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Newsletter #2, July 2026



New Project advances long-lived and recyclable perovskite photovoltaics as a pivotal part of the Energy transition

Dear Readers,

It is our pleasure to welcome you to the 2nd edition of the CIRCULAR-PV Newsletter as a first introduction of our project to the scientific community!

CIRCULAR-PV is an ambitious and innovative project led by the University of Cyprus which will delve on investigating perovskite recycling aspects. It is implemented by a network of five European partners with expertise in material development (Dyename AB), perovskite module fabrication (University of Freiburg and Solaronix), testing and aging (University of Cyprus), and recycling/material recovery (Forschungszentrum Jülich).

As our project progresses, we look forward to sharing significant achievements and activities performed by the partnership towards contributing to the challenge of perovskite sustainability and material criticality in the field.

If you would like to keep up to date with all the latest developments and our next steps in CIRCULAR-PV, you can follow us on the project's website and on our social media.



*Kind Regards,
Dr. Maria Hadjipanayi (Project Coordinator),
on behalf of the CIRCULAR-PV Consortium*



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About CIRCULAR-PV

CIRCULAR-PV is a Clean Energy Transition (CET) Partnership project that targets to develop and test innovative circularity strategies combined with low environmental impact manufacturing of perovskite PV modules to achieve reliable, sustainable, recyclable, and potentially lower cost PV. The consortium comprises of five partners from four countries that bring their expertise together to address the ambitious objectives of this project, namely University of Cyprus (Cyprus), which is also the Coordinator, University of Freiburg (Germany), Forschungszentrum Jülich (Germany), Solaronix (Switzerland), and Dynamo (Sweden). The partnership will strive to investigate eco-design modules outdoors in terms of their lifetime and stability studying links between material recovery and degradation pathways generated by real field operation. Moreover, it will aim to demonstrate successful material recovery without substantial quality loss. Ultimate target is to achieve effective recycling of eco-friendly perovskite modules without sacrificing long-term stability and efficiency.

CIRCULAR-PV is expected to lead to minimisation of use of critical raw materials, to new circularity-by-design approaches, to the demonstration of the feasibility of scaling up perovskites using sustainable green approaches, circularity designs, and pre-industrial processes, as well as to the demonstration of the technology (in terms of stability and in terms of circularity effectiveness) in different climatic conditions in Cyprus and in Germany. The project's official launch date was January 2025, and it is scheduled to run for 36 months.

Duration:
3 years

Budget:
€2.075.709

4 Partner
Countries

Objectives

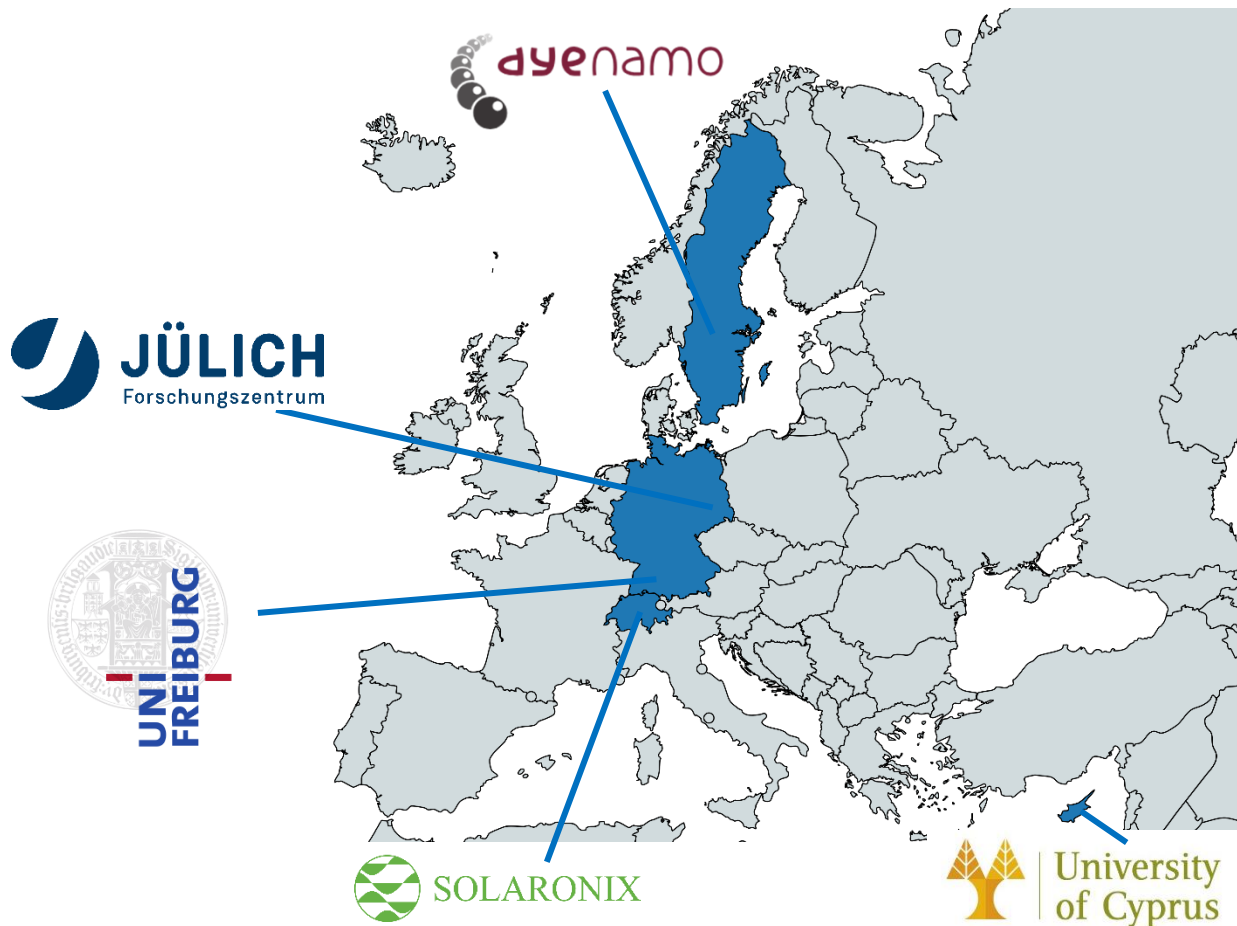
- To investigate the feasibility of using fully eco-friendly perovskite module manufacturing approaches for stable and almost 100% recyclable devices.
- To demonstrate sustainable eco-design perovskite modules with efficiency >18% that pass at 1000h of IEC/ISOS indoor aging.
- To study the field lifetime of eco-design modules through long-term outdoor aging at two different climatic locations.
- To design appropriate aging protocols for circularity strategies for perovskite-based PV.
- To study the link between material recyclability and degradation generated by real field operation.
- To demonstrate successful material recovery (>95%) without substantial quality loss.
- To study the feasibility of re-manufacturing eco-friendly perovskite-based modules using recycled material.



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Project consortium



[University of Cyprus](#) is the Coordinating institution; its main technical role is in indoor/outdoor aging tests of eco-design perovskite-based devices and in indoor characterization of the modules before/after field testing using advanced optoelectronic techniques.

[University of Freiburg's](#) role is in fabrication of encapsulated eco-designed perovskite sub-modules with planar cell architecture and carbon back electrode, in their stability testing indoors and outdoors and detailed characterization.

[Forschungszentrum Jülich's](#) role will be mainly in development of the appropriate circularity strategy, the life-cycle analysis (LCA), the eco-module design, and the recycling efforts.

[Solaronix](#) will be involved in encapsulated eco-design module manufacturing and indoor stability testing and characterization.

[Dyenamo's](#) role is in innovative material development and supply to the manufacturing partners, and for studies in recovered material quality from degraded eco-design modules.



Republic of Cyprus



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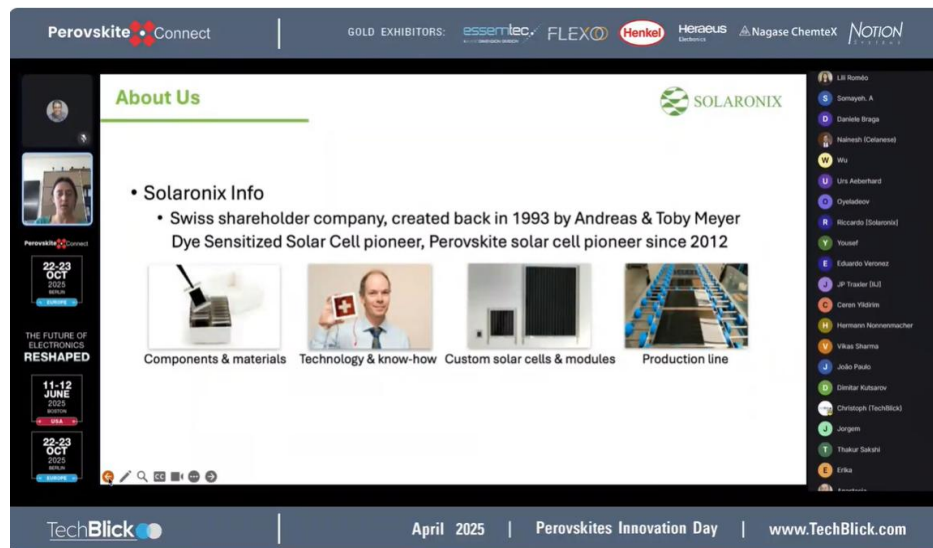
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Summary of the project's activities

TechBlick Perovskite Technologies Event

On 4 April 2025, Stéphanie Narbey from Solaronix represented CIRCULAR-PV at the TechBlick Perovskite Technologies Event, presenting developments in perovskite solar cell manufacturing and commercialisation.



FuturePV Workshop in Cyprus



CIRCULAR-PV partners participated in the FuturePV Workshop at the University of Cyprus in May 2025. Vasiliki Paraskeva, Henrik Pettersson, Toby Meyer, Markus Kohlstädt, and Ian Marius Peters



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contributed presentations on circularity, materials, industrialisation, sustainable manufacturing, and material utilisation.

The contributions highlighted the diverse expertise within CIRCULAR-PV and the project's collaborative approach to advancing sustainable, scalable, and resource-efficient photovoltaic technologies.

Nature Conference on Advancing Perovskite-Based Photovoltaics



From 29 September to 1 October 2025, Henrik Pettersson from Dyenamo AB represented CIRCULAR-PV at the Nature Conference in Stuttgart, engaging with the international perovskite PV research and industry community.

Photonics Industry Day



SOLARONIX

On 9 October 2025, Soloronix participated in Photonics Industry Day, engaging with students and industry representatives and raising awareness of sustainable and circular photovoltaic technologies.



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BECOME PV Workshop in Brussels



Henrik Pettersson represented CIRCULAR-PV at the BECOME PV Workshop on 2-3 December 2025, contributing to discussions on scalability, stability, commercialisation, and the future PV value chain.

Researchers in Schools



On 20-21 April 2026, Maria Hadjipanayi from the University of Cyprus introduced students in Nicosia to clean energy, solar technologies, and Circularity research through the “Researchers in Schools” initiative.



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The Energy Transition: Nordic Countries & the CETPartnership



On 8 June 2026, Elias Peraticos from the University of Cyprus participated in the CETPartnership event in Oslo, Norway, strengthening connections with the wider European clean energy research community.

M18 CIRCULAR-PV Progress Meeting in Stockholm



On 15 June 2026, CIRCULAR-PV partners met in Stockholm for the M18 Steering Committee and Progress Meeting, hosted by Dynamo AB. At the project's halfway milestone, partners reviewed progress and aligned activities for the next phase.



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FuturePV2 Workshop in Cyprus



On 29 June 2026, Savannah Bennett from Forschungszentrum Jülich (FZJ) presented CIRCULAR-PV research at the FuturePV2 Workshop, highlighting a multi-metric framework for sustainable material selection in perovskite modules.

Upcoming activities

CIRCULAR-PV Co-Organising a Parallel Event at EU PVSEC 2026

CIRCULAR-PV will participate in the 43rd European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC 2026), taking place from 14–18 September 2026 in Rotterdam, the Netherlands.

As part of the conference, CIRCULAR-PV is pleased to co-organise the **Parallel Event “Opportunities for Sustainable Perovskite PV Commercialisation” on 15 September 2026, from 13:30 to 15:00.**

The CIRCULAR PV joins forces with **8 EU Projects**:

PEPPERONI, LAPERITIVO, LUMINOSITY, SMARTLINE-PV, PEARL, PERSEUS, TRANSMIT, EMPOWER#IoT

The event will bring together researchers, industry representatives, policymakers, and innovators to discuss key opportunities and challenges for sustainable perovskite PV commercialisation, including technology upscaling, market uptake, circular value chains, Life Cycle Assessment, and the frameworks needed to support safe and scalable deployment.



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Through this event, CIRCULAR-PV continues to strengthen collaboration between research and industry and contribute to the development of sustainable, circular, and commercially viable next-generation photovoltaic technologies.



 14–18 September 2026
 Rotterdam, the Netherlands

More information: [Parallel Event program](#)

Stay connected

If you are interested in learning more about the project or for potential collaborations,

Visit our **website & Social media**:



[CIRCULAR-PV website](#)



[Linkedin](#)



[X \(Tweeter\)](#)

Or get in touch via **email**:



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