CONSTRUCTION FEDERATION OF INDIA

NEWSLETTER

CONSTRUCTION INFRASTRUCTURE UPDATES

WEDNESDAY, JANUARY 28, 2026

^ TOP

CFI is now on social media! We'd love your support in increasing our visibility. Please take a moment to like and share our posts. Your engagement will certainly help us reach more people! Check us out here: **CFI LinkedIn**.

Thank you for your support!

- Technology for sustainability: The future of infrastructure in India
- Need stronger arbitral institutions for infrastructure sector: Supreme Court judge
- From LNG And Refining To Deep-Sea Exploration, PM Modi Lays Out India's Energy Independence Strategy During India Energy Week 2026
- Titagarh And ABB Join Hands To Build Indigenous Propulsion Systems For Driverless Metros
- Bengaluru-Hyderabad Highway To Get 10-Lane Upgrade As Part Of New Vijayawada Expressway Project: Report
- Puducherry To Get New 4 Km Flyover And Major Road Expansion With Rs 437 Crore Central Support, Says Lt Governor Kailashnathan

CONSTRUCTION FEDERATION OF INDIA

- Mira–Bhayander Flyover Row: MMRDA Defends Design After Video Goes Viral Alleging Faulty Planning

Technology for sustainability: The future of infrastructure in India

Construction Week Online,
January 08, 2026

Robert Demann, Head of Smart Infrastructure at Siemens India, discusses how technology is reshaping sustainable infrastructure development.

India's infrastructure sector is on the cusp of a digital and sustainable revolution – a pivotal moment. As the nation accelerates its urbanisation and industrial growth, the pressure to build sustainably has never been greater. Technology is rapidly transforming how we design, construct, and operate buildings, campuses, and cities—making sustainability a practical reality. In this exclusive Q&A, *Construction Week* speaks with **Robert Demann**, Head of Smart Infrastructure, Siemens India, to explore how artificial intelligence, digitalisation, automation, and smart solutions are reshaping the future of Indian infrastructure. Technology is the key enabler—unlocking efficiency, resilience, and environmental stewardship. For builders, contractors, consultants, and developers, embracing smart infrastructure is not just a strategic choice but also a responsibility towards future generations.

Why is sustainability such a critical focus for India's infrastructure sector today?

India's infrastructure is growing at an unprecedented pace. Yet, the nation continues to face constraints in resources – human, financial, and time. Striking a balance between the rising demand for a better quality of life and these limitations is critical, and this balance must be achieved sustainably. With this growth comes a responsibility—to ensure that our buildings, factories, campuses, and cities are both functional and environmentally responsible and resilient. Sustainability is no longer a 'nice-to-have'; it's a business imperative. Regulatory requirements, investor expectations, and customer demand are all driving the need for greener, more efficient infrastructure. The good news is that technology now enables us to decarbonise, optimise resource use, and create healthier environments at scale. Technology enables us to achieve this by allowing digital modelling and simulation, which helps optimise resources – materials, manpower, and finances—before execution in the physical world.

What are the biggest challenges Indian infrastructure faces in becoming more sustainable?

The challenges are multilayered. First, there's the sheer scale—India's infrastructure must serve a billion-plus population. Second, legacy systems and fragmented operations make it difficult to track and optimise energy and resource use. Third, financing and ROI concerns often slow down the adoption of new technologies. Finally, there's a skills gap: we need more professionals trained in digital and sustainable practices. Overcoming these challenges calls for a holistic approach – integrating technology, financing, and capacity building. Creating a digital or virtual model first allows us to optimise resources before moving to physical implementation.

How is digitalisation changing the way infrastructure projects are planned and operated in India?

Digitalisation is a game-changer. With tools like Building Information Modelling (BIM), digital twins, and IoT-enabled sensors, we can simulate, monitor, and optimise every aspect of a building or campus—from energy flows to occupancy patterns. For example, Siemens' Building X platform allows real-time monitoring of energy, water, and carbon emissions across entire portfolios. This data-driven approach helps owners and operators identify inefficiencies, benchmark performance, and make informed decisions that drive sustainability and cost savings. Siemens PSS®E software is enabling seamless integration of renewable energy into India's power grid, ensuring stability, reliability, and optimised performance for a sustainable future.

Can you share examples of smart technologies that are making Indian infrastructure more sustainable?

Absolutely. Here are a few:

· **Microgrids and on-site renewables:** Siemens' microgrid solutions enable campuses and industrial parks to generate, store, and manage their own renewable energy, reducing dependence on the grid and improving resilience.

· **Smart building automation:** Platforms like building management systems and integrated command and control centres integrate HVAC, lighting, security, and fire safety systems, optimising energy use and indoor air quality.

· **Thermal optimisation:** AI-driven cooling solutions, such as white space cooling optimisation for data centres, can cut energy consumption by up to 40%.

· **Digital twins:** These virtual models allow us to simulate building performance, test 'what-if' scenarios, and optimise designs before construction begins.

· **EV charging infrastructure:** Siemens supports the rollout of electric vehicle charging stations, helping campuses and commercial buildings reduce transport emissions. Using Electrification X allows Aral pulse, BP's German brand, to centrally operate, optimise and secure Aral charging stations with ultra-fast electric vehicle charging technology.

How do these technologies impact the bottom line for developers, contractors, and building owners?

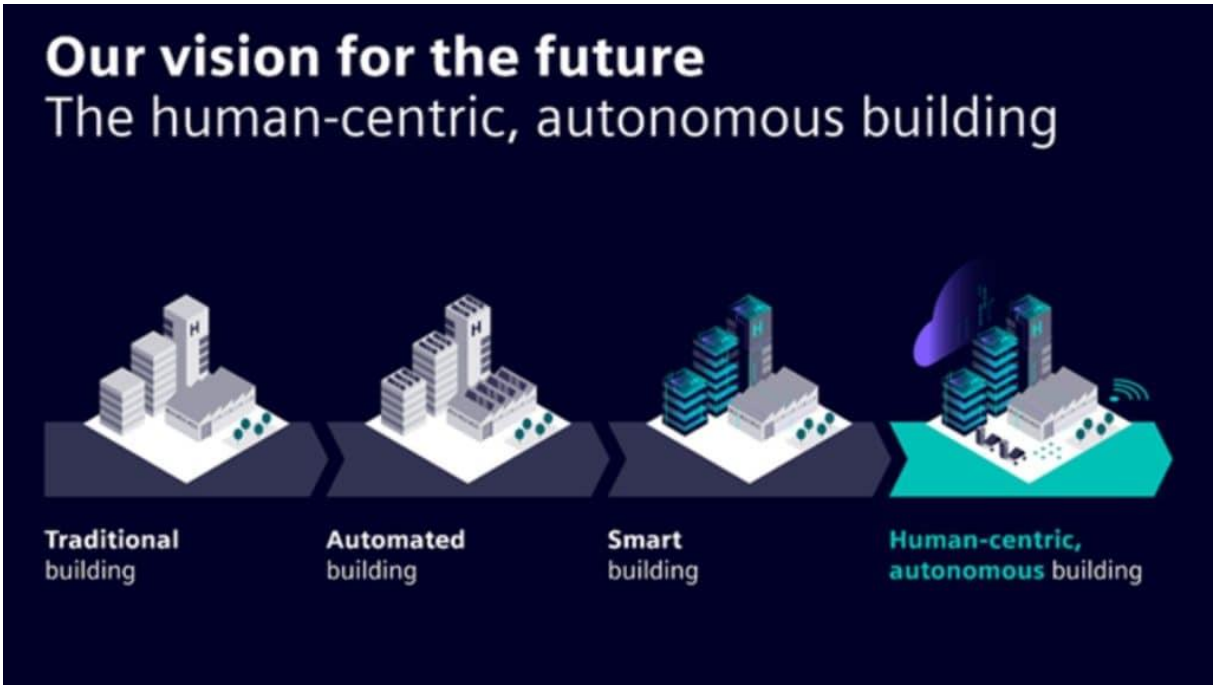
The impact is significant. Smart infrastructure solutions can reduce operational costs by 20–30%, lower energy consumption by up to 40%, and improve asset reliability and uptime. For developers, this means higher property values and easier compliance with green building standards. For contractors, integrated digital platforms streamline project delivery and reduce rework. For owners, predictive maintenance and real-time monitoring minimise downtime and extend equipment life. Sustainability is about balancing the need to save the planet with building better business outcomes.

What role does financing play in accelerating sustainable infrastructure adoption?

Financing can play a critical role. Where customers are faced with similar needs, Siemens offers tailored solutions—such as energy-as-a-service, performance contracting, managed service agreements, and flexible models like pay-as-you-use and pay-as-you-save—that allow organisations to invest in sustainable technologies without heavy upfront costs. These models tie payments to actual savings or usage, making the business case for sustainability easier to implement. We also help clients navigate government incentives and green funding opportunities.

How can India's infrastructure sector leverage digital twins and data analytics for ongoing sustainability?

Digital twins are revolutionising asset management. By creating a virtual replica of a building or campus, operators can simulate energy flows, predict equipment failures, and optimise maintenance schedules. Data analytics platforms aggregate information from sensors, meters, and control systems, providing actionable insights. For example, our NXpower Monitor and SENTRON power manager enable facilities to track energy consumption, identify peak loads, and benchmark sustainability KPIs. This continuous feedback loop drives ongoing improvement and ensures compliance with ESG goals. Standardised data collection further unlocks AI-driven insights for faster, smarter decision-making—paving the way towards human centric, autonomous infrastructure.



What are the most promising trends in sustainable infrastructure for the next decade?

Technology is changing at an unprecedented speed and offering outcomes that previously seemed impossible. For example, using AI, data centres can cut their HVAC energy costs by half! Many of these can be pivotal in making infrastructure greener and smarter.

Several trends stand out:

· **Net-zero buildings and campuses:** The push for net-zero energy and carbon is accelerating, with digitalisation and renewables at the core.

· **Circularity and resource efficiency:** More projects are focusing on material reuse, recycling, and lifecycle assessments.

· **AI and predictive maintenance:** Artificial intelligence is being used to optimise building operations, forecast demand, and prevent failures.

· **Integrated mobility:** EV charging, smart parking, and e-mobility solutions are becoming standard features in new developments.

· **Flexible financing models:** Energy-as-a-service and outcome-based contracts will make sustainability accessible to more stakeholders.

· **Autonomous buildings and grids:** Intelligent systems powered by IoT, AI, and edge computing are enabling self-optimising buildings and grids that learn, adapt, and operate with minimal human intervention—enhancing resilience, efficiency, and sustainability.

Siemens is deeply committed to India's sustainability goals, combining global expertise with local insights across projects—from smart campuses to industrial parks, data centres, transportation, and healthcare. Our open, interoperable digital platform, Siemens Xcelerator, accelerates digital transformation and fosters innovation. We collaborate with government, industry, and academia to build capacity and deliver future-ready solutions. By transforming our own infrastructure first, we lead by example. Ultimately, our mission is to help India build infrastructure that is smart, sustainable and inclusive.

What advice would you give to builders, contractors, and consultants looking to future-proof their projects?

Start with a clear vision for optimising resources and understanding how digitalisation can make your operations faster, more efficient, and higher in quality. Then, map that vision to your business objectives. Invest in digital tools and platforms that deliver transparency and control. Collaborate with technology partners offering end-to-end solutions, from design to operation. And don't overlook financing—explore models such as pay-as-you-use and pay-as-you-save that align payments with realised savings. The future belongs to those who build with purpose, agility, and a commitment to sustainability.

There's growing interest in the human-centric aspects of autonomous buildings. Why should each stakeholder—owners, occupants, and operators—be excited about the future of buildings and their partnership with Siemens?

Technology is one part of the future of buildings, but people are indeed at the centre of it. Every stakeholder stands to benefit in unique ways:

· **Owners** gain peace of mind and efficiency. Autonomous buildings powered by Siemens' platforms deliver real-time insights, predictive maintenance, and optimised energy use, translating into cost savings and higher asset value.

· **Occupants** enjoy healthier, safer, and more responsive environments. With real-time feedback and adaptive systems, buildings automatically adjust lighting, air quality, and temperature to actual needs—enhancing comfort and well-being. This creates a more productive experience for occupants while ensuring efficient use of time and resources.

· **Operators and Service Providers** see dramatic improvements in reliability and uptime.

Automation fills labor and skill gaps, streamlines operations, and enables remote management, allowing teams to focus on what matters most.

How do autonomous buildings ensure that people remain at the centre of decision-making, rather than losing control to technology?

1. **Human-Centric Design:** Autonomous buildings are designed to learn individual preferences and behavioral patterns, creating personalised environments for occupants. This means technology adapts to people, not the other way around.

2. **Human-in-the-Loop:** While AI and automation handle routine tasks and optimise building operations, humans always retain ultimate control. Facility managers, owners, and occupants can set parameters, prioritise use cases, and override automated decisions when needed. Manual override options and transparent interfaces are built in to ensure people can intervene at any time.

3. **Empowering, Not Replacing:** The goal of autonomy is to free people from repetitive tasks, allowing them to focus on higher-value activities and strategic decisions. For example, AI highlights critical issues and suggests solutions, but facility teams validate insights and tailor responses. This partnership between humans and technology creates a virtuous cycle of learning and improvement.

4. **Continuous Feedback:** Occupants can provide feedback on comfort, air quality, and space utilisation, which the system uses to adapt in real time. This ensures that the building environment continuously aligns with human needs and preferences.

5. **Transparency and Trust:** Siemens emphasises that autonomy is not about removing people from the picture, but about empowering them with smarter tools and more comfortable, productive environments. Most organisations prefer to maintain supervisory control, approving actions before they are taken.

In summary, autonomous buildings by Siemens are intentionally designed to keep people in control, using technology as an enabler to enhance comfort, efficiency, and decision-making—never to replace human judgment.

^ TOP

Need stronger arbitral institutions for infrastructure sector: Supreme Court judge

The Hindu Business Line,
January 28, 2026

Justice Bindal warned about challenges posed by AI in arbitration and litigation, including fabricated evidence, non-existent judgments, and confidentiality risks on open AI platforms.

Supreme Court judge Justice Rajesh Bindal has underlined the need for strong arbitral institutions, stating that the country's booming infrastructure sector requires expert involvement and problem-solving approaches to prevent disputes from stalling projects.

Speaking at the 5th Biennial International Conference on Construction Law and Arbitration organised by the Society of Construction Law in New Delhi on Friday (December 5, 2025), Justice Bindal said construction law is a highly specialised field.

He said the rapid growth of India's infrastructure, including power, roads, metro, ports and dams, has naturally increased disputes.

"Activity is increasing, so a percentage of disputes will go up — some genuine, some creative. We should solve them at each stage, instead of taking the entire dispute to the end and stalling the project," Justice Bindal said.

He endorsed institutional arbitration in construction disputes to combat its current issues of inflated costs and delayed proceedings by ensuring the availability of technical experts, proper record-keeping, and structured case management.

He also stressed contract drafting as a key area for reducing disputes. "The best form of agreement is where all relevant laws and terms are incorporated in a single document, avoiding overlaps and pathological clauses," he said.

Justice Bindal warned about challenges posed by Artificial Intelligence (AI) in arbitration and litigation, including fabricated evidence, non-existent judgments, and confidentiality risks on open AI platforms.

Speaking at the event, Attorney General R. Venkataramani called for dedicated legislation for the construction sector, underlining its current fragmented nature.

He urged law schools to play a larger role in shaping the future of construction law and regulatory frameworks.

Delhi High Court judge Justice Tejas Karia highlighted the rapid evolution and complexity of India's infrastructure sector and emphasised the need for specialised dispute resolution frameworks.

"The future of construction disputes is clear. It will be faster, more data driven and more technology supported. It will be less adversarial and more collaborative. It will rely on early resolution structures and enforcement. If we build a dispute resolution system that is clear, predictable, economically enabled and globally trusted, we can position India as a hub for infrastructure arbitration," he said.

Lalit Bhasin, president of the Society of Indian Law Firms, highlighted weaknesses in the current system in the country, saying that litigation "has virtually failed" to resolve construction disputes and that arbitration has struggled because "we do not have good and strong arbitral institutions that would inspire confidence among the disputing parties."

Stressing the need to revive India's traditional approach to harmony, he said, "The only way out appears to be settling disputes within the arbitration framework, a pre-stage of consensual resolution."

^ TOP

From LNG And Refining To Deep-Sea Exploration, PM Modi Lays Out India's Energy Independence Strategy During India Energy Week 2026

Swarajya,
January 28, 2026

Prime Minister Narendra Modi on Tuesday (27 January) said India has positioned itself as a major destination for global energy investments, stressing that the country is steadily transitioning from the goal of energy security to the broader ambition of energy independence.

Addressing the inaugural session of India Energy Week 2026 via video conference, Modi noted that delegates from nearly 125 countries had assembled in Goa to discuss pathways towards a secure and sustainable energy future.

He said the event had quickly grown into a significant global forum for dialogue, collaboration and action in the energy sector.

Highlighting India's rapid economic expansion, the Prime Minister said rising domestic energy demand also creates opportunities for global partners.

He pointed out that India ranks among the world's top five exporters of petroleum products, supplying energy to more than 150 countries, and said this capacity makes India a reliable partner in a volatile global market.

Referring to trade and economic integration, Modi described the forthcoming India–European Union Free Trade Agreement as the "mother of all deals".

He said the agreement would showcase unprecedented coordination between two major economies and would together account for nearly a quarter of global GDP and about one-third of global trade.

The FTA, he added, would complement India's recent trade pacts with the UK and EFTA nations, strengthen supply chains and boost manufacturing and services. He said sectors such as textiles, gems and jewellery, leather and footwear stood to gain significantly.

Turning to energy sector reforms, Modi said India offers opportunities across the entire value chain.

He highlighted exploration reforms and the Samudra Manthan Mission, under which India aims to attract $100 billion in oil and gas investments by the end of the decade and expand exploration coverage to one million square km.

Over 170 exploration blocks have already been awarded, with the Andaman and Nicobar basin emerging as a key focus area.

The Prime Minister also underlined India's growing refining strength, noting that the country is currently the world's second-largest refiner and is on track to become the largest, with capacity expected to exceed 300 million metric tonnes per annum.

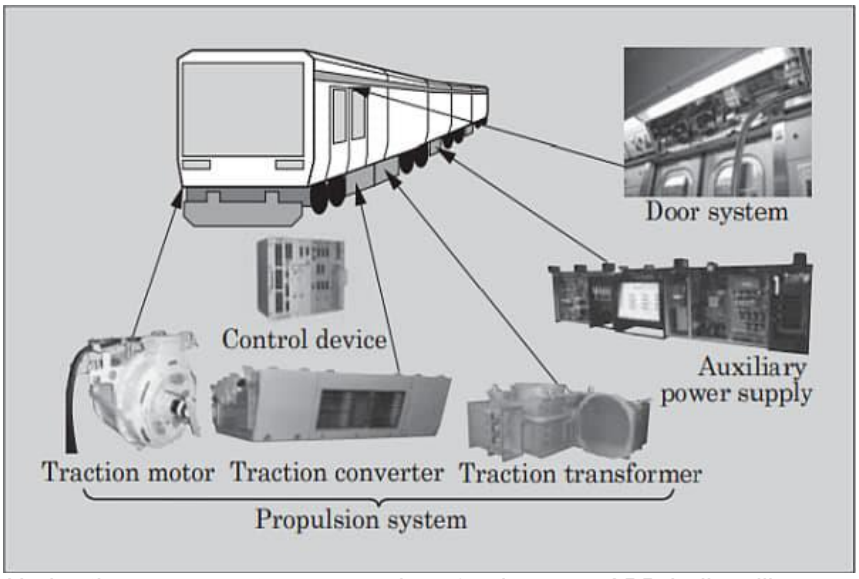
On LNG, he said India is targeting 15 per cent of its energy demand from gas and is investing heavily in terminals, pipelines, city gas networks and a Rs 70,000 crore shipbuilding programme.

"India is now moving beyond energy security towards the mission of energy independence," Modi said, adding that the sector offers investment opportunities worth $500 billion. He concluded by urging global investors to "Make in India, Innovate in India, Scale with India, Invest in India."

^ TOP

Titagarh And ABB Join Hands To Build Indigenous Propulsion Systems For Driverless Metros

Swarajya,
January 28, 2026



Under the agreement announced on 27 January, ABB India will support the end-to-end lifecycle of propulsion systems for high-voltage metro applications. (Pic Credit: EDN Network)

Under the agreement announced on 27 January, ABB India will support the end-to-end lifecycle of propulsion systems for high-voltage metro applications. (Pic Credit: EDN Network) Titagarh Rail Systems Ltd (TRSL) has entered into a strategic partnership with ABB India Ltd to develop advanced propulsion systems and facilitate technology transfer for 25 kV driverless metro projects.

Under the agreement announced on 27 January, ABB India will support the end-to-end lifecycle of propulsion systems for high-voltage metro applications.

This includes design, manufacturing support, supply, testing, installation supervision and commissioning. Crucially, the collaboration also covers the transfer of technology for the Train Control and Monitoring System (TCMS), a core digital brain of modern metro trains.

The TCMS to be developed under the partnership will initially operate at Grade of Automation 2 (GoA2) and will be upgradeable to GoA4 standards, enabling fully driverless operations in the future.

This capability aligns with the growing adoption of automated metro systems across major Indian cities.

A key component of the agreement is the phased transfer of manufacturing and co-production of converters and traction motors for metro projects commissioned by the Mumbai Metropolitan Region Development Authority (MMRDA).

Titagarh has already secured an order to supply 240 metro coaches — 132 cars for Mumbai Metro Line 5 and 108 cars for Line 6 — along with five years of maintenance following a two-year Defect Liability Period.

The partnership strengthens Titagarh's alignment with the Make in India and Atmanirbhar Bharat programmes. In 2023, the company had acquired TCMS technology for 750 V metro systems through an earlier arrangement with ABB.

The latest agreement completes Titagarh's TCMS capability across the full range of traction systems used in Indian metro networks.

Titagarh has also invested in building domestic expertise, including setting up a dedicated TCMS laboratory at its Bengaluru design centre.

Already manufacturing traction motors for locomotives and EMUs, the company will now progressively co-produce metro propulsion systems, a segment that demands high precision and advanced engineering.

Propulsion systems, including TCMS, are critical to controlling, monitoring and optimising train operations.

^ TOP

Bengaluru-Hyderabad Highway To Get 10-Lane Upgrade As Part Of New Vijayawada Expressway Project: Report

Swrajya,
January 28, 2026

Bengaluru-Hyderabad highway (Rishabh Mathur/Flickr)

The National Highways Authority of India is moving ahead with plans to transform the northern corridor of Bengaluru through a massive highway expansion project.

Following the successful linkage of the city's eastern areas to the Chennai expressway via Hoskote, NHAI is now preparing detailed project reports for connecting northern Bengaluru with the Vijayawada expressway.

According to a TOI report, the centrepiece of this development involves upgrading a 90 km stretch of the existing NH-44 between Bengaluru and Hyderabad into a 10-lane road.

The enhanced highway will feature a six-lane main carriageway running from Devanahalli in Karnataka through to Kodikonda in Andhra Pradesh.

At Kodikonda, this upgraded section will merge with the greenfield portion of the Bengaluru-Kadapa-Vijayawada expressway, which extends 342 kilometres to Muppavaram in Andhra Pradesh.

According to senior NHAI officials, the expressway project promises to cut journey times dramatically.

"Upgrading NH-44 for a length of 90 km from Devanahalli to Kodikonda is part of the expressway project. The existing four-lane highway will be expanded into a 10-lane road, with a six-lane main carriageway passing through Devanahalli, Chikkaballapura, up to the Andhra Pradesh border and Kodikonda," the official was quoted as saying in the report.

Travel time between Bengaluru and Vijayawada is expected to drop from 11-12 hours to roughly 6-7 hours.

The draft project report should arrive by February, with road widening commencing at Kannamangala Gate near Devanahalli. NHAI already possesses most of the required land, though three locations still need railway overbridges.

The upgraded highway will integrate seamlessly with the existing Satellite Town Ring Road at Devanahalli, with a new cloverleaf interchange planned at Kodikonda.

Safety improvements are also underway. NHAI will install 1.5 metre barriers along 12.5 km and streetlights across 12 km between the trumpet interchange and Devanahalli, addressing concerns about rising accidents.

^ TOP

Puducherry To Get New 4 Km Flyover And Major Road Expansion With Rs 437 Crore Central Support, Says Lt Governor Kailashnathan

Business Standard,
January 28, 2026

Puducherry (NDSRAM/Flickr)

Puducherry administration has set plans for a four-lane flyover and extensive road widening aimed at easing congestion in the popular coastal town.

Lieutenant Governor K Kailashnathan announced the projects on Monday (26 January) while unfurling the national flag during Republic Day celebrations.

According to the plan, a four-lane flyover of around four km will be constructed from Indira Gandhi Square to Rajiv Gandhi Square and Marapalam.

In addition, a 13.5 km four-lane road will be laid between Ariyankuppam and Mullodai, while existing roads up to Marapalam will be widened to improve traffic flow.

The projects will be implemented with financial assistance of Rs 437 crore from the Union government.

The Lieutenant Governor said the flyover, which connects key highways leading to Chennai, Villupuram and Chidambaram, is expected to substantially reduce travel time and improve road safety for commuters.

Once completed, traffic congestion within Puducherry town is projected to fall by nearly 55 per cent.

Kailashnathan also linked the infrastructure push to Puducherry's growing stature as a tourism hub.

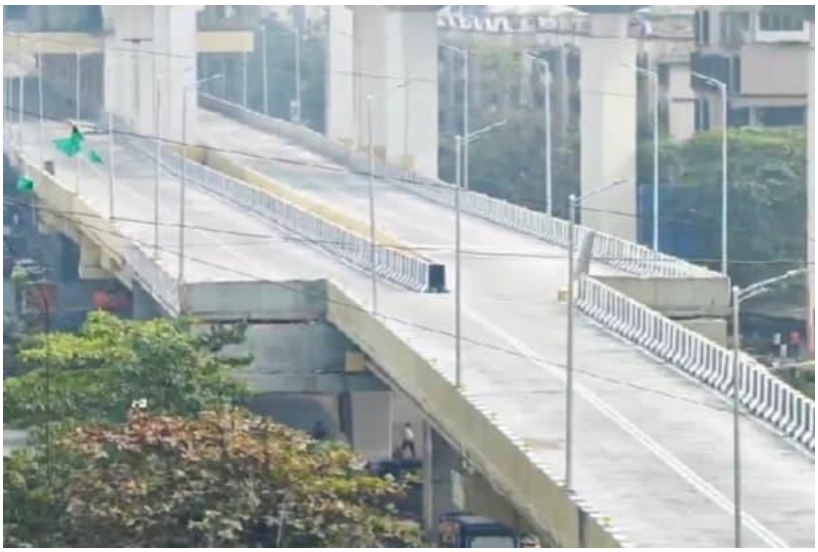
"It is a pride to Puducherry that it ranks next to the city of Toulouse in France as one of the most preferred tourist destinations," he said, adding that the government is focusing on strengthening tourism-related infrastructure.

Beyond road projects, the administration is also planning to develop the Thirunallar Lord Dharbaranyeswarar temple in Karaikal into a global pilgrimage destination under the proposed Thirunallar Temple Town project.

^ TOP

Mira–Bhayander Flyover Row: MMRDA Defends Design After Video Goes Viral Alleging Faulty Planning

The Hindu Business Line,
January 28, 2026



The viral post claimed that the structure "suddenly narrows" from four lanes to two, prompting concerns over safety. (Pic Credit: @GemsOfMBMC/X)

A newly built flyover in the Mira–Bhayander region has sparked a fresh debate on urban infrastructure planning after a viral social media post flagged what appeared to be a sudden narrowing from four lanes to two.

The Mumbai Metropolitan Region Development Authority (MMRDA) has pushed back against allegations of faulty design, insisting that the layout follows a phased and well-considered engineering plan.

The controversy began after a post by the Gems of Mira Bhayander account on X questioned whether the double-decker flyover, part of the Metro Line 9 corridor, might worsen traffic congestion instead of easing it.

The post claimed that the structure “suddenly narrows” from four lanes to two, prompting concerns over safety, bottlenecks and planning oversight.

Responding to the criticism, MMRDA clarified that the lane transition is intentional and dictated by land availability and future expansion plans.

According to the authority, the flyover has been designed with two lanes leading towards Bhayander East, while space has been reserved for two additional lanes towards Bhayander West as part of a later phase that will extend across the Western Railway line.

Officials explained that because the Bhayander East arm comes first along the alignment, the current four-lane configuration tapers into two lanes at present.

Up to Golden Nest Circle, a key junction where five major roads converge, a 2+2 lane flyover has been provided, integrated with the Metro corridor, and supported by slip roads to allow smoother traffic dispersal.

Beyond this junction, towards Bhayander East, the road width reduces as per the Development Plan. This has resulted in a 1+1 lane flyover along the median, complete with dedicated entry and exit ramps leading towards Railway Phatak Road.

MMRDA said provisions have been kept for future widening, subject to approvals and coordination with the Mira-Bhayander Municipal Corporation.

Despite the clarification, the project continues to face a wave of criticism online.

Several social media users warned that the flyover could quickly become an accident-prone stretch if opened in its current form, arguing that major changes may be required soon after inauguration.

^ TOP