

**NOT RATED****EMS**

| Infrastructure

| 22 July 2025

## Leveraging full lifecycle expertise to ride industry tailwinds

- **Broad expertise across water infra value chain, enabling EMS to execute full-lifecycle projects**
- **India's water infrastructure poised to benefit from structural tailwinds and long-term policy support**
- **EMS's execution track record and qualification edge enable access to high-value, performance-linked infrastructure contracts.**

Vineet Shanker  
 research@bobcaps.in

**Experience across water supply and sewerage infra development:** EMS Ltd is an EPC company with integrated O&M capabilities, specialising in water and wastewater treatment, sewage networks, civil construction, and electrical T&D. It is among the few players in India with end-to-end capabilities in both sewage laying and STP execution, enabling it to bid for large, bundled infrastructure projects with long-term O&M components. Founded by Mr. Ramveer Singh, a former UP Jal Nigam official (1984–2006), EMS draws from his extensive public-sector experience in STP projects across Meerut, Gautam Budh Nagar, and Ghaziabad. Post voluntary retirement, he entered the private sector, initially executing government contracts as a subcontractor—paving the way for EMS Ltd.

**India's water & sewerage infra sector is supported by strong structural tailwinds:** India's rapid urbanisation has led to mounting water stress, driving a shift toward sustainable and energy-efficient water management. Despite rising sewage generation, only 17% is effectively treated (CPCB), leaving over 80% untreated. Indian policies are increasingly aligned with UN SDGs (SDG 6 & 13), promoting circular water use and efficient STPs. Policy initiatives like AMRUT 2.0 (total outlay of Rs 3 trn), Jal Jeevan (budgeted allocation of ~Rs 700 bn), and Namami Gange II (total outlay of Rs 225 bn) provide strong tailwinds and long-term funding visibility.

**EMS well positioned in sewerage infra:** India's water infrastructure sector is fragmented at the lower end, but presents high entry barriers in larger, integrated projects. While small municipal contracts (Rs 100–500 mn) are dominated by local players with limited qualification requirements, the Rs 1–5 bn segment and above (Rs 3–10bn) requires strong technical and financial credentials, especially for bundled EPC + O&M contracts. EMS Ltd operates in this mid-to-large project space, with demonstrated capabilities in integrated execution and lifecycle management. It has also executed design-based PPP-format projects involving advanced technologies. EMS's positioning in this high-barrier segment offers better project visibility, margin stability, and long-term growth potential, aligned with rising infrastructure investments in the water sector.



## A diversified EPC firm with presence in water & civil infra and electrical T&D

**EPC player with capabilities spanning key stages of water infrastructure, including intake, treatment, distribution, and reuse:** Over the years, EMS has developed strong in-house capabilities across design, EPC, and long-term O&M, enabling it to bid for larger, more complex water and sewerage infrastructure projects. As of March 2025, the company has a robust order book of over Rs 22 bn, comprising 27 active STP projects, including 12 bundled contracts with integrated O&M components. With the government increasingly awarding water infrastructure projects in bundled EPC + O&M formats under schemes like AMRUT 2.0 and Swachh Bharat Mission (Urban), EMS is well-positioned to capitalise on this shift. Its execution track record and full-stack capability make it a qualified contender for these high-value, performance-linked opportunities.

**Fig 1 – Company-wise value chain presence in water infra projects**

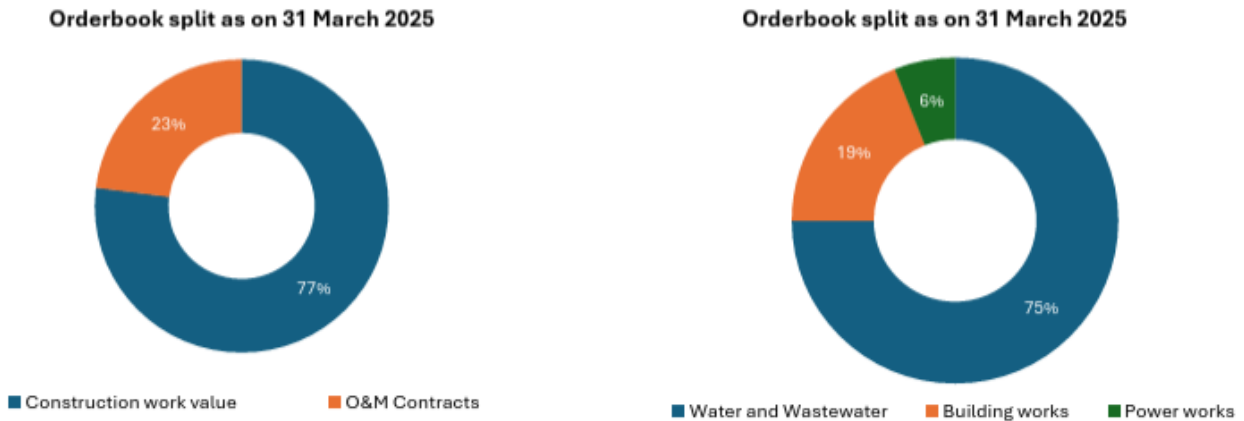
COMPANY	DESIGN & DEVELOPMENT	COMPONENT MANUFACTURING	CONSTRUCTION & INSTALLATION	O&M	IOT
VA Tech Wabag	✓		✓	✓	✓
Ion Exchange	✓	✓	✓	✓	✓
Vishnu Prakash R Punglia Ltd.	✓		✓	✓	
EMS Limited.	✓		✓	✓	✓

Source: Company

**Fig 2 – Executed 18 projects since 1<sup>st</sup> April 2021**

Supply, Laying, Jointing, Testing, & Commissioning of PCCP Pipe of 1500 mm dia	Sewerage Project Laying of 150 mm dia to 1200 mm dia sewer line with Trenchless method	Build new sewerage network of about 88 KM Length	Sewage Treatment plant of capacity 60 MLD including main pumping station of 83 MLD and sewage network of about 55km length
Kanpur (Uttar Pradesh)	Moradabad (Uttar Pradesh)	Pahari, Patna (Bihar)	Saidpur (Bihar)
Sewerage works in sewerage District-F Phase-I in Allahabad City	Sewerage works in sewerage District-F Phase-I in Allahabad City	24 MLD Sewage Treatment Plant, Main Sewage Pumping Station, Intermediate Pumping Station Zone-3, sewerage Network of Zone-3	Bulandshahar Sewerage Project Package -2 Under AMRIT Program
Allahabad (Uttar Pradesh)	Allahabad (Uttar Pradesh)	Etah (Uttar Pradesh)	Bulandshahar (Uttar Pradesh)
Water Supply Distribution Network Improvement with house service connections and providing Sewer Network with STP	W.T.P 80 MLD Capacity along with related ancillary works	Sewage Treatment Plants	Sewage Treatment Plant of capacity 30MLD including MPS (45 MLD) and all appurtenant structures and allied works
Tonk (Rajasthan)	Unnao (Uttar Pradesh)	Mirzapur & Ghazipur, (Uttar Pradesh)	Munger (Bihar)

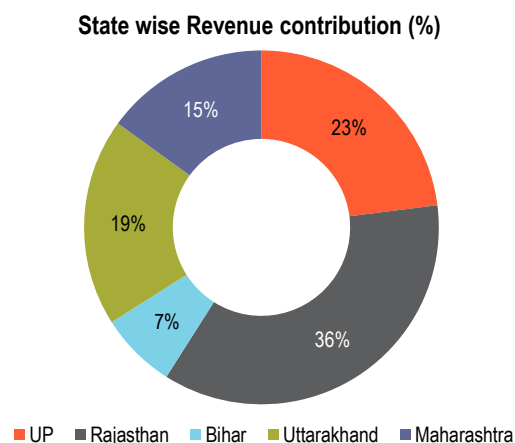
Source: Company PPT

**Fig 3 – Order book split between a) EPC and O&M b) water, building works and electrical T&D**


Source: Company PPT

**In-house design capabilities drive cost advantages and order wins:** EMS's in-house design and engineering team plays a pivotal role in both order acquisition and margin optimisation. Government tenders increasingly require bidders to submit detailed design proposals along with EPC bids — especially for STPs, reuse systems, and energy-efficient upgrades. An in-house design team allows EMS to respond faster, with more technically sound and cost-effective solutions, improving technical scoring in quality-cum-cost-based selection (QCBS) tenders.

**Scale aids in pre-qualification in large ticket size projects:** EMS's rapid scale-up over the past few years has significantly strengthened its ability to qualify for and execute large-ticket infrastructure projects in the water and wastewater segment. Strong revenue growth — a ~39% CAGR over FY22–25 — and successful delivery of complex STP and bundled projects across multiple states, now position it comfortably within the eligibility criteria for larger bids.

**Fig 4 – Revenue contribution by state – FY25**


Source: Company, BOBCAPS Research

**Diversified order execution beyond UP and Delhi-NCREMS** has successfully diversified its order book beyond its traditional base of Uttar Pradesh (UP) and Delhi–NCR and now has a strong presence across 5 water-stressed states, including Rajasthan, Madhya Pradesh, Bihar, and Haryana. This geographic expansion reduces concentration risk, enhances credibility for multi-state and centrally funded projects, and strategically positions the company as a nation-wide sewage treatment EPC player.

**Gaining capabilities with JV partners for advanced STP plants and HAM project:**

EMS has actively enhanced technical depth through JVs with specialist partners, enabling pursuing both advanced STP technologies and HAM (Hybrid Annuity Model) projects. For example, the company entered a JV with EMIT Group (Italy) to develop a Rs 3bn HAM-based STP project at Mirzapur-Ghazipur. This JV gives EMS access to capital annuity financing, the required equity strength, and long-term O&M know-how.

**Leveraging civil/ electrical construction in STP/ water infra :** EMS is strategically leveraging core expertise in civil and electrical construction—developed through years of executing STP and water infrastructure projects — to expand into adjacent verticals such as building works and electrical transmission & distribution (T&D). In-house capabilities in structural engineering, pipeline networks, control systems, and power integration for treatment plants provide a natural extension into government-funded civil infrastructure (e.g., hospitals, urban buildings) and utility-scale electrical projects. This diversification not only broadens the addressable opportunity set, but also enhances revenue visibility.

**40+ years of promoter experience in handling water infra projects:** With 40+ years of combined experience as an engineer and contractor, the company’s chairman brings deep domain expertise across government and private water projects. This blend of technical and on-ground experience enhances EMS’s strength in project design, regulatory navigation, and efficient execution. The company has recently strengthened leadership team by appointing a new CEO — an ex-official of the Jal Nigam and an IIT Gold Medalist.

## Water & sewerage infra riding structural tailwinds

**Aging water infrastructure driving the shift from conventional methods to methods with higher efficacy with lower environmental impact:** A significant portion of the country's sewage treatment assets are outdated, capacity constrained or non-compliant with evolving environmental norms. Many plants built during earlier infrastructure cycles now require either capacity augmentation, technology upgrades, or complete overhaul. This is triggering a multi-year replacement and rehabilitation cycle, supported by policy push from programs like AMRUT 2.0.

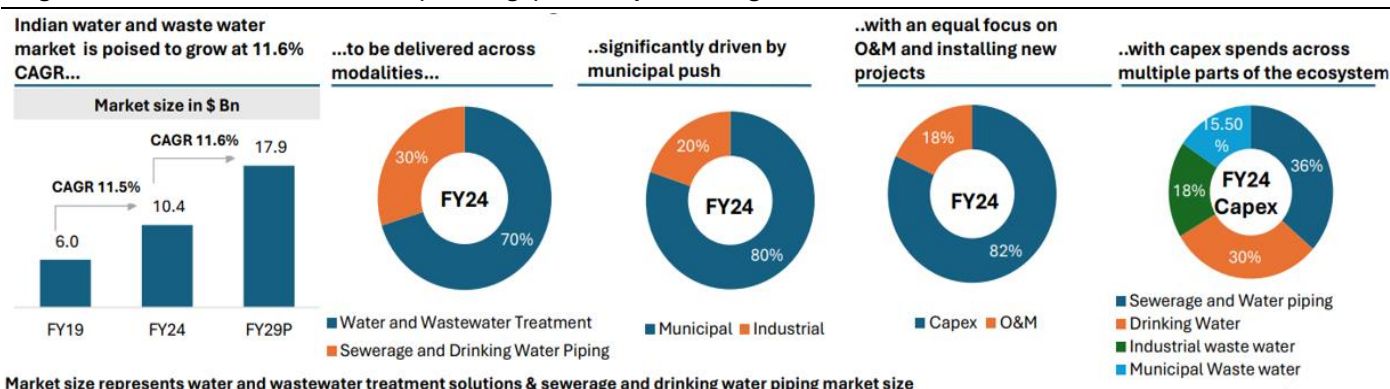
**Thrust on circular economy, alignment with UN SDG:** Globally rising emphasis on circular economy and United Nations Sustainable Development Goals (UN SDG) have taken a strong seat in the Government of India's urban policies in development. The SDG aligned policies (SDG 6 and SDG 13) now mandate the reuse of treated water for irrigation, industrial purpose, construction b) energy-efficient STP c) non-revenue water reduction and smart metering. Developing nations have high non-revenue water (water loss – generated but not billed), due to water theft. As per studies in the last 5-6 years, India's NRW stands high around 32-40%. Global benchmark for NRW is less than 15%.

**Policy and regulatory tailwinds:** Over the last 10 years, water infrastructure has witnessed significant policy support through various urban development and rejuvenation schemes such as AMRUT 1 and 2, Swachh Bharat 2.0 and river rejuvenation schemes such as Namami Gange, etc. Under the AMRUT scheme, government has outlined total outlay of Rs 3trn over FY22-26, with a central share of Rs 770bn.

**Fig 5 – Key government water schemes: launch timeline & budget allocations**

Scheme	Year Launched	Budgetary Allocation
Swachh Bharat Mission-Gramin	2014	Total allocation for 2023-24: Rs 50bn
Namami Gange	2014	Total allocation for 2014-21: Rs 200bn • Namami Gange Mission-II is approved with a budgetary outlay of Rs.22,500 crore till 2026
Jal Shakti Abhiyan	2019	Total allocation for 2024-25: ~Rs 210bn. • Central share: ~Rs 80bn • State share: ~Rs 130bn, including AIBP and CAD works
Jal Jeevan Mission	2019	Total allocation for 2024-25: ~Rs 700bn
Pradhan Mantri Krishi Sinchayee Yojna – Har Khet Ko Pani (PMKSY-HKPP)	2021	• Central support to states: Rs 374mn • Total scheme outlay: Rs 930bn
Ground Water Management and Regulation (GWMR)	2021	• Estimated budget for GWMR in 2024-25: Rs 3.3bn
Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0	2021	• Budget of Rs 3trn, for five years from FY22 to FY26
National Aquifer Mapping and Management (NAQUIM) revised	2022	• NAQUIM operates under the CGWB as part of the Ground Water Management and Regulation (GWM & R) Scheme, with a budget of Rs 325Cr

Source: Company, BOBCAPS Research

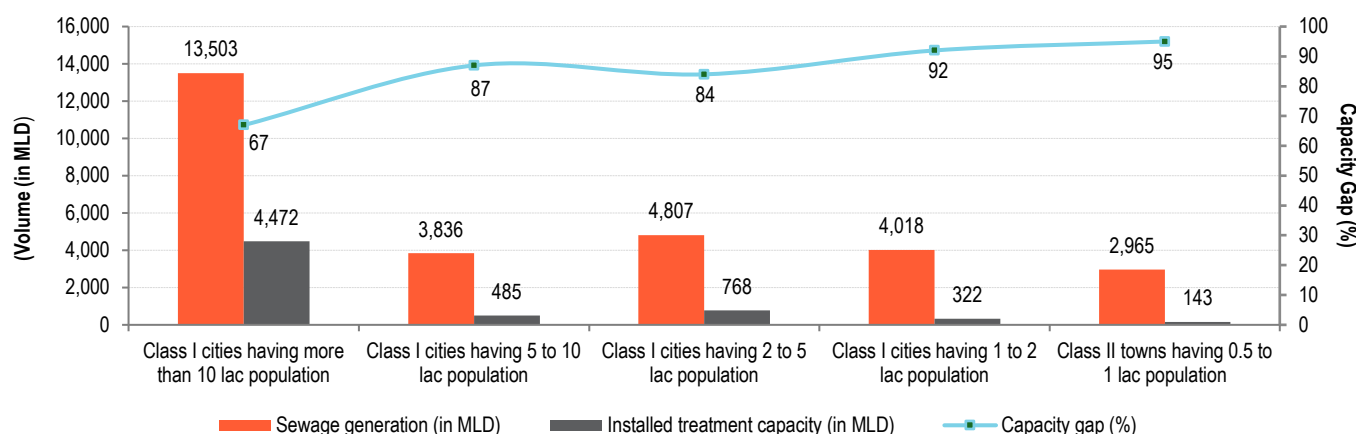
**Fig 6 – India water and wastewater (sewerage) market poised to grow at 11.6% CAGR**


**Substantial gap between sewage generation and treatment:** As per data from the Central Pollution Control Board (CPCB), India has the capacity to treat approximately only 44% of the total urban sewage generated, although only 37% of this capacity is operational. Only about 28% of the total sewage generated undergoes treatment. Of this, merely 17% is effectively treated to comply with prescribed discharge standards, indicating that approximately 83% of urban sewage in India remains untreated or inadequately treated.

**Fig 7 – Significant gap between sewage generation and treatment**

Sewerage treatment process	2020-21
Urban sewage generated (MLD)	72,638
Installed treatment capacity (MLD)	31,841
Capacity as % of generation	44
Operationalised capacity (MLD)	26,869
Operational capacity as % of installed/ generation	84/37
Utilised capacity (MLD)	20,235
Sewerage in treatment as % of operational/generation	75/28
Actual and compliant treatment (MLD)	12,197
Treated sewage as % of sewerage generated	17

Source: Company, BOBCAPS Research

**Fig 8 – More than 87% of sewage remains untreated in cities with 10 lac and below population**


Source: Industry, RHP, BOBCAPS Research

**Fig 9 – UP with the highest sewage generation and highest % of treatment, while 0 operational capacity in Bihar**

State	Sewage Generated (MLD)	Installed Capacity (MLD)	Operational Capacity (MLD)	% Treated (Op/Gen)
Uttar Pradesh	8,263	3,374	3,224	~39
Bihar	2,276	10	0	0
Madhya Pradesh	3,646	1,839	684	~19
Rajasthan	3,185	1,086	783	~25

Source: Company, BOBCAPS Research

**AMRUT 2.0 approaches peak execution – final leg order flows present last mile**

**opportunity:** As of Nov-24, AMRUT 2.0 has sanctioned projects worth Rs 1.9trn, out of the total mission outlay of Rs 3trn, with central assistance allocation of Rs 667bn. Of this, Rs 640bn has been formally approved for projects. Of the 8998 projects identified, 4916 contracts have been awarded, while 1198 projects remain at the DPR level and 2884 projects are yet to be tendered. On the fund flow, the centre funds remain slow as it has released Rs 118bn, while total utilisation by states including their own funding stands at Rs 171bn. Despite modest financial utilisation, physical execution equivalent to Rs 230bn of work has been completed. With AMRUT 2.0 set to conclude by Mar-26, the unawarded pipeline (1198 under DPR stage + 2884 yet to be awarded) presents a significant near-term order flow opportunity for EPC players, though the risk of spillover into future scheme remains.

**Fig 10 – Unawarded pipeline value of Rs 890bn under AMRUT 2.0 till Mar-26**

Particulars	Value / Count	Remarks
Total Mission Outlay	Rs 2.99 trillion	FY22–FY26 target
Total Sanctioned Projects	Rs 1.9 trillion	Includes Centre + State/ULB shares
Central Assistance Allocated	Rs 667.5 billion	Of this, Rs 640 billion formally approved
Projects Identified	8,998 projects	Across water supply, sewage laying and treatment
Projects Awarded (Contracts Signed)	4,916 projects (~Rs 1 trillion)	Already awarded
Projects at DPR Stage	1,198 projects	To be tendered post-DPR completion
Projects Yet to Be Tendered	2,884 projects	Direct bidding pipeline
Unawarded Pipeline Value	~Rs 890 billion	This is the remaining market opportunity
Centre's Fund Release (So Far)	Rs 118 billion	Disbursed to states
Total Funds Utilized by States (incl. own)	Rs 171 billion	Reflects execution gap
Work Completed (Physical Progress)	Rs 230 billion (Work-in-place)	Ahead of fund utilization

Source: Industry, PIB, BOBCAPS Research

**Fig 11 – Major opportunity in water supply infrastructure (Rs 550-600bn)**

Category	Opportunity (Rs bn)	% of Total
STP & Sewerage (EPC + O&M)	~Rs 140–196 bn	~16–22
Water Supply Infra	~Rs 550–600 bn	~65–70
Stormwater & Others	~Rs 100–150 bn	~12–15

Source: Industry estimates, BOBCAPS Research

**Fig 12 – Total unawarded opportunity for tier 2/3 cities EPC and O&M combined in STP projects (Rs 104bn)**

Parameter	Cost/MLD	Estimate
Unawarded Capacity		~2,800 MLD
EPC	Rs 20–25mn	Rs 70bn
O&M (10 years)	Rs 8m – Rs 12mn	Rs 34
Total Pipeline (EPC + O&M)		Rs 104bn

Source: Industry estimates, BOBCAPS Research



## Improving participation in high-entry barrier projects enhancing growth visibility

**EMS leveraging integrated capabilities in high-ticket water projects:** India's fragmented water and wastewater (sewerage) infra market favours small contractors for low-ticket jobs, but with the increasing project size and complexity, entry barriers increase as well. EMS is among the few players capable of executing large, bundled EPC + O&M contracts — a high-value niche with limited competition.

**Fig 13 – Water infra – project size vs execution depth**

Project Type	Typical Ticket Size	Number of Capable Players
Local water supply & pipes	Rs 100–300mn	300+ small contractors
STP + pumping combo	Rs 500mn– Rs 1.5bn	50–70 regional/national
Bundled EPC + O&M (5–10 yr)	Rs 1bn - Rs 5bn	10–15 national/regional
Specialized/PPP/Design-based	Rs 3bn– Rs 10bn	5–10 integrated players

Source: Company, BOBCAPS Research

**Post AMRUT 2.0, a substantial gap between generation and treatment to ensure growth visibility:** Post AMRUT 2.0, a substantial gap between sewage generation (~67,500 MLD) and treatment capacity (~38,580 MLD) remains, ensuring long-term growth visibility for water infra-EPC players. Despite significant capacity additions under AMRUT and Namami Gange, over 29,000 MLD of untreated sewage still flows into water bodies, creating a structural need for continued investments in STPs and sewerage infrastructure. This gap, particularly in urban India, underpins a steady pipeline of projects beyond the current scheme cycles.

**Fig 14 – Post-AMRUT 2.0, India's ~29,000 MLD capacity gap implies a Rs 700–720bn EPC opportunity**

Parameter	Remarks
Sewage generated (MLD)	67500 500mn urban population generating 135 ltrs/ day of wastewater
Pre AMRUT 2.0 capacity (MLD)	31841 Source CPCB data
Capacity added during AMRUT 2.0 (MLD)	6739 AMRUT 2.0 target
Total installed capacity post AMRUT 2.0 (MLD)	38580 Projected installed capacity post full completion 8998 projects
Installed capacity gap (MLD)	28920 Gap between generation and installed capacity post AMRUT 2.0
STP Cost/MLD (Rs mn)	25 Rs 25-30mn cost of a STP
EPC opportunity (Rs bn)	723 ~29000 MLD @ Rs 25mn/ MLD

Source: Industry estimates, BOBCAPS Research



## Financial Analysis

**Robust financial performance and strong order book pipeline:** Over the past 3 years (FY22–FY25), EMS Ltd has delivered a robust revenue / EBITDA / PAT CAGR of 39%/31%/33%, on superior execution quality of its order book. As of March 2025, the company's consolidated unexecuted order book stands at Rs 22.4bn (vs revenue of Rs 9.6bn in FY25), comprising 27 active EPC contracts, including 12 bundled projects with integrated O&M scope.

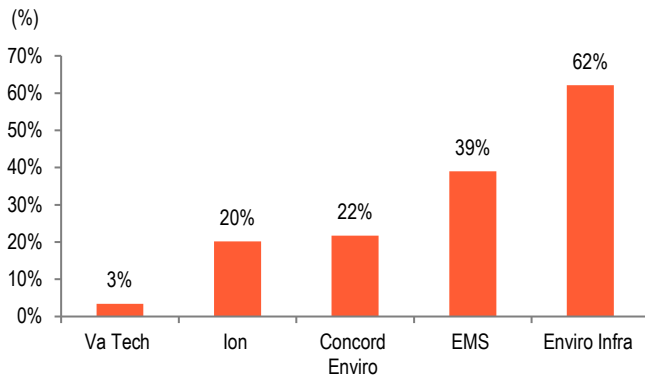
**Industry-leading operating margin:** EMS enjoys an industry-leading EBITDA margin of 26% vs peer margins ranging from 11% to 25%, driven by its cost advantage from an in-house design team. However, margins have seen some contraction in recent years due to rising competitive intensity in select projects.

**Strong balance sheet position:** EMS reported a net cash position of Rs 750mn as of Mar-25, translating to a net debt-to-equity ratio of -0.1x. This reflects a healthy cash flow generation and improved working capital efficiency.

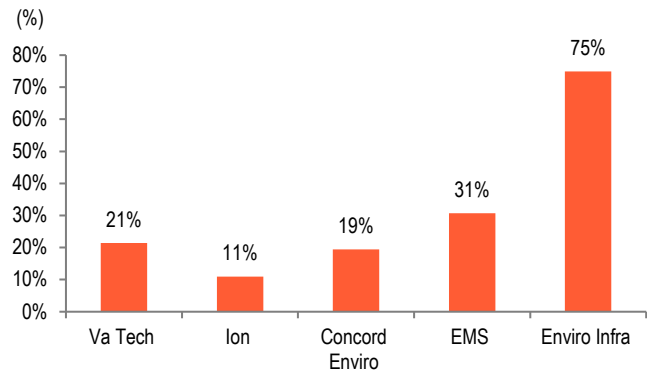
**Fig 15 – Financial snapshot**

Particulars (Rs mn)	FY22	FY23	FY24	FY25	3yr CAGR (%)
Revenue	3,599	5,382	7,933	9,658	39
EBITDA	1,127	1,500	2,038	2,512	31
EBITDA Margin (%)	31.3	27.9	25.7	26.0	
EBIT	1,102	1,466	1,973	2,415	
PBT	1,077	1,479	2,068	2,490	
Tax	288	390	541	652	
Reported PAT	789	1,077	1,524	1,835	33
PAT Margin (%)	21.9	20.0	19.2	19.0	
EPS (Rs)	67.1	22.9	29.4	33.1	
Total Assets	5048	6390	9702	11653	
Gross Debt	38	454	707	860	
Cash & cash equivalents	899	1,212	1,114	1,617	
Net Debt	(861)	(758)	(407)	(757)	
Networth	3,829	4,907	7,981	9,757	
Net Debt/ equity	(0.2)	(0.2)	(0.1)	(0.1)	
Receivables	1,164	1,235	2,426	3,768	
days	118	84	112	142	
Inventories	541	1,048	886	481	
days	55	71	41	18	
Payables	430	154	81	146	
days	44	10	4	6	
Net working capital	1,275	2,129	3,232	4,103	
days	129	144	149	155	
Operating Cash Flow	174	42	(1,159)	335	
Capex	(13)	(78)	(239)	(61)	
Free Cash Flow	159	(144)	(1,941)	590	
ROE (%)	20.6	21.9	19.1	18.8	
ROCE (%)	28.6	27.3	22.7	22.8	
Dupont					
Asset turnover	0.7	0.8	0.8	0.8	
Financial leverage (A/E)	1.3	1.3	1.2	1.2	
PAT margin (%)	21.7	20.0	19.2	19.0	
ROE (%)	20.6	21.9	19.1	18.8	

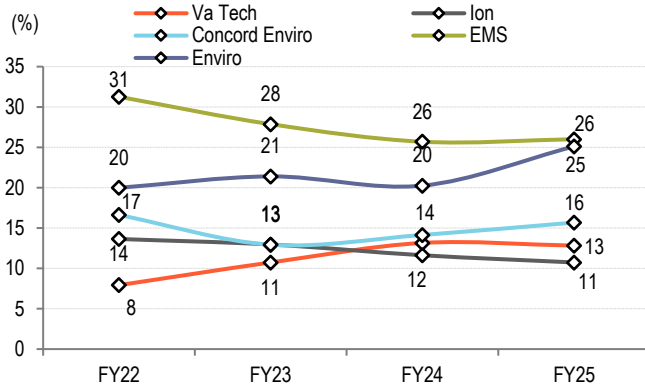
Source: Company, BOBCAPS Research

**Fig 16 – EMS delivered 39% revenue CAGR over FY22-25**

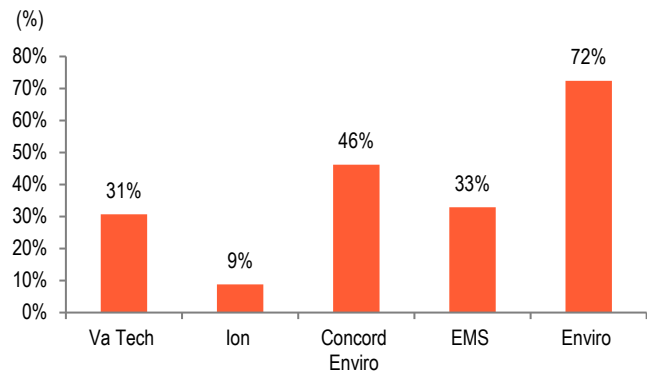
Source: Company, BOBCAPS Research

**Fig 17 – 31% EBITDA CAGR over FY22-25**

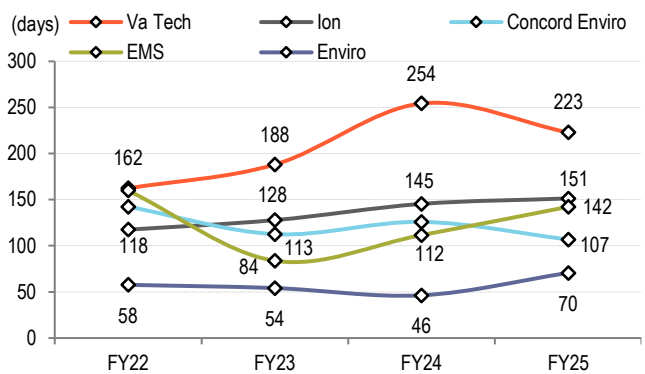
Source: Company, BOBCAPS Research

**Fig 18 – Industry-leading EBITDA margin of 26% in FY25**

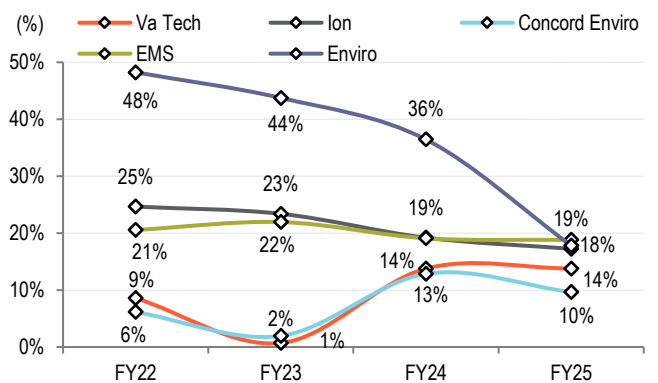
Source: Company, BOBCAPS Research

**Fig 19 – 33% PAT CAGR for EMS over FY22-25**

Source: Company, BOBCAPS Research

**Fig 20 – Receivable Days**

Source: Company, BOBCAPS Research

**Fig 21 – ROE of 19% in FY25**

Source: Company, BOBCAPS Research

NOT FOR DISTRIBUTION, DIRECTLY OR INDIRECTLY, IN OR INTO THE UNITED STATES OF AMERICA ("US") OR IN OR INTO ANY OTHER JURISDICTION IF SUCH AN ACTION IS PROHIBITED BY APPLICABLE LAW.

## Disclaimer

Name of the Research Entity: **BOB Capital Markets Limited**

Registered office Address: **1704, B Wing, Parinee Crescenzo, G Block, BKC, Bandra East, Mumbai 400051**

SEBI Research Analyst Registration No: **INH0000000040 valid till 03 February 2025**

Brand Name: **BOBCAPS**

Trade Name: **www.barodaetrade.com**

CIN: **U65999MH1996GOI098009**



Investments in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

### Recommendation scale: Recommendations and Absolute returns (%) over 12 months

**BUY** – Expected return >+15%

**HOLD** – Expected return from -6% to +15%

**SELL** – Expected return <-6%

**Note:** Recommendation structure changed with effect from 21 June 2021

Our recommendation scale does not factor in short-term stock price volatility related to market fluctuations. Thus, our recommendations may not always be strictly in line with the recommendation scale as shown above.

### Analyst certification

The research analyst(s) authoring this report hereby certifies that (1) all of the views expressed in this research report accurately reflect his/her personal views about the subject company or companies and its or their securities, and (2) no part of his/her compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) in this report. Analysts are not registered as research analysts by FINRA and are not associated persons of BOB Capital Markets Limited (BOBCAPS).

### General disclaimers

BOBCAPS is engaged in the business of Stock Broking and Investment Banking. BOBCAPS is a member of the National Stock Exchange of India Limited and BSE Limited and is also a SEBI-registered Category I Merchant Banker. BOBCAPS is a wholly owned subsidiary of Bank of Baroda which has its various subsidiaries engaged in the businesses of stock broking, lending, asset management, life insurance, health insurance and wealth management, among others.

BOBCAPS's activities have neither been suspended nor has it defaulted with any stock exchange authority with whom it has been registered in the last five years. BOBCAPS has not been debarred from doing business by any stock exchange or SEBI or any other authority. No disciplinary action has been taken by any regulatory authority against BOBCAPS affecting its equity research analysis activities.

BOBCAPS is also a SEBI-registered intermediary for the broking business having SEBI Single Registration Certificate No.: INZ000159332 dated 20 November 2017.

BOBCAPS prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, BOBCAPS prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover.

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additionally, other important information regarding our relationships with the company or companies that are the subject of this material is provided herein.

This material should not be construed as an offer to sell or the solicitation of an offer to buy any security in any jurisdiction. We are not soliciting any action based on this material. It is for the general information of BOBCAPS's clients. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, clients should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice. BOBCAPS research reports follow rules laid down by Securities and Exchange Board of India and individuals employed as research analysts are separate from other employees who are performing sales trading, dealing, corporate finance advisory or any other activity that may affect the independence of its research reports.

The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur. BOBCAPS does not provide tax advice to its clients, and all investors are strongly advised to consult with their tax advisers regarding any potential investment in certain transactions — including those involving futures, options, and other derivatives as well as non-investment-grade securities — that give rise to substantial risk and are not suitable for all investors. The material is based on information that we consider reliable, but we do not represent that it is accurate or complete, and it should not be relied on as such. Opinions expressed are our current opinions as of the date appearing on this material only. We endeavour to update on a reasonable basis the information discussed in this material, but regulatory, compliance, or other reasons may prevent us from doing so.

We and our affiliates, officers, directors, and employees, including persons involved in the preparation or issuance of this material, may from time to time have "long" or "short" positions in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein and may from time to time add to or dispose of any such securities (or investment). We and our affiliates may assume an underwriting commitment in the securities of companies discussed in this document (or in related investments), may sell them to or buy them from customers on a principal basis, and may also perform or seek to perform investment banking or advisory services for or relating to these companies and may also be represented in the supervisory board or any other committee of these companies.

For the purpose of calculating whether BOBCAPS and its affiliates hold, beneficially own, or control, including the right to vote for directors, one per cent or more of the equity shares of the subject company, the holdings of the issuer of the research report is also included.

BOBCAPS and its non-US affiliates may, to the extent permissible under applicable laws, have acted on or used this research to the extent that it relates to non-US issuers, prior to or immediately following its publication. Foreign currency denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of or income derived from the investment. In addition, investors in securities such as ADRs, the value of which are influenced by foreign currencies, effectively assume currency risk. In addition, options involve risks and are not suitable for all investors. Please ensure that you have read and understood the Risk disclosure document before entering into any derivative transactions.

No part of this material may be (1) copied, photocopied, or duplicated in any form by any means or (2) redistributed without BOBCAPS's prior written consent.

### Company-specific disclosures under SEBI (Research Analysts) Regulations, 2014

The research analyst(s) or his/her relatives do not have any material conflict of interest at the time of publication of this research report.

BOBCAPS or its research analyst(s) or his/her relatives do not have any financial interest in the subject company. BOBCAPS or its research analyst(s) or his/her relatives do not have actual/beneficial ownership of one per cent or more securities in the subject company at the end of the month immediately preceding the date of publication of this report.

The research analyst(s) has not received any compensation from the subject company or third party in the past 12 months in connection with research report/activities. Compensation of the research analyst(s) is not based on any specific merchant banking, investment banking or brokerage service transactions.

BOBCAPS or its research analyst(s) is not engaged in any market making activities for the subject company.

The research analyst(s) has not served as an officer, director or employee of the subject company.

BOBCAPS or its associates may have material conflict of interest at the time of publication of this research report.

BOBCAPS's associates may have financial interest in the subject company. BOBCAPS's associates may hold actual / beneficial ownership of one per cent or more securities in the subject company at the end of the month immediately preceding the date of publication of this report.

BOBCAPS or its associates may have managed or co-managed a public offering of securities for the subject company or may have been mandated by the subject company for any other assignment in the past 12 months.

BOBCAPS may have received compensation from the subject company in the past 12 months. BOBCAPS may from time to time solicit or perform investment banking services for the subject company. BOBCAPS or its associates may have received compensation from the subject company in the past 12 months for services in respect of managing or co-managing public offerings, corporate finance, investment banking or merchant banking, brokerage services or other advisory services in a merger or specific transaction. BOBCAPS or its associates may have received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past 12 months.

#### **Other disclaimers**

BOBCAPS and MAYBANK (as defined below) make no representation or warranty, express or implied, as to the accuracy or completeness of any information obtained from third parties and expressly disclaim the merchantability, suitability, quality and fitness of this report. The information in this report has not been independently verified, is provided on an "as is" basis, should not be relied on by you in connection with any contract or commitment, and should not be used as a substitute for enquiries, procedures and advice which ought to be undertaken by you. This report also does not constitute an offer or solicitation to buy or sell any securities referred to herein and you should not construe this report as investment advice. All opinions and estimates contained in this report constitute BOBCAPS's judgment as of the date of this report and are subject to change without notice, and there is no obligation on BOBCAPS or MAYBANK to update this report upon issuance. This report and the information contained herein may not be reproduced, redistributed, disseminated or copied by any means without the prior consent of BOBCAPS and MAYBANK.

To the full extent permitted by law neither BOBCAPS, MAYBANK nor any of their respective affiliates, nor any other person, accepts any liability howsoever arising, whether in contract, tort, negligence, strict liability or any other basis, including without limitation, direct or indirect, special, incidental, consequential or punitive damages arising from any use of this report or the information contained herein. By accepting this report, you agree and undertake to fully indemnify and hold harmless BOBCAPS and MAYBANK from and against claims, charges, actions, proceedings, losses, liabilities, damages, expenses and demands (collectively, the "Losses") which BOBCAPS and/or MAYBANK may incur or suffer in any jurisdiction including but not limited to those Losses incurred by BOBCAPS and/or MAYBANK as a result of any proceedings or actions brought against them by any regulators and/or authorities, and which in any case are directly or indirectly occasioned by or result from or are attributable to anything done or omitted in relation to or arising from or in connection with this report.

#### **Distribution into the United Kingdom ("UK"):**

This research report will only be distributed in the United Kingdom, in accordance with the applicable laws and regulations of the UK, by Maybank Securities (London) Ltd ("MSL") who is authorised and regulated by the Financial Conduct Authority ("FCA") in the United Kingdom (MSL and its affiliates are collectively referred to as "MAYBANK"). BOBCAPS is not authorized to directly distribute this research report in the UK.

This report has not been prepared by BOBCAPS in accordance with the UK's legal and regulatory requirements.

This research report is for distribution only to, and is solely directed at, selected persons on the basis that those persons: (a) are eligible counterparties and professional clients of MAYBANK as selected by MAYBANK solely at its discretion; (b) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended from time to time (the "Order"); or (c) fall within Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc. as mentioned in the stated Article) of the Order; (all such persons together being referred to as "relevant persons").

This research report is directed only at relevant persons and must not be acted on or relied on by any persons who are not relevant persons. Any investment or investment activity to which this material relates is available only to relevant persons and will be engaged in only with relevant persons.

The relevant person as recipient of this research report is not permitted to reproduce, change, remove, pass on, distribute or disseminate the data or make it available to third parties without the written permission of BOBCAPS or MAYBANK. Any decision taken by the relevant person(s) pursuant to the research report shall be solely at their costs and consequences and BOBCAPS and MAYBANK shall not have any liability of whatsoever nature in this regard.

#### **No distribution into the US:**

This report will not be distributed in the US and no US person may rely on this communication.

#### **Other jurisdictions:**

This report has been prepared in accordance with SEBI (Research Analysts) Regulations and not in accordance with local regulatory requirements of any other jurisdiction. In any other jurisdictions, this report is only for distribution (subject to applicable legal or regulatory restrictions) to professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions by Maybank Securities Pte Ltd. (Singapore) and / or by any broker-dealer affiliate or such other affiliate as determined by Malayan Banking Berhad.

If the recipient of this report is not as specified above, then it should not act upon this report and return the same to the sender.

By accepting this report, you agree to be bound by the foregoing limitations.