

Solar PV Circularity Workshops

The **Delegation of the European Union to Australia** is seeking to stimulate dialogue on solar PV circularity through a series of workshops aimed at informing PV recycling policies in Australia and raising awareness around PV recycling as part of an EU-Australia bilateral project.

ITP Renewables and UNSW Sydney have been engaged to facilitate a series of policy dialogue workshops engaging key stakeholders, government agencies, industry bodies, and industry experts. The workshops will cover aspects of what can be done during the manufacturing phase to make solar PV panels more recyclable, during operation to avoid unnecessary PV waste with early retirement of functioning systems, as well as at the end-of-life with product stewardship and logistics considerations for Australia. Workshops will be hybrid to allow for virtual and physical participation.

You can register interest via the form linked below. Please also inform anyone in your company who might be keen to participate.

Details on the workshops, the project, and our team are provided below.

Registration/Survey Link: <https://forms.microsoft.com/r/QHns281UD8>

Workshop Title	Overview	Date	Location
PV Product Stewardship	Improving understanding in Australia of options for recycling and state-of-the-art programs around the world.	17 th August 2023 3pm-5pm	In person: Sydney, UNSW Kensington Campus. Online: link will be provided.
PV Recycling Drivers and Barriers, Australia vs Other Countries	Gaining feedback from IEA PVPS Task 12 experts on drivers and barriers for establishing PV circularity in Australia.	23 rd October 2023	In person: Adelaide, Venue TBC. Online: link will be provided.
Recycling Technology Options and Design for Recycling	Understanding the PV recycling landscape and options for module design with consideration of end-of-life.	5 th December 2023 (held in conjunction with the Asia-Pacific Solar Research Conference)	Online: link will be provided.
Logistics Challenges in Australia	Understanding challenges specific to Australia for the collection of PV waste.	21 st February 2024	In person: ITP Renewables Sydney Office. Online: link will be provided.
Reuse Opportunities in Australia and Reducing Unnecessary End-of-Life PV Waste	Discussion on minimising premature retirement of PV systems.	9 th April 2024	In person: ITP Renewables Canberra Office. Online: link will be provided.

The project is part of the EU Climate Dialogues (EUCD) between the EU and 20 EU partner countries including Australia. The EUCD was launched in 2022 with the following objectives:

- Facilitate exchanges on climate policy options, expertise, success stories, and good practices between the EU and non-EU economies to enable policy shifts in partner countries.
- Advance bilateral trade, investment, and innovation in line with the goals of the Paris Agreement.
- Improve public awareness, including in the business community, of the challenges and opportunities associated with the implementation of the Paris Agreement.
- Within the scope of these objectives, the EUCD supports activities that facilitate technical cooperation among key stakeholders in the EU and partner countries.

Australia has rapidly adopted solar PV solutions, bolstered by feed-in-tariffs (FiTs) and government subsidies. As a result, we expect the volume of end-of-life (EoL) PV modules will reach 54,000 tonnes/year by 2030. As such, solar PV circularity is of increasing importance in Australia. The EUCD sees this as an opportunity for discussions, dialogue, and knowledge sharing such that the EU may better understand technical and regulatory solutions regarding solar PV circularity.

ITP Renewables and UNSW have been engaged to facilitate workshops engaging key stakeholders in conversation around PV circularity in Australia. The workshops have the aim of raising awareness and informing policy recommendations, which will be collated and presented by ITP and UNSW. ITP and UNSW will also engage in knowledge sharing throughout the course of the project to stimulate interest in PV recycling and increase industry awareness.

About the Team

Dr Brett Hallam

Brett has 19 years of experience working in the sustainability/climate change mitigation space spanning PV R&D, PV and battery manufacturing and promoting awareness of sustainability issues for PV and battery deployment. Recent work led by Brett is complementary to recycling by looking at addressing sustainability issues for PV deployment during manufacturing (beginning of life). Brett is regarded as a world leader in the field of photovoltaics having received the 2020 IEEE PVSC Young Professionals Award, the highest-level award globally for a young researcher in the field of Photovoltaics. He also received the 2022 Australian Prime Minister's Prize for New Innovators for his pioneering work developing solar technology. Brett is currently leading two multi-million-dollar government funded programs addressing sustainability concerns for solar PV deployment. These are focused on addressing challenges with the use of silver by the PV industry, as well as environmental impact of PV manufacturing. He has a solid understanding of the concern with growing PV waste due to exponential growth of the industry, and where the technical challenges lie in the recycling process. He has made technical contributions to Australia's 2nd Hybrid PV Recycling Workshop in 2022.

Dr Rong Deng

Rong has 10 years of experience in the renewable energy sector, including 6 years of research into PV circularity and end-of-life management with a focus of the needs for Australia, covering both technical and policy aspects.

Rong has studied & worked in Australia for 10 years at the School of Photovoltaic and Renewable Energy Engineering, UNSW. She is the technical advisor and R&D partner on the NSW EPA project "Scipher Advanced Solar Panel Recycling", which aims to establish a dedicated solar panel recycling facility in 2023-2024 in Albury, NSW. Rong is the Australia Representative on IEA PVPS Task 12 PV sustainability since 2022, covering the EU-Directive 2002/95/EC (Reduction of Hazardous Substances) and WEEE.