MEDIA RELEASE

ARENA
Australian Government
Australian Renewable Energy Agency

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Lightweight solar panels power up Maritime Museum

Australia's largest lightweight solar panel system has been installed on the roof of the Australian National Maritime Museum's Heritage Centre by Australian solar company Energus using innovative new light, flexible panels.

The Southern Cross Renewable Energy Fund (Fund), supported by the Australian Renewable Energy Agency (ARENA), provided a $6.6 million investment into Sunman Energy Co Ltd - parent to Energus - to develop "eArche", the new lightweight, flexible solar panel technology, made from a polymer composite material.

eArche is a glass-free lightweight solar PV panel that can be fitted on any surface including curved surfaces. Being 70 per cent lighter than conventional solar panels, eArche can be fitted to roofs with weight constraints while still having the same capacity for generation.

A 235 kW array of 812 panels have been installed at the Museum's Wharf 7 Maritime Heritage Centre building in Darling Harbour, which due to its weight constraints and heritage status could not use conventional solar panels. The array will now reduce the Museum's electricity consumption by approximately 25 per cent.

Last year, eArche solar panels were also installed on the world's first solar powered train in Byron Bay.

ARENA and the Fund's co-investor Softbank China Venture Capital have each contributed $3.3 million to the Fund's investment.

The Fund provides management expertise and makes equity investments in early-stage renewable energy companies to help them overcome capital constraints, develop technologies, increase skills and forge international connections.

ARENA CEO Darren Miller said eArche opens up solar PV technology for new applications.

"This solar technology, created by SunMan, is an innovative and versatile alternative that can help to incorporate solar into more buildings, making solar a key part of the building process, and allowing solar to be installed on curved surfaces or heritage buildings.

"The Southern Cross Renewable Energy Fund supports innovative companies and challenges entrepreneurs to think outside the box and SunMan has achieved this," Mr Miller said.

Energus / SunMan founder Dr Zhengrong Shi said: "When I developed eArche, I knew it could unlock the potential for solar on buildings which were previously unable to support conventional glass solar panels.

"eArche's light weight, flexibility, high performance and competitive costs means that solar can now be applied to any building design," Dr Shi said.

Maritime Museum Director and CEO, Mr Kevin Sumption PSM said the museum had been exploring installing solar panels to Wharf 7 for several years, but found conventional solar panels were too heavy and rigid.

"We came across a unique glass-free solar panel from SunMan. The 5.5 kg lightweight panels could overcome the building's structural challenges and also have the same power output as 20 kg conventional panels" he said.

The installation has also been made possible through the Australian Government's Modernisation Fund.

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