

Advancing Building-Integrated Photovoltaics (BIPV) Manufacturing in India

Date: Wednesday, 5th March 2025 Time: 10.30 am to 1.00 pm Venue: Silver Oak -1, India Habitat Centre

India aims for net-zero emissions by 2070, accelerating clean energy adoption to meet growing demands. With buildings consuming over 30% of electricity, integrating Renewable Energy (RE) into urban infrastructure is crucial. Building-Integrated photovoltaics (BIPV) offers a solution by transforming building materials into energy-generating surfaces, enhancing efficiency and reducing fossil fuel dependence. The government targets 500 GW of non-fossil fuel capacity by 2030, with solar playing a key role. Despite an estimated 309 GW BIPV potential, deployment remains limited due to high costs, policy gaps, limited manufacturing, and low industry awareness. As India charts its course toward net-zero and energy security, mainstreaming BIPV manufacturing and deployment will be pivotal.



The roundtable discussion, —a thematic track under WSDS— is being organised by TERI, under the Development Partnership with the Private Sector (dPPP) project by GIZ India and Ornate Solar, aimed at promoting and scaling up the adoption of BIPV in India. The discussion aims to address critical gaps in India's BIPV landscape by fostering dialogue among manufacturers, policymakers, and investors, focusing on the grand question—*How can India build a strong BIPV manufacturing ecosystem to overcome key barriers and scale adoption?*

- Identifying the key regulatory and technical barriers limiting BIPV manufacturing.
- Developing a roadmap for establishing pilot BIPV manufacturing facilities in India.
- Aligning **global best practices** with India's policy, BIPV technology and market ecosystem to ensure sustained growth.

The roundtable shall revolve around the following fundamental guiding discussion points:

- How can India's existing solar manufacturing ecosystem be leveraged to integrate BIPV production? What regulatory, financial, and technical barriers hinder India's solar PV value chain, and how can policy interventions address them?
- What steps are needed to establish BIPV test-bed manufacturing in India, and what roles can government, industry, and research institutions play?
- How can investors and financial institutions be incentivised to support indigenous BIPV manufacturing, and what financing models can drive domestic production?
- What global best practices in BIPV manufacturing, standards, and integration can be adapted to India's market for scalability? How can Indian manufacturers collaborate with international technology providers for better reliability?