TKLN: Northern territory, Australia

The solar parks in the remote communities of Ti Tree, Kalkarindgi and Lake Nash will lead the way in creating a sustainable future for the Northern Territory. The project is the first of its kind in Australia and will see 1MW of solar power distributed over 3 sites with the added inclusion of Proven wind turbines. The solar parks will initiate NT remote community's transition from the reliance on diesel power to renewables.

Sustainable energy in the Northern Territory

The giant solar plant is located across three aboriginal communities relative to the primary urban centres in the Northern Territory. Ti Tree; approximately 200km North of Alice Springs and 314 kilometres south of Tennant Creek on the Stuart Highway. The Kalkarindgi community; approximately 480km South West of Katherine on the Buntine Highway and Lake Nash; approximately 550km from Tennant Creek.

On a total area of 18,000m2 the solar park will produce approximately 1,680,000 kWh of clean energy per year. As a result a total of 230 Territorian households will benefit from this reliable and environmentally friendly source of energy and at the same time saving up to 1,200,000 kg of CO2 yearly. The project started in May 2011 and is due for completion in October 2011 with 5358 modules, 59 inverters and 3 turbines installed.

Delivering clean energy to the homes of remote Territorians

This bold initiative contributes to the Northern Territory Government's Climate Change Policy (Target 11), which, by 2020, aims to replace diesel as the primary source of power generation.

What the plant installations mean for local residents is that 80 per cent of the electricity used during the day to conduct activities such as boiling a kettle or watching the news, will be supplied by the sun.

The remaining energy requirements will continue to be supplied by diesel generators, which will operate on a more constant load day and night. This improves the efficiency and service life of the diesel engines.

A reduction in the volume of diesel required is another benefit of the project, as supplying diesel to remote communities is expensive and often difficult during the wet season. The benefits of the solar parks will mean that fewer deliveries will be required and the diesel stored in each location will last longer.

Project Highlights	
Date	October 2011
Location	Ti Tree, Kalkarindgi and Alpurrurulam: NT QLD
Produced KH/h annually	1,680,000 kWh/a
Modules	5,358 Conergy P 185M modules
Inverters	59 Sunny Mini Central SMC 17000TL inverters
Mounting System	Conergy SolarLinea
Wind Turbine	3 Proven 15kW
Size of Plant	18,000m2
CO_2 Emissions Saved	1,200,000 kg pr year