Company Profile

About Solar Systems

Solar Systems is a Melbourne-based private company that has developed an innovative solar electricity generation system with the potential to cost-efficiently generate electricity on a large scale with zero greenhouse gas emissions.

The company is backed by a group of private investors who have invested more than $50 million to advance the technology to its current form.

Solar Systems has over 50 staff with significant, specialised expertise in commercial and technical fields, including control, optical and power systems. The company's research and development, manufacturing and corporate facilities are located in Hawthorn, Victoria.

The business was founded in 1990 to develop the discoveries that Technical Director, John Lasich, had made while researching solar photovoltaic (PV) power systems in the 1970s. Photovoltaic literally means 'electricity-from-light'.

Since this early research, solar concentrator photovoltaics was selected as an excellent option considering the following criteria:

- Resource availability (solar energy is unlimited and widespread)
- Capability for high performance
- Continuing pathway for technological improvement

Solar Systems has been developing solar concentrator PV technology for 16 years. The company achieved a world record performance in solar efficiency in 2000 and again in 2006.

The company owns intellectual property including 10 patents granted and pending registered around the world, covering innovations in:

- PV modules and receivers
- Optical systems
- Control systems
- Cooling systems
- Hydrogen production

Solar Systems won Engineers Australia's 2005 Engineering Excellence Award for the $7 million Indigenous solar power station project at Hermannsburg, Yuendumu and Lajamanu. It comprises 30 solar concentrator photovoltaic dishes that produce electricity for the communities.

The company has developed strategic alliances with Boeing subsidiary Spectrolab, and Australian based company, Able Engineering and has collaborative relationships with a number of research bodies including the CSIRO and US Department of Energy's National Renewable Energy Laboratory.

The new $420 million large scale solar power station planned for north-west Victoria will consist substantially of technology developed by Solar Systems. It is the first step in a strategic plan to roll out of over 5GW of large-scale solar technology across Australia by 2030 and internationally. It represents the beginning of a new international industry. Australia is estimated to be less than 5% of the world market.

Solar Systems' investors have a wide range of business and environmental interests. Two of Solar Systems' major shareholders are also directors and significant supporters of the Australian Wildlife Conservancy, which is a non-profit organisation working to ensure that Australian wildlife and ecosystems thrive into the future.