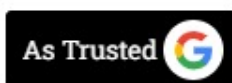
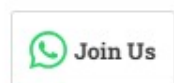


Bengaluru: Namma Metro's Blue Line could become fully solar-powered corridor

According to the study, the installation of solar panels on station rooftops, depot rooftops, station canopies and viaduct structures could generate enough electricity to offset the Blue Line's yearly energy demand.



Last Updated : 19 May 2026, 15:51 IST



Representative image generated using AI

Bengaluru: A study by the Indian Institute of Science (IISc) has found that Bengaluru's upcoming [Namma Metro Blue Line](#) can potentially run entirely on solar energy using land already owned by the Bangalore Metro Rail Corporation Limited (BMRCL).



ANYTIME, ANYWHERE.

Experience a more refined e-paper today

Subscribe

The study, titled 'Assessing the Potential of Directly Using Solar Power to Run the Operations of Blue Line of Namma Metro', examined whether the nearly 55 km airport corridor, which connects the Central Silk Board and Kempegowda International Airport, a key metro link scheduled for completion by December 2027, could meet its annual energy needs through solar power generation.

Also Read: [Bengaluru: Namma Metro's Blue Line trains arriving in May but depot link may delay trial runs](#)

The research was carried out between August 2025 and March 2026 by the IISc Sustainable Transportation Lab in collaboration with BMRCL. The research team was led by Professor Ashish Verma from IISc's Department of Civil Engineering, along with professors from the institute's electrical engineering, electronic systems engineering and nanoscience departments.

Also Read: [Vijayendra travels by Namma Metro, backs PM Modi's austerity call](#)

According to the study, the installation of solar panels on station rooftops, depot rooftops, station canopies and viaduct structures could generate enough electricity to offset the Blue Line's yearly energy demand. The study has estimated that an installed solar capacity of 83.3 MWp would be sufficient to meet the corridor's annual requirement of 152 GWh.

The findings also highlighted that 30 MWp of rooftop solar capacity could be integrated immediately without requiring changes to the existing traction power system, providing an opportunity to offset more than one-third of the metro line's annual energy consumption.

As per the research, it is estimated that the first phase, focused on station rooftops, would require an investment of Rs 48 crore to Rs 63 crore and could recover costs in under two years through electricity savings. Over 25 years, the study has projected that the savings will increase on a year-on-year basis.

The environmental benefits of such a move have also been highlighted. A full-scale deployment across the Blue Line could reduce nearly 78,000 tonnes of carbon dioxide emissions annually, equivalent to taking around 19,000 petrol cars off Bengaluru's roads.

The report has recommended that BMRCL begin rooftop solar installations across all 30 Blue Line stations as the first phase of implementation.

Published 19 May 2026, 14:48 IST