

# Renewable Energy and Environmentally Sustainable Design Case Studies

## Springfield Park Pavilion - PV

### Site:

Box Hill North, Melbourne, Victoria

### Dates:

- System Design: July-October 2012
- System Installation: December 2012
- System Commissioned: December 2012

### Client:

Whitehorse City Council

### Project Goals:

Design, supply and install a grid-connected power system for a community sports pavilion.

### Project Features:

- Roof-mounted photovoltaic array consisting of 40 x 265W Winaico Mono PV Modules.
- 40 x Enecsys Micro-Inverters
- Complete system documentation including maintenance schedule and log sheets.
- System Size: 10,200 W
- Expected Average Output: 40kWhr/day
- Approx. Annual Generation: 14,600kWh/year
- Direct Annual Bill Offset: \$3,650 @25c/kWhr

The Enecsys micro inverters are installed on the rack at the back of each solar module instead of using central inverters. Benefits include significantly increased energy harvest and lower lifetime cost of solar photovoltaic systems, increased inverter reliability to match the life of the solar modules, comprehensive web-based monitoring and a communications system that analyses and reports the performance of each solar module to enable system performance optimisation, simplification of PV array design, ease of installation, and improved safety.

### Project Team:

- Warwick Tullio, System Designer, Going Solar
- Liam Shellard, Project Manager, Going Solar
- Duncan McGregor, Lead Installer, Going Solar
- Mark Colwell, Installer, Going Solar
- Andy Savidge, Installer, Going Solar
- Ross Shaw, Electrician

### Further Information:

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PV Panels on Roof



Rear of PV Panels



Micro-Inverters on framing before the PV panels are installed.