

National Dialogue on Solar Circular Economy

20 March 2024 (Wednesday) | 1000 to 1600

Venue: Ambassador Hotel, Khan Market, New Delhi

There is a growing consensus that circular economy strategies will play a pivotal role in creating a sustainable and resilient future. The honourable Prime Minister has given a clarion call to make the circular economy the basis of India's urban development. Furthermore, in the New Delhi Leaders' Declaration, the G20 nations committed to "enhance environmentally sound waste management, substantially reduce waste generation by 2030, and highlight the importance of zero waste initiatives". The renewable energy sectors are no exception and provide tremendous opportunities to adopt circular strategies. India has shown exemplary leadership in scaling renewable energy to about 135 GW as of December 2023. Solar energy, representing more than half of this capacity, remains the key driver of RE deployment. However, as the early installations reach their end of life and we scale up domestic manufacturing, India will see a tremendous rise in the volume of waste from solar PV modules across the value chain towards the end of this decade. The Government of India has already taken steps to manage this incoming waste by including solar PV cells and modules in the ambit of the Electronics Waste Management Rules 2022.

Solar waste management is a huge challenge that needs innovative technological solutions. The private sector and academia are at the forefront of developing PV module recycling technologies to turn this waste into usable raw materials. However, at this nascent stage of innovation, it is difficult to balance the economics and efficiency of recycling technologies. The need of the hour is to identify India-specific business models to scale the recycling industry and establish a solar circular economy.

The first **National Dialogue on Solar Circular Economy 2024** aims to build a common consensus among stakeholders towards making circular economy central to India's clean energy transition. The national dialogue will have a fireside chat on understanding the policy priorities for circular economy from MNRE, followed by two panel sessions deliberating on the challenges and opportunities in solar PV recycling and market strategies for solar manufacturers and developers to manage their solar waste.

Agenda (IST)

1000 to 1030	Registration
1030 to 1040	Welcome remarks by Dr Arunabha Ghosh, CEO, CEEW
1040 to 1050	Presentation Estimating India's Solar Waste by Dr Akanksha Tyagi, Programme Lead, CEEW Report launch "Enabling a Circular Economy in India's Solar Industry: Assessing the Solar Waste Quantum"
1050 to 1100	Special Remarks by Mr Satyendra Kumar, Director (Hazardous Substances Management), Ministry of Environment, Forest and Climate Change (HSM,

MoEF&CC)

- 1100 to 1115 **Keynote remarks** by Shri Dinesh Jagdale, Joint Secretary, Ministry of New and Renewable Energy (MNRE)
- 1115 to 1155 **Fireside chat** | *Policy priorities for creating a circular solar industry*
Hosted by **Dr Arunabha Ghosh**, CEO, CEEW
- Guests:
Dr Kuldeep Rana | Scientist E, MNRE
Mr Satyendra Kumar | Director (HSM), MoEF&CC
Mr Sujoy Ghosh | Vice President and Country Managing Director, First Solar
Mr Rajat Verma | Founder and CEO, LOHUM CLEANTECH
- 1155 to 1200 **Presentation** | Economics of solar module recycling in India by Mr Ajinkya Kale, Research Analyst, CEEW
- 1200 to 1300 **Session 1: Creating circular solar value chain: challenges and opportunities**
This panel will have the panellists discuss the opportunities to integrate circular economy strategies across the solar value chain. This includes innovations in designing circular products, recycling technologies and circular business models.
Moderator | Mr Neeraj Kuldeep, Senior Programme Lead, CEEW
Dr Sarita Zele, *Professor and Associate Director, Maharashtra Institute of Technology - World Peace University, Pune*
Mr Sujoy Ghosh, *Vice President and Country Managing Director, First Solar*
Dr Sushil Kumar, *Chief Scientist and Professor, CSIR-National Physical Laboratory*
Mr Rajat Verma, *Founder and CEO, LOHUM CLEANTECH*
- 1300 to 1400 **Lunch and poster presentations**
- 1400 to 1500 **Session 2: Market strategies for solar waste management**
This panel will bring together module manufacturers and project developers actively pursuing various solar waste management strategies. They will discuss the priorities, business models and other market mechanisms necessary to create a circular economy ecosystem in India.
Moderator | Dr Akanksha Tyagi, Programme Lead, CEEW
Mr Ankit Kapasi, *Lead - Sustainability Services, dss+*
Ms Mirunalini Chellappan, *Director, Swelect Energy Systems Ltd*
Mr Prashant Mathur, *CEO, Saatvik Solar*
Mr Vineet Mittal, *Co-founder and Director, Navitas Green Solutions Pvt. Ltd.*
- 1500 to 1505 **Certificate distribution to poster presenters** by Dr Kuldeep Rana, Scientist E, MNRE
- 1505 to 1515 **Closing remarks and vote of thanks** by Dr Kuldeep Rana, Scientist E, MNRE

1515 to 1600 **High tea and poster presentations**

1000 to 1600 **Poster presentations** on the research trends under the solar circular economy

Poster presentations on the research trends under the solar circular economy

Names of participating institutions and organisations:

1. CSIR-National Physical Laboratory
2. Maharashtra Institute of Technology - World Peace University
3. Indian Institute of Technology, Mandi
4. Indian Institute of Technology, Bombay
5. dss+
6. Saatvik Solar
7. Indian Institute of Technology, Roorkee

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