

Noida International Airport Becomes First Large-Scale Project to Build with Limestone Calcined Clay Cement

As the first large-scale project in India to utilize Limestone Calcined Clay Cement (LC3), NIA is pioneering a viable path for more sustainable infrastructure

New Delhi, September 26, 2025: Noida International Airport (NIA), a subsidiary of Zurich Airport International AG, sets a new milestone in India's sustainable infrastructure journey, becoming the country's first large-scale project to adopt Limestone Calcined Clay Cement (LC3), a breakthrough in lower-carbon building material. This makes NIA the first large-scale infrastructure project in India to embed LC3 into its construction.

The milestone was marked at the airport site in the presence of leaders from the Embassy of Switzerland in India and senior representatives of India's cement industry, highlighting a shared commitment to environmental consciousness.

LC3 is a revolutionary, low-carbon cement developed through a decade-long (2013–2023) international collaboration between experts from Indian Institutes of Technology (IIT) Delhi and Madras, Swiss Development Cooperation (SDC), École Polytechnique Fédérale de Lausanne (EPFL- Switzerland), Technology and Action for Rural Advancement (TARA), and Universidad de las Villas (UCLV) in Cuba. The result is a ground-breaking product for the building materials industry with significant benefits:

Lower Carbon Footprint: Up to 40% less CO2-intensive than conventional Portland cement.

- **Cost-Effective:** Approximately 25% more cost-effective to produce.
- Resource Efficient: Utilizes abundant low-grade limestone and clays.
- Energy Efficient: Requires a lower calcination temperature of 800°C instead of 1450°C.
- Superior Performance: Offers properties comparable to or superior to traditional cement.

This initiative is driven by India's private sector, with major companies like JK Cement, JK Lakshmi Cement, UltraTech Cement, Dalmia Bharat Cement and Shree Cements announcing commercial production of LC3, paving the way for cleaner growth in the world's second-largest cement market.

Nicolas Schenk, Chief Development Officer at Noida International Airport, stated, "At Noida International Airport, we are committed to building a world-class facility with sustainability at its core. We are proud to be the first large-scale project in India to build with LC3. Our use of this innovative cement showcases how major infrastructure projects can lead the change and set a new standard for the future of construction in the country."

Philippe Sas, Head of International Cooperation, Embassy of Switzerland in India and Bhutan highlighted, "As part of the Swiss-Indian environmental collaboration, the development of LC3 stands as a landmark achievement for the cooperation between scientists and experts from Switzerland, India and Cuba. LC3 represents a breakthrough within the construction sector with a high impact. It paves the way for its commercial production and large-scale use in India and other regions globally. The Embassy of



Switzerland in India remains firmly committed to advancing sustainability and resilience in India, with a particular focus on the sustainable building and construction sector."

About Noida International Airport

Noida International Airport (IATA code - DXN) will connect the greater Delhi area and Western Uttar Pradesh with other cities in India and the world. This world-class airport will combine Swiss efficiency and Indian hospitality to offer rich experiences and comprehensive commercial attractions and services to its passengers. NIA is committed to an ambitious net-zero emissions goal supported by sustainable design and operations principles.

Yamuna International Airport Private Limited (YIAPL) was established for the development, construction and operation of the greenfield project - the Noida International Airport. The company, a 100% subsidiary of Zurich Airport International AG, is responsible for the implementation of the public-private partnership project in close partnership with the Government of Uttar Pradesh and the Government of India. The concession period for Noida International Airport commenced on October 01, 2021, and will run for 40 years. At its opening, the airport will feature one runway and one terminal and handle a capacity of 12 million passengers – with the potential for further development in additional construction phases.

For more information, please visit www.niairport.in.

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