

Media Release

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Field of 'giant sunflowers' to power Alice Springs Airport

Alice Springs Airport will soon derive over a quarter of its total electricity requirements from 28 solar power arrays that will track the sun across the sky each day – like a field of giant sunflowers.

One of Australia's leading solar power companies, Ingenero Pty Ltd, is to design and construct a 235 kilowatt solar power station for the airport. Part of the Alice Solar City project, the power station will use leading edge solar concentrator technology from American company SolFocus.

A field next to the airport terminal will soon be home to the 28 concentrated photovoltaic arrays, each pole-mounted and designed to capture maximum energy by tracking the path of the sun across the sky. Every year the solar power station will produce approximately 600 megawatt hours of electricity – the equivalent power used by about 70 homes in Alice Springs.

At the end of the day each 8.4 kilowatt array will close down for the night by turning its panels a few degrees off vertical (like a sunflower) to protect them from dust and other hazards.

"Alice Springs is the ideal location for concentrated photovoltaics, especially with its status as an Australian government Solar City. Ingenero is proud to be able to bring this exciting solar technology to Australia for the first time" said Rodger Whitby, GM of Generation at Ingenero.

The power station, one of five iconic projects planned for Alice Solar City, will be the first of its kind in the southern hemisphere. The system incorporates highly efficient triple junction photovoltaic (PV) cells originally developed for satellites in space. These PV cells are capable of operating at twice the efficiency of standard solar panels and at much higher temperatures. The SolFocus technology also uses panels made up of inexpensive mirrored dishes about 300mm in diameter to concentrate the sun's rays by 650 times.

The airport's solar power station will produce around 28% of its electricity and will reduce their greenhouse gas emissions by around 470 tonnes of CO_{2e} per annum.

Ingenero CEO Steve McRae said, "Alice Springs Airport has been visionary in choosing this world leading SolFocus CPV technology and the Australian government has provided invaluable financial support for the project."

The project will cost approximately \$2.3 million, up to half of which will be met by the Australian Government under the Solar Cities program. Construction will begin in the next few weeks and is expected to be complete by August 2010.

Chief Technology Officer and co-founder of SolFocus, Steve Horne, who is originally from Australia, said, "CPV works best in environments with clear skies and little cloud cover – so that means most of Australia other than the coastal fringe. SolFocus is very optimistic about the future prospects for our technology in Australia and we are very happy to be entering this market with Ingenero as a development partner."

About Ingenero

Ingenero is a leading Australian renewable energy company specialising in solar power. Ingenero develops utility scale solar power stations using a variety of world class solar technologies and is the Australian development partner for SolFocus concentrated photovoltaic (CPV) systems. Using innovative solar power purchase agreements, Ingenero enables commercial and industrial customers and local government entities to install solar panels on the roofs of their buildings without the need for up-front capital investment. Ingenero also supplies and installs PV and solar hot water systems to residential customers and communities, with an industry leading system guarantee and tailored finance packages.

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