

AI and cloud computing fuel global data center construction boom driving risks and innovation

Global spending on data centers is expected to reach up to \$7 trillion by 2030, mainly driven by the US and China's rapid expansion to meet surging AI and cloud computing demand. Massive projects, some exceeding \$20 billion, require complex construction and specialized insurance. Power consumption and cooling needs are soaring, with global electricity use by data centers forecast to more than double by 2030-matching that of Japan. Grid capacity constraints, fire risks from lithium-ion batteries, and increasing reliance on self-generated power are shaping evolving risk profiles. As industry leaders push the boundaries, concerns remain about sustainability, over-investment, and the possibility of stranded assets amid technological uncertainty.



Global Methane Hub invests US\$10 million for regional emissions reduction

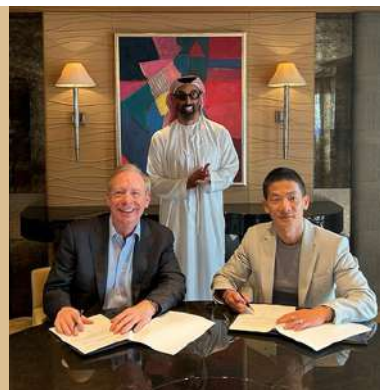
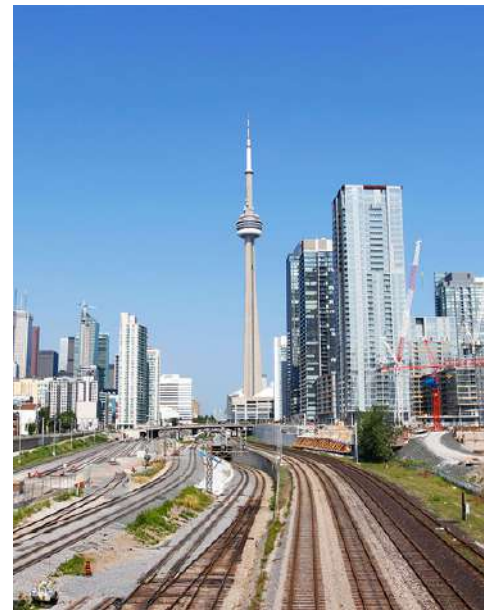
The Global Methane Hub announced a \$10 million investment at the C40 World Mayors Summit to help Latin American and Caribbean cities fight methane emissions from waste by supporting local methane reduction strategies, data, finance, and policy innovation. This follows a regional pact by 33 countries and expands the C40 Sustainable Waste Systems Accelerator, launched in 2022. The program's projects could reduce 1.2 million tons of methane by 2030 equal to 100 million tons of CO₂ or taking 22 million cars off the road. Cities like Ekurhuleni, South Africa, and others showcased initiatives converting landfill waste into energy while creating local green jobs and spurring circular economy benefits.

China to make European solid oxide fuel cells

Chinese state-owned conglomerate Guangdong Energy Group will manufacture Denmark's European company Blue World Technologies' solid oxide fuel cells in China. This partnership aims to boost local production capacity, support China's hydrogen goals, and expand commercial deployment of efficient fuel cell technologies. The cooperation marks a pivotal advance in hydrogen sector industrialization, linking European innovation with China's manufacturing and clean energy ambitions.

Canada's 2025 budget invests \$51B in Infrastructure

Canada's Budget 2025 includes a \$51 billion Build Communities Strong Fund over 10 years to revitalize local infrastructure nationwide, with \$16.1 million allocated to Belleville's Avonlough Sanitary Pumping Station project. This transformative fund supports hospitals, schools, roads, clean energy, and community spaces, aiming to enhance productivity, create skilled jobs, and foster economic resilience. The initiative aligns with Canada's broader plan for economic independence and sustainable growth.



Microsoft, G42 expand UAE data center capacity

Microsoft and Abu Dhabi-based G42 announced a 200-megawatt data center capacity expansion in the UAE, part of Microsoft's \$15.2 billion investment in the country. The expansion, delivered through G42's Khazna Data Centers subsidiary, aims to come online before the end of 2026, providing advanced AI and cloud infrastructure. This will support the UAE's national digital economy strategy to double the digital economy's GDP contribution in the next decade. The partnership also emphasizes cybersecurity, data protection, and ethical AI practices, establishing the Responsible AI Future Foundation with Mohamed bin Zayed University for AI. The project will create innovation opportunities, workforce development, and strengthen sovereign cloud services for public sector and enterprises across the UAE.



HUDCO eyes \$1B global fund to boost metro expansion

Housing and Urban Development Corporation Limited (HUDCO) is in advanced talks with multilateral banks to create a \$1 billion pooled fund for financing metro rail projects across India. The initiative supports HUDCO's broader push into sustainable urban infrastructure beyond affordable housing. Chairman Sanjay Kulshrestha described the fund as a "blended solution," combining foreign and domestic contributions to offer loans at competitive rates. India's metro network has grown from 248 km in 2014 to 1,013 km in 2025, with plans to double by 2030. HUDCO is also expanding into PPP projects across roads, ports, airports, real estate, and energy transition. It aims to lend to ventures where private capital covers half the cost. HUDCO expects to meet its ₹65,000 crore borrowing target this fiscal and projects its loan book to reach ₹3 lakh crore by 2030, with UiWIN managing new inflows.

PMRDA plans ₹2,200 crore sewage, STP upgrade for 162 villages

The Pune Metropolitan Region Development Authority (PMRDA) has proposed a ₹2,200-crore plan to upgrade sewage infrastructure and install sewage treatment plants (STPs) across 162 villages grouped into 103 clusters. The initiative addresses rising concerns over untreated wastewater and drainage issues in rapidly urbanising areas. Phase one, costing ₹1,200 crore, will cover 96 villages in Mulshi, Khed, and Maval tehsils along upstream stretches of the Indrayani, Pavana, and Mula-Mutha rivers. Phase two, estimated at ₹1,000 crore, includes 66 villages in Haveli, Shirur, and Daund tehsils downstream. DPRs are ready, and tenders will be invited post local elections. The clusters, identified as Urban Growth Centres, are near MIDC zones and city limits. The plan includes laying new sewage lines linked to existing or proposed STPs, supporting river rejuvenation. PMRDA aims to complete the project within three years to prevent future infrastructure bottlenecks and flooding.



Delhi-Dehradun expressway set for Feb 2026 launch

The 210 km Delhi-Dehradun Expressway, designed to reduce travel time from six to under three hours, is now expected to open by February 2026 after multiple delays. Initially slated for December 2024, the ₹11,868 crore project will be inaugurated only after all four phases are completed. Phase 1 is ready; Phase 2 nears completion; Phase 3 and 4 are in advanced stages. A highlight is Asia's longest 12 km elevated corridor through Rajaji National Park, featuring six animal underpasses. The expressway links Delhi to Haridwar, Roorkee, and major corridors. Despite environmental concerns over 17,913 trees affected, NHAI has pledged to plant 50,600 trees and allocated ₹40 crore for afforestation. The project is expected to boost regional connectivity and infrastructure.

NABARD boost: Panel greenlights rural infra projects worth crores

Kerala's high-powered committee, led by the chief secretary, has approved ₹1,441 crore worth of infrastructure projects under tranche 31 of NABARD's Rural Infrastructure Development Fund (RIDF). The Forest Department received ₹159.64 crore, while ₹199.70 crore was sanctioned for 5,689 solar pumps. The Water Resources Department got ₹176.42 crore for irrigation, and ₹261



crore was recommended for paddy field and pond development. The Agriculture Department secured ₹176.14 crore for smart agri-houses and conflict mitigation. ₹165 crore was allocated for waste management and road restoration, and ₹243 crore was recommended for fisheries and port engineering projects.

Adani Group plans to build India's largest battery storage system

Adani Group is entering the Battery Energy Storage Systems (BESS) sector with India's largest and one of the world's biggest single-location BESS projects at Khavda, Gujarat. Scheduled for completion by March 2026, it will feature 1,126 MW of power capacity and 3,530 MWh of energy capacity, using over 700 lithium-ion battery containers. Chairman Gautam Adani emphasized its role in advancing India's energy independence and sustainability. The system will manage peak electricity demand, enable time-shifting of energy use, and support 24/7 renewable power, making Khavda the world's largest renewable-plus-storage park. Adani plans to scale up to 15 GWh by 2027 and 50 GWh within five years. As India targets 500 GW of clean energy by 2030, BESS will be critical for integrating intermittent solar and wind power into the national grid.





HARISRAJ G
MBA-IDM
SCMHRD'27

Digital Twin and advance planning in supply chain

The latest game-changer in supply chain and operations is the Digital Twin, a living virtual replica of the actual supply chain powered by real-time IoT data that mirrors current operations accurately. When integrated with Advanced Planning and Scheduling (APS) systems, it transforms traditional planning into a dynamic, adaptive process. Unlike static analyses, the Digital Twin enables continuous verification of machine capacity, inventory levels, and production status while providing a safe simulation space for testing “what-if” scenarios like port shutdowns or supplier failures. This integration allows organisations to anticipate disruptions, assess their impact instantly, and determine optimal solutions in real time. APS, enhanced by the Digital Twin, goes beyond forecasting, it now recommends automated, data-driven actions to mitigate risks and maintain stability. The result is a self-correcting, intelligent supply chain that optimises performance, minimises downtime, and strengthens responsiveness. By merging predictive analytics, IoT insights, and automation, businesses can achieve higher efficiency, visibility, and control across every operational layer. This convergence of technology leads to a self-healing, resilient, and future-ready supply chain capable of adapting swiftly to market fluctuations, disruptions, and evolving customer demands. It empowers organizations to make smarter decisions faster, driving long-term competitiveness and operational excellence across global networks. Ultimately, the Digital Twin revolution redefines efficiency, resilience, and intelligence in operations.

MR. PARAMASIVAN SRINIVASAN
MD, AFCONS INFRASTRUCTURE LTD.
Mr. Paramasivan is the Managing Director of Afcons Infrastructure Ltd, one of India's leading engineering and construction companies under the Shapoorji Pallonji Group. He holds a bachelor's degree in Commerce from Madurai University and is a Fellow Member of both the Institute of Cost Accountants of India and the Institute of Company Secretaries of India. A Stanford



Certified Project Manager, he brings over four decades of experience in finance, legal, and strategic operations. Paramasivan joined Afcons in 2002 and has played a key role in transforming it into a globally respected infrastructure company. Under his leadership, Afcons has delivered landmark projects across marine works, surface transport, hydro and underground infrastructure, and oil and gas sectors. Known for his emphasis on corporate governance, project excellence, and financial prudence, he has also contributed to national infrastructure policies through his active role in FICCI's Transport Infrastructure Committee. His vision continues to steer Afcons toward sustainable, innovative, and world-class infrastructure development.

INFRA Shorts

- NCL Industries commissioned a new cement grinding plant near Anakapalle, Andhra Pradesh, enhancing production capacity and strengthening its southern market presence.
- Amar Infrastructure secured the Balance of System (BoS) package for SECI's 200 MW solar project, marking a significant renewable energy milestone.
- Union Minister Nitin Gadkari announced ₹1,000 crore for road infrastructure projects in Odisha, aiming to boost connectivity, trade, and regional development.
- Prime Minister Modi inaugurated ₹8,260 crore worth of developmental projects in Uttarakhand, celebrating the state's Silver Jubilee and promoting sustainable growth.
- Kerala CM launched KIIFB's Silver Jubilee celebrations, highlighting the board's role in financing major state infrastructure and development initiatives.
- Tata Power will establish a 10 GW solar ingot and wafer plant to boost domestic manufacturing.

