

## **Expression of Interest: Joint Development 2-terminal Monolithic Si/CdTe-Perovskite Tandem Solar Solar Cell Technology**

Dear Solar Cell Production Companies (SPC) of India,

We are pleased to extend an invitation to your esteemed company for a collaborative venture with Advanced Renewable Tandem - Photovoltaics India (ART-PV India) Pvt Ltd. This initiative, supported by the Ministry of New and Renewable Energy, India, aims to jointly develop cutting-edge 2-Terminal Monolithic Silicon/CdTe-perovskite tandem photovoltaic technology at the scale of M10 wafer half-cut size.

### **Overview:**

- **Initiating Entity:** NCPRE- IIT Bombay
- **Venture:** Advanced Renewable Tandem - Photovoltaics India (ART-PV India) Pvt Ltd incubated at SINE-IIT Bombay campus.
- **Purpose:** Joint development of 2-Terminal Monolithic Silicon/CdTe-perovskite tandem photovoltaic technology.
- **Support:** Major support from the Ministry of New and Renewable Energy, India.

**Requirements:** We are seeking Solar Cell Production Companies with the following capabilities:

- **Cell Manufacturing:** Capability to produce bottom silicon/CdTe cells without metallization step.
- **Commitment:** Willingness to commit to joint development with ART-PV India by in-kind support in phase manner against set milestones.

### **Collaborative Commitments:**

- **Mutual Agreement:** SPC is expected to enter into a mutual agreement with ART-PV India, outlining commitments and responsibilities.
- **In-Kind Support:** SPC's support in the joint development will be compensated with technology licensing at a reduced price.
- **Technology Licensing:** Joint partners will have access to technology licensing at a reduced rate.
- **Mutual Benefits:** All discussions regarding compensation and benefits will be conducted in good faith to ensure mutual benefits for all parties involved.

### **Technology Accessibility:**

- The developed technology will be available to other manufacturers, with a premium expected for non-collaborative entities.

**Next Steps:** Interested Solar Cell Production Companies are invited to express their interest by 03 March 2024. Please provide a brief overview of your company's capabilities and commitment to the joint development initiative.

For further details and to express your interest, please contact: Prof. Dinesh Kabra, Email: dkabra@iitb.ac.in.

We look forward to the prospect of a successful collaboration in advancing renewable tandem photovoltaic technology.

Sincerely,

Dinesh Kabra  
Group Leader for Emerging PV technologies  
NCPRE – IIT Bombay