Alice Springs Airport

At a glance.....

System Rating	235kW
Annual Output	600MWh
Technology	SolFocus SF-1100 CPV tracking arrays
System Owner	Alice Springs Airport
Producing	Approx. 28% of the airport's electricity, direct to its internal grid
Principal Contractor	Ingenero Pty Ltd
Total Project Cost	$2.264 million
Funding	$1.132 million from the Australian Govt. in conjunction with Alice Solar City
Construction Start	Mid-April 2010
Project Completion	August 2010

Breaking new ground!

- This is the first installation using SolFocus technology in the southern hemisphere
- It's the largest tracking solar system in Alice Springs
- This will be the first Australian airport to have a large scale solar energy plant feeding back to its internal electricity grid

Alice Solar City

Alice Springs is one of the seven Solar Cities in the Australian Government's $94 million Solar Cities Program.

The Solar Cities Program is creating a new energy future for Australia by trialling solar technologies with cost reflective pricing, energy efficiency measures and metering technologies.

The Alice Springs Airport's 235kW solar project is the second of the Alice Solar City's five planned "iconic projects", after the Crowne Plaza Hotel. Although the Airport's power station has a lower technical rating than Crowne Plaza's installation, it will actually output a greater amount of electricity due to the use of SolFocus CPV, tracking technology.

The Airport has worked with Alice Solar City for several years on its solar power station project and has also been assisted by the valuable expertise of Alice Springs based CAT Projects.

General Manager of CAT Projects, Lyndon Frearson, commented that "the scale and technical advances associated with the project certainly reinforce Alice Springs' position as the centre of solar excellence for Australia. Alice Springs Airport will become a solar destination in its own right with this new installation."

Alice Solar City is a $37 million project designed to explore how solar power, energy efficient technologies and new approaches to electricity supply and pricing can encourage the residents and businesses of Alice Springs to become energy champions and develop a sustainable energy future.

Alice Solar City is not just about solar power, it's also about being energy wise.

The commercial and public sectors currently consume over 50% of Alice Springs power and are integral to the success of Alice Solar City.

Alice Solar City provides a range of services, financial incentives, and other offerings designed to assist the commercial sector in Alice Springs to be more energy efficient.

Alice Springs Airport

Alice Springs Airport Pty Ltd (ASAPL) has a 50 year lease plus 49 year option over the Alice Springs Airport from the Commonwealth of Australia under the *Airport Act 1996*.

ASAPL is owned by three major shareholders: Industry Funds Management Managed Funds, Hastings Funds Management/AIX and Palisade Investment Partners Limited.

Alice Spring Airport is strategically important to the Central Australian community, business and government activity.

Ingenero

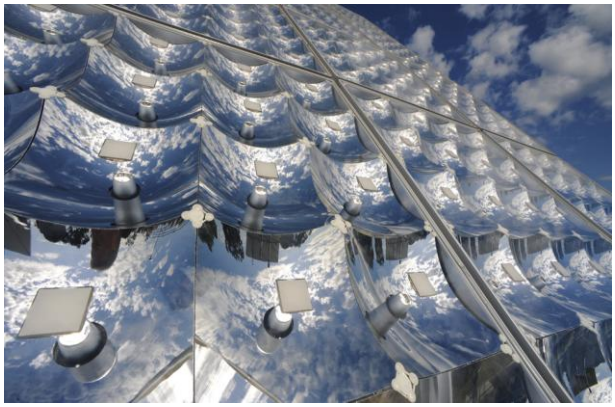
In mid 2009, Ingenero Pty Ltd was chosen via a competitive tender process by Alice Springs Airport to design and construct its Solar Power Station.

Ingenero is a leading Australian developer of solar power stations, rooftop solar installations for commercial and industrial customers and PV and solar hot water systems for residential customers using a variety of world class solar technologies.

Ingenero is also an Australian development partner for California, USA-based SolFocus whose concentrator photovoltaic technology will be used for this project.

Ingenero CEO, Steve McRae, commented that "the Airport has been visionary in choosing this world leading SolFocus CPV technology and the Australian government has provided invaluable financial support for the project via the Solar Cities Program."

"Alice Springs is the ideal location for concentrated photovoltaic's and Ingenero is proud to be able to bring this exciting solar technology to Australia for the first time," added Rodger Whitby, General Manager of Generation at Ingenero.



The Technology

The Airport's solar power station will comprise 28 SolFocus SF-1100 Concentrator Photovoltaic (CPV) tracking arrays, with each individual array being rated at 8.4kW peak power, and measuring eight metres wide and seven metres high.

SolFocus technology is particularly effective in areas of high Direct Normal Incident radiation (DNI), in effect "sunny" locations, such as Alice Springs.

Concentrator Photovoltaic (CPV) systems are an emerging solar technology that offer perhaps the greatest opportunity for cost reductions in photovoltaic (PV) systems.

Where traditional PV systems use a large amount of costly photovoltaic material, SolFocus technology uses only small quantities, utilising less expensive materials such as glass and steel to capture sunlight and direct it onto a very small PV cell.

In addition, most solar technology is fixed whereas the SolFocus arrays track the sun east to west and north to south. Tracking the sun increases the energy output of traditional, static photovoltaic systems as more of the sun's energy can be harnessed during the day.

Steve Horne, SolFocus Chief Technical Officer and Co-Founder, commented that "there is potential for CPV technology to leapfrog the cost structure of traditional photovoltaic technology and make solar energy more affordable."

There are very few CPV technology providers in the world who have 'commercially ready' technology , but SolFocus is one of them. SolFocus technology lends itself to mass production and factory alignment which helps to reduce the cost of production.

CPV is likely to be more readily available in the next five years. The Alice Springs airport project is contributing to the development of this technology.

The SolFocus arrays, which track the sun throughout the day to maximise energy output, will produce about 600 MWh of electricity a year, which will be fed directly into the Airport's high voltage electricity network.

SolFocus will also use one of the 28 airport arrays as a research and development tool that will help gather data and test new products in the Alice Springs climate.

"SolFocus is pleased to have been provided this opportunity. The Australian climate is ideally suited to advanced CPV technology, where we expect the energy yield from this 253kW power plant to be 20-30% higher than would have been achieved by traditional solar technologies," said SolFocus CTO Steve Horne.

" The leadership shown in undertaking this project with new technology has not only resulted in an excellent energy solution, but also shows vision in utilising a technology with a light environmental footprint and a strong ability to support climate change challenges," added SolFocus CEO, Mark Crowley.