawing

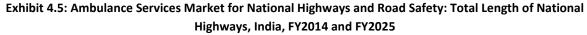
examples from the success of companies like GVK EMRI and BVG, working out a strong government framework in the public private partnerships mode will enable longevity in the industry.

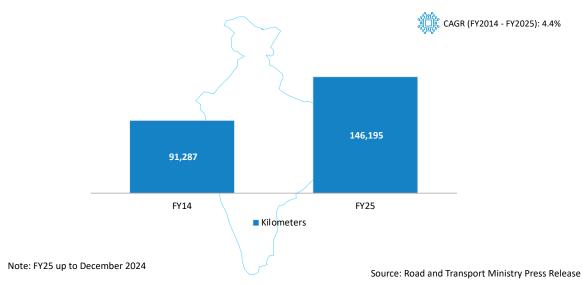
- Funding Mechanisms: Clear funding mechanisms are essential to survive in the market. Delayed
 payments from the government have resulted in several strikes by ERS staffs which have resulted
 in huge burden to the citizens. Having a strong capital flow is essential for success in the industry.
- **Process Innovations:** Streamlining processes by standardising the operations enable cost reductions. Using research, analysis, and metric based evaluations for optimal use of deployable resources helps in increased efficiency and gaining public confidence.
- Unique Service Offerings and Value-additions: Offering unique services and value-additions is a
 key success factor to differentiate from competition. BVG has created a distinctive advantage by
 providing a Police Emergency Services to the Madhya Pradesh government. Replication of its
 efficiency in other states will create more opportunities. Value added services such as a doctor for
 every ambulance provided by BVG in Maharashtra yields a competitive advantage.
- **Leadership and Strategic Partnerships:** Leadership and strategic partnerships with renowned organisations help in adapting best practices from several parts of the globe.

Ambulance Services Market for National Highways and Road Safety in India

Market Overview and Outlook:

Road transport infrastructure is a critical element contributing to the growth of economy, social integration and security needs of a country. India has the second longest road network in the world, running about 6.67 million kilometers and this includes National Highways, State Highways, District Roads and Rural Roads. National Highways play a very crucial role in the economic and social development by enabling efficient movement of freight and passengers and improving market access. They account for 2.0% of the total road network in India and connect major ports, state capitals, large industrial hubs, and tourist centers etc. The National Highways Authority of India (NHAI) is responsible for the development, maintenance and management of National Highways attached to it. State Governments have the authority to build State Highways that connect National Highways, district headquarters, prominent towns, tourist attractions and minor ports to carry the traffic along major centers within the state. Most of the State Highways are developed by State Public Works Department (PWD).





Government of India has launched several initiatives to develop the road infrastructure. One of the major initiatives is the Bharatmala Pariyojana, that aims to upgrade and expand the road network, including the construction of expressways, economic corridors, and feeder routes. The first phase of this programme is anticipated to develop 34,800 kilometers of highways with an investment of INR 5.35 lakh crore¹⁰⁵. The Pradhan Mantri Gram Sadak Yojana (PMGSY) focuses on improving rural connectivity and increasing access to markets, education, and healthcare. There have been other initiatives by the government to attract FDI and private participation into the sector such as the government covering the cost of project feasibility study, land for the right of way and way side amenities, shifting of utilities, and environment clearances. Government spending is the key factor driving the growth of National Highways construction in India.

¹⁰⁵ https://www.investindia.gov.in/sector/road-highways

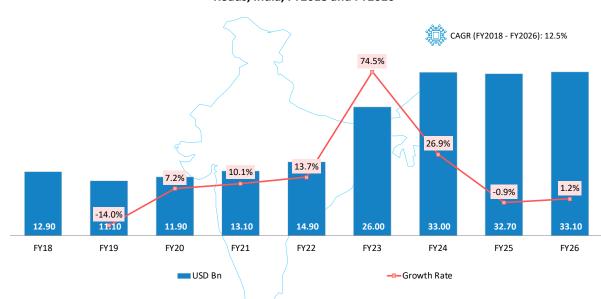


Exhibit 4.6: Ambulance Services Market for National Highways and Road Safety: Government Budget Outlays for Roads, India, FY2018 and FY2026

The Cabinet Committee on Economic Affairs has approved the development of eight National High Speed Corridor projects in 2024, with a cumulative length of 936 kilometers at a cost of INR 50,655 crore¹⁰⁶ across the country. List of the projects include

- 6-Lane Agra Gwalior National High-Speed Corridor
- 4-Lane Kharagpur Moregram National High-Speed Corridor
- 6-Lane Tharad Deesa Mehsana Ahmedabad National High-Speed Corridor
- 4-lane Ayodhya Ring Road
- 4-Lane Section between Pathalgaon-Gumla of Raipur-Ranchi National Highspeed Corridor
- 6-Lane Kanpur Ring Road
- 4-Lane Northern Guwahati Bypass and Widening/Improvement of Existing Guwahati Bypass
- 8-Lane Elevated Nashik Phata Khed Corridor near Pune

Development of road infrastructure and the growth of automobiles in India have resulted in the need for road safety and emergency response services with focus on National Highways. The development of emergency services for National Highways and Road Safety have not grown at the same pace as the road infrastructure in India and this offers high growth potential for solution providers. The traffic-related fatalities in India have been increasing every year and to address this the government rolled-out an integrated setup through the Traffic Incident Emergency Management System (TIMS).

Traffic Incident Emergency Management System:

Source: NHAI

¹⁰⁶ https://pib.gov.in/PressReleasePage.aspx?PRID=2091508

Emergency response such as ambulances, patrol vehicles, and tow-away cranes services are being provided through incident management services under Build, Operate, Transfer (BOT) and Operate, Maintain, Transfer (OMT) highway concessionaries. In order to improve these services and scale-up operations, the NHAI launched TIMS to monitor the traffic movement in highways and provide emergency response services. Through TIMS,

- Incident Management Contractors are appointed at a state/regional office level to provide ambulances, tow-away cranes and highway surveillance vehicles across all highways.
- Regional Command and Control Centre are set up in Rajasthan and Uttar Pradesh for monitoring and operations on a pilot basis. In each of these states an additional 100 – 110 ambulances are planned to be provided through the Incident Management Contractors. Upon successful demonstration of this programme in these two states, it would be scaled up to pan India level.

To begin with, the TIMS will cover nearly 11,000 kilometers in Uttar Pradesh and Rajasthan with adequate deployment of ambulances, surveillance vehicles, and tow-away cranes at regular intervals. This stretch of the highway and all vehicles associated with it will be mapped, connected and controlled by an IT-based regional command center for real- time detection of incidents and emergency response. The responsibility of the Incident Management Contractors would be to provide:

- Two patient capacity ambulances at every 40 45 kilometer or a 'four patient capacity ambulance' at every 100 kilometers.
- 24 x 7 surveillance vehicles to cover the assigned stretch at least once every four hours. The incharge of these vehicles will inform about any incident to the regional center and police who will provide mechanical assistance in case of vehicle breakdowns and basic mechanical repairs
- Provide fuel and water to stranded motorists enabling them to reach the closest fuel station.
- Contractors will be required to put overhead electronic display to alert users about traffic status on the stretch and other information.

Market Size and Forecasts:

Emergency Response Services (ERS), which is a bigger umbrella, includes National Highways and Road Safety, Police Response Services and other organised or unorganised players that are maintained privately by hospitals, NGOs, etc. Tenders for National Highways and Road Safety is floated by both NHAI and the State Governments. The Ambulance Services Market for National Highways and Road Safety is valued at INR 52.44 billion in FY2025 and is forecast to grow at a CAGR of 16.3% from FY2025 to FY2030 to reach INR 111.67 billion. Recently, NHAI has signed a Memorandum of Understanding (MoU) with HLL Lifecare Limited, a Public Sector Undertaking under the Ministry of Health & Family Welfare (MoH&FW). The objective is to ensure faster response times and better medical support for accident victims. As part of this MoU, HLL Lifecare will operate trauma centres and emergency stabilisation centres along National Highways. Such initiatives are expected to drive the demand for Ambulance Services for National Highways and Road Safety in the long-term.

CAGR (FY2020- FY2025): 13.2% CAGR (FY2025 - FY2030P): 16.3% 17.1% 16.8% 16.5% 16.3% 16.1% 15.9% 15.6% 15.4% 15.0% 3.4% 28.22 33.57 44.78 52.44 60.78 70.57 82.07 95.61 29.19 38.74 111.67 FY20 FY21 FY22 FY23 FY24 FY25 FY26P FY27P FY28P FY29P FY30P ---Growth Rate Revenue INR Bn P - Projections Source: Frost & Sullivan Analysis

Exhibit 4.7: Ambulance Services Market for National Highways and Road Safety: Historic and Forecast Revenue Trend, India, FY2020 – FY2030

Competitive Landscape and Major Players:

All major players in the Emergency Response Services Market provide Ambulance Services for National Highways and Road Safety. The market in India is totally privatized and one of the major players is BVG, who has won an EMS contract for livestock in Uttar Pradesh as part of their expansion plan under Emergency Response Service business. BVG India Ltd entered the animal healthcare segment by operating Mobile Veterinary Units across 15 districts in Uttar Pradesh under a government-funded initiative. Launched in March 2023, the service provides doorstep treatment for farmers' animals through a techenabled call center and GPS-tracked ambulances. With a robust system for telemedicine, on-site care, and performance tracking, BVG has significantly reduced animal mortality. Through operational excellence and grassroots awareness efforts, BVG is setting benchmarks in rural veterinary healthcare.

CHAPTER 5: COMPETITOR KEY PERFORMANCE INDICATOR (KPI) BENCHMARKING

Exhibit 5.1: Total Income and Revenue from Operations Comparison of Peers, India, Value in INR Million, Growth in %, FY2023 – FY2025

Company name	Total Income			Revenue from Operations			
	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025	CAGR
BVG India	23,186.83	28,448.46	33,195.40	23,148.78	28,393.83	33,017.97	19.43%
Bluspring Enterprises*	NA	NA	34,886.86	NA	NA	34,835.72	NA
SIS Limited	113,785.22	123,040.92	132,571.07	113,457.80	122,614.25	131,890.37	7.82%
Updater Services (UDS)	21,120.90	24,679.73	27,717.30	20,988.87	24,443.63	27,360.63	14.17%

 $[\]boldsymbol{^*}$ For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA – Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.2: EBITDA and EBITDA Margin Comparison of Peers, India, Value in INR Million, Growth in %, FY2023 – FY2025

Componing	EBITDA			EBITDA Margin		
Company name	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025
BVG India	2,925.34	3,470.43	3,641.41	12.64%	12.22%	11.03%
Bluspring Enterprises*	NA	NA	(864.86)	NA	NA	-2.48%
SIS Limited	5,017.40	5,437.35	3,236.99	4.42%	4.43%	2.45%
Updater Services (UDS)	925.92	1,342.16	1,665.44	4.41%	5.49%	6.09%

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA - Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.3: PBT from Continuing Operations and PBT Margin from Continuing Operations Comparison of Peers, India, Value in INR Million, Growth in %, FY2023 – FY2025

Company name	PBT from Continuing Operations			PBT Margin from Continuing Operations		
	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025
BVG India	1,861.73	2,269.28	2,609.46	8.04%	7.99%	7.90%
Bluspring Enterprises *	NA	NA	(1,696.60)	NA	NA	-4.87%
SIS Limited	2,849.10	2,719.15	673.38	2.51%	2.22%	0.51%
Updater Services (UDS)	541.88	845.83	1,447.29	2.58%	3.46%	5.29%

 $[\]boldsymbol{*}$ For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA – Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.4: Profit from Continuing Operations and Profit Margins from Continuing Operations Comparison of Peers, India, Value in INR Million, Growth in %, FY2023 – FY2025

C		PAT		PAT Margin			
Company name	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025	
BVG India	1,573.25	1,856.23	2,220.53	6.80%	6.54%	6.73%	
Bluspring Enterprises *	NA	NA	(1,791.22)	NA	NA	-5.14%	
SIS Limited	3,465.02	1,900.40	117.88	3.05%	1.55%	0.09%	
Updater Services (UDS)	346.05	662.64	1,189.77	1.65%	2.71%	4.35%	

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA – Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.5: ROE (%) and ROCE (%) Comparison of Peers, India, FY2023 – FY2025

Company name		ROE		ROCE			
Company name	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025	
BVG India	16.32%	16.86%	17.44%	18.99%	21.00%	19.37%	
Bluspring Enterprises *	NA	NA	-23.14%	NA	NA	-34.81%	
SIS Limited	15.72%	8.01%	0.49%	17.26%	16.19%	6.04%	
Updater Services (UDS)	9.43%	10.74%	13.14%	21.62%	13.36%	16.68%	

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA – Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.6: Trade Receivables Days Outstanding Comparison of Peers, India, FY2023 - FY2025

Company name	Trade Receivables Days Outstanding					
Company name	FY2023	FY2024	FY2025			
BVG India	152	121	114			
Bluspring Enterprises *	NA	NA	81			
SIS Limited	54	56	52			
Updater Services (UDS)	74	75	81			

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA – Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.7: Net Debt in INR Million, Net Debt to Equity Ratio and Debt Service Coverage Ratio Comparison of Peers, India, FY2023 – FY2025

Componing	Net Debt, INR Mn			Net Debt to Equity Ratio			Debt Service Coverage Ratio		
Company name	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025	FY2023	FY2024	FY2025
BVG India	4,188.56	3,959.67	3,132.47	0.41	0.34	0.23	2.99	1.89	3.90

Bluspring Enterprises *	NA	NA	106.77	NA	NA	0.01	NA	NA	(1.35)
SIS Limited^	7,713.33	7,680.79	3,290.46	0.33	0.32	0.14	1.45	1.53	0.98
Updater Services (UDS)	114.44	(978.39)	(1,846.40)	0.03	(0.12)	(0.19)	(1.30)	0.88	5.08

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025.

NA - Not available

Source: Annual Reports and Frost & Sullivan Analysis

Exhibit 5.8: Headcount Comparison of Peers, India, FY2023 – FY2025

C	Headcount						
Company name	FY2023	FY2024	FY2025				
BVG India	68,800+	77,400+	85,600+				
Bluspring Enterprises*	NA	NA	87,000+				
SIS Limited	283,300+	284,700+	300,000+				
Updater Services (UDS)	68,200+	65,000+	70,000+				

^{*} For Bluspring Enterprises FY2025 refers to period 11 Feb 2024 - 31 March 2025. NA – Not available

Source: Annual Reports and Frost & Sullivan Analysis

[^] For SIS Limited, Debt service coverage ratio denominator is calculated as: Repayment of term loans + Bonds/ debentures repaid/ redeemed + Interest paid + Payment of lease liabilities