

New technology to track and mirror sun

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The Australian Renewable Energy Agency (ARENA) is investing in a new Australian-made utility solar technology that uses mirrors to track and reflect the sun.

ARENA is providing Victorian company RayGen with a \$2.9million recoupable grant towards a \$5.8million project aimed at developing a utility-scale solar system utilising its PV Ultra technology.

PV Ultra differs from typical large-scale solar photovoltaic (PV) as it relies on low-cost mirrors to track and reflect the sun onto a solar PV receiver atop a central tower. The technology is particularly effective in locations with strong, direct sunlight. ARENA CEO Ivor Frischknecht said the funding would allow RayGen to take its system to the next level, building on the success of its world-first pilot plant in Newbridge, Victoria. "PV Ultra has the potential to be a renewable energy game-changer and RayGen is well on the way to taking its innovative system to the rest of the world," Mr Frischknecht said. "ARENA is excited to have supported both the pilot plant and this project. We are excited to assist RayGen to move another step closer to fully commercialising its PV Ultra system and, at the same time, also help to move this emerging technology down the cost curve." Over the course of this project, RayGen will develop a cheaper and more efficient commercial product, and scale up operations through a newly developed 8 MW per year manufacturing line for its highly-efficient PV receiver at its facility in Blackburn, Victoria. "RayGen's improved technology will be installed at the existing Newbridge site and will generate enough renewable energy to power the equivalent of 50 homes in the local community." Mr Frischknecht said the potential for RayGen's PV Ultra technology extended well beyond Australian shores and had already attracted Chinese investors. "A flexible system size makes the solution a good option for developing countries and remote locations looking to access affordable power without building expensive grid infrastructure." Newly-appointed RayGen CEO Alex Wyatt said ARENA's two-stage support had been instrumental in hastening the technology's pathway towards commercialisation. "This latest project will enable RayGen to increase its manufacturing capacity and develop potentially lucrative overseas markets for our product," Mr Wyatt said. The project is expected to be completed by December 2016.