

11 DECEMBER 2019

## ARENA launches \$15 million funding round to address solar panel end-of-life issues and increase efficiency

On behalf of the Australian Government, the Australian Renewable Energy Agency (ARENA) has today announced up to \$15 million in funding to support research that aims to address end-of-life issues for solar PV panels, as well as increasing their efficiency and lowering their cost.

As the rate of solar PV deployment increases, innovations that can reduce the cost of sustainably managing panels at the end of their life will become more important. The round is seeking to fund projects that can improve the economics of recycling, such as with better upfront design, increasing the value of recovered materials, or even innovations for re-using reused or recycled components in new panels. Cost savings will enable both large-scale solar PV projects and roof-top PV customers to responsibly manage their waste, without significantly impacting the overall cost of renewable electricity generation.

In addition to end-of-life issues, the funding round will also aim to improve the efficiency and cost-effectiveness of solar PV for new or established applications. The funding round will strengthen Australia's world-leading solar PV R&D sector that ARENA has helped establish through its previous funding. However, this is the first time that ARENA has sought applications for addressing solutions to end-of-life solar PV issues.

ARENA's fifth round of research and development (R&D) supports solar PV in the following areas:

- **end-of-life:** new solutions, including upfront solar PV panel designs and end of life processing, that increase the cost-effectiveness of sustainable end-of-life management of solar PV panels
- **advanced silicon:** improvements to the overall cost-effectiveness of silicon-based panels already in mass market production, and their production processes
- **tandem silicon:** increasing the cost-effectiveness of silicon-based solar PV through the use of tandem materials
- **new materials:** development of new materials with the potential to either reach breakthrough cost-efficiencies, or the potential for new deployment applications.

ARENA CEO Darren Miller said: "Currently, solar PV panel recycling adds a cost to the supply chain. R&D can help find innovative solutions to reduce this cost, enabling sustainable and cost effective management of solar panels at the end of their life."

"The funding round also aims to build on Australia's excellence in solar PV R&D, to increase efficiencies and drive down costs even further and help bring about the next generation in solar technology. More efficient and lower cost solar PV can underpin the growth of a renewable hydrogen industry, can drive the electrification of transport and industrial processes, and can reduce the costs of delivering secure and reliable renewable electricity."

ARENA has provided more than \$290 million to around 300 solar research and development projects since 2009 through funding programs inherited from the Australian Solar Institute, or run by ARENA since 2012, including \$84 million in funding to the Australian Centre for Advanced Photovoltaics (ACAP) to continue its research operations until 2022.

Expressions of interest for the funding round are now open. For more information, visit [arena.gov.au/funding](https://arena.gov.au/funding)