

Stakeholder Workshop on the Building-Integrated Photovoltaics Portal for India

Date: 30 January 2026

Venue: Juniper Hall, India Habitat Centre, New Delhi

Time: 9:00 a.m.–5:00 p.m.

Concept Note

India has set an ambitious target of 500 GW of renewable energy capacity by 2030. Innovative solar applications are expected to play a critical role in meeting this goal. Building-Integrated Photovoltaics (BIPV) has been identified by the Ministry of New and Renewable Energy (MNRE) as a key New and Innovative Solar Application (NISA) and is now also covered under the PM Surya Ghar: Muft Bijli Yojana, owing to its potential to integrate clean energy generation directly into the building envelope while contributing to architectural aesthetics and material substitution.

The potential of BIPV in India is estimated at approximately 309 GW¹. However, large-scale adoption of BIPV in India remains low because of limited awareness, fragmented technical and market information, and the absence of user-friendly decision-support tools. To address these challenges, the German Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung [BMZ]), through its Development Partnership with the Private Sector (develoPPP) programme, is funding a project implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to facilitate BIPV adoption in India in partnership with Ornate Agencies Private Limited (Ornate Solar). Under this project, a BIPV portal is being developed as a one-stop digital platform to support informed planning and implementation of BIPV projects in India. The project is undertaken by CSTEP, in collaboration with various experts, including Prof Jyotirmay Mathur, Malaviya National Institute of Technology Jaipur; Dr Khushal Matai, School of Planning and Architecture, New Delhi; Dr Adersh Asok, Council of Scientific and Industrial Research - National Institute for Interdisciplinary Science and Technology; and Ar Shilpi Saboo, Sahyog Designway Pvt Ltd.

¹ <https://staai.cstep.in/staai/#/nisadownload>

The BIPV portal will comprise three key components: a) **BIPV Ladder**: A high-level assessment framework to evaluate the technical, financial, environmental, and architectural viability of BIPV across different building typologies and use cases. b) **BIPV Design Tool**: An interactive design-support tool offering indicative system configurations, performance estimates, and cost insights based on user input. c) **Knowledge Resources**: Curated information including case studies, product catalogues, policy and regulatory references, and technical guidance on BIPV.

Stakeholder consultations form a critical component of the project and are essential for validating and refining the components of the portal to ensure practical relevance and alignment with the Indian context.

Therefore, GIZ is convening a workshop to bring together key stakeholders with the following objectives:

1. Introduce stakeholders to the vision, structure, and functionality of the BIPV portal for India.
2. Present the key components of the portal, with a focus on the BIPV Ladder and the BIPV Design Tool at its current stage of development, as well as the associated knowledge resources.
3. Discuss the methodology and design framework for the BIPV Design Tool.
4. Demonstrate the BIPV Ladder and BIPV Design Tool through a live walkthrough, including an explanation of its methodology, evaluation criteria, and outputs, and showcase the proposed functionality of the components.
5. Highlight the value proposition of the BIPV portal for different stakeholder groups, including manufacturers, architects, green building professionals, developers, policymakers, and government agencies, by demonstrating how the portal can support technology selection, early-stage design, feasibility assessment, and project planning to enable wider adoption of BIPV in India.
6. Obtain structured feedback from stakeholders on the relevance, assumptions, usability, and applicability of the BIPV Ladder and BIPV Design Tool.
7. Incorporate stakeholder experience and insights to strengthen the robustness and practical relevance of the components.

Agenda

Time	Session	Person/Organisation
09:00–10:00 a.m.	Registration	
10:00–10:10 a.m.	Welcome remarks and opening address	GIZ
10:10–10:25 a.m.	Keynote address	Dr Sangita M Kasture, Scientist G, MNRE
10:25–10:40 a.m.	Special address	Dr Mohammad Rihan, Director General, NISE
10:40–11:00 a.m.	Context setting: BIPV in India and the need for decision-support tools	GIZ
11:00–11:30 a.m.	Overview of the BIPV portal and its components	CSTEP, MNIT Jaipur, SPA New Delhi, CSIR- NIIST, and Sahyog Designway Pvt Ltd
11:30 a.m.–12:30 p.m.	BIPV Ladder: <ul style="list-style-type: none"> • Framework, Methodology, and Criteria • Live demonstration (20-minute presentation, followed by an open discussion) 	CSTEP, MNIT Jaipur, SPA New Delhi, CSIR- NIIST, and Sahyog Designway Pvt Ltd
12:30– 1:00 p.m.	Presentation on 180 kW BIPV Project, followed by an open discussion	Mr Amit Khanna, Design Principal, AKDA
1:00–2:00 p.m.	BIPV Tool: <ul style="list-style-type: none"> • Framework, Methodology, and Criteria • User interface demonstration (20-minute presentation, followed by an open discussion) 	CSTEP, MNIT Jaipur, SPA New Delhi, CSIR- NIIST, and Sahyog Designway Pvt Ltd
2:00–3:00 p.m.	Networking lunch	

Time	Session	Person/Organisation
3:00–3:15 p.m.	Key takeaways	CSTEP, MNIT Jaipur, SPA New Delhi, CSIR- NIIST, and Sahyog Designway Pvt Ltd
3:15–3:30 p.m.	Way forward	GIZ
3:30–5:00 p.m.	Discussion and synthesis of stakeholder inputs	CSTEP, MNIT Jaipur, SPA New Delhi, CSIR- NIIST, Sahyog Designway Pvt Ltd, and GIZ