# Media Release

# ANU and Indosol Solar Join Forces to Accelerate Next-Generation TOPCon Solar Cell Technology

**Nellore, Andhra Pradesh, September 15, 2026:** The Australian National University (ANU) and Indosol Solar Private Limited have signed a Strategic Memorandum of Understanding (MOU) & Collaboration Agreement to fast-track the development and commercial scale-up of next-generation Tunnel Oxide Passivated Contact (TOPCon) silicon solar cell technologies.

Facilitated by the India Australia Technology Commercialisation Challenge Pilot Program, the partnership bridges world-leading photovoltaics research at ANU with Indosol Solar's giga-scale manufacturing footprint in Andhra Pradesh, India. Together, the entities will co-develop advanced TOPCon cell architectures designed to achieve higher conversion efficiencies, improved degradation resistance, resulting in lower levelized cost of electricity (LCOE) for global solar deployments.

**Key Highlights of the Collaboration**

- **Joint R&D & Process Optimization:** ANU researchers will work alongside Indosol's process teams to optimize manufacturing processes for advanced N-type TOPCon solar cells, accelerating key lab-to-fab breakthroughs.
- **Efficiency & Reliability Push:** The collaborative research targets enhanced cell conversion efficiencies beyond standard TOPCon baselines, alongside enhanced resistance to light- and UV-induced degradation.
- **Opportunity for research exchange:** This collaboration will enable researchers from both organisations to visit each other's facilities, undertake joint research, and build capability through hands-on knowledge exchange.
- **Giga-Scale Technology Transfer:** ANU advanced cell designs will be validated directly within Indosol Solar's integrated manufacturing lines in India, providing a rapid pathway to commercial market delivery.
- **Bilateral Clean Energy Ties:** Supported by bilateral innovation frameworks such as the India-Australia Technology Commercialisation Challenge (TCC), the project strengthens clean-energy technology supply chains between both nations.

**Leadership Statements**

*"Our team at ANU has a long history of driving silicon solar efficiency breakthroughs that define the global market. Partnering with Indosol Solar allows us to translate cutting-edge TOPCon innovation directly into gigawatt-scale production, ensuring high-efficiency technology makes a tangible impact on Indian PV market."*

— **Dr. Rabin Basnet & Dr. Marco Ernst**, Lead Photovoltaic Researchers, The Australian National University

*"Indosol Solar is committed to building a world-class, fully integrated solar manufacturing ecosystem in India. Collaborating with The Australian National University—a powerhouse in PV innovation—enables us to stay at the absolute forefront of TOPCon and next-generation solar technologies, delivering ultra-high-efficiency modules to domestic and international markets."*

— **Dr. Balachander Krishnan**, Indosol Solar Private Limited

**About the Partners**

| Partner | Key Profile & Focus |
|---|---|
| **The Australian National University (ANU)** | A premier global research institution based in Canberra, Australia. ANU School of Engineering is internationally recognized for pioneering silicon solar cell breakthroughs, advanced characterization, and high-efficiency contact technologies. |
| **Indosol Solar Private Limited** | A leading Indian renewable energy manufacturer establishing a giga-scale, vertically integrated solar PV manufacturing facility in Andhra Pradesh, India. Indosol specializes in advanced N-type TOPCon ingots, wafers, cells, and high-efficiency modules. |

The Technology Commercialisation Challenge Pilot Program, part of the India-Australia Renewable Energy Partnership, is funded by the Department of Climate Change, Energy, the Environment and Water, and delivered by CSIRO.

The India-Australia REP drives bilateral climate and energy cooperation by advancing shared priority areas in renewable energy technologies and capacity building. These priority areas include two-way renewable energy investment, accelerated technology commercialisation, and strengthening the future renewable energy workforce. These areas contribute to the clean energy 'superhighway of growth' under the roadmap, demonstrating the important opportunity of strengthening Australia's trade and investment partnership with India.

**Key contacts for interview and further comment**

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