PORTABLE MINI-SOLAR FARMS FOR REMOTE LOCATIONS

Image: ECLIPS

What began life as a way to provide renewable power to Australian troops on the ground in remote locations could soon see solar energy powering disaster relief efforts and construction sites.

CONTAINER ROLL-OUT SOLAR SYSTEM

Lead organisation: ECLIPS
ARENA funding: $289,000
Total project cost: $703,000
Location: Canberra, ACT

The Container Roll-Out Solar System (CROSS) is a mobile solar PV unit that provides temporary solar energy in place of diesel generators.

CROSS fills a gap in the Australian market for small (100-500 kilowatt) renewable energy systems that can be easily moved and temporarily deployed for days, months or even a few years. A rapidly-deployable solar PV system would open up previously inaccessible markets for temporary power, such as in the defence and construction industries, or for use in disaster relief or humanitarian efforts.

Developed by Canberra-based company ECLIPS, the CROSS is designed to fit inside transportable standard shipping containers and can be delivered wherever it is needed to bring clean energy to remote locations in a way not previously possible.

ARENA's support made it possible for ECLIPS to design, manufacture and test the CROSS units, which come in two sizes. The CROSS units, which are transported inside a shipping container, can be deployed in minutes to produce power. They are delivered fully assembled, providing up to 2175 watts of power for each 20 foot unit and up to 4350 watts for each 40 foot unit.

The project also demonstrates how standard material handling equipment can be used to transport and set up CROSS units, and confirm there is a market for mini-solar farms of this size.