

#### Grid-connect Solar PV System Case Study



# **5kW Solar Power System**

### 20 Canadian Solar 255W Polycrystalline Modules 5kW SMA Tripower 5000TL Three Phase Inverter

### Sylvania Waters - NSW Australia

#### **Project Summary**



Location Sylvania Waters NSW

Project Type **Residential Grid Connect** 

**Project Size** Three-phase 5kW

Module Type Canadian Solar CS6P-255P

Inverter Type SMA STP 5000TL

Date Installed August 2015

Orientation North East (azimuth 55°, tilt 22°) A 5kW system installed in a quiet suburb in Sydney is aimed to reduce the occupant's electricity-dependency of the utility network as well as reducing their electricity costs.

The system works by absorbing photon energy from the sun and convert to electricity using the solar photovoltaic panels. Electricity generated at that time will be used directly by the occupants and excess energy can be exported to the grid. If energy produced by the panels are not sufficient, your meter will automatically switch back to grid energy.

Panels were situated in the north east facing aspect for the morning sun. This will help occupants reduce energy usage from early morning til early afternoon. Heavy usage appliances such as swimming pool pump and electric hot water can be utilized during this period to save costs.

#### **Product Highlights**

Outstanding performance at low irradiance

Long term system reliability

25 Year performance warranty insurance

Comes with easy to use monitoring device

Local warranty in Australia







Estimated Yearly Yield<sup>1</sup>

## Estimated Yearly Savings<sup>2</sup> \$2,400/Annum 8.7MWh/Year

1. Based on a yearly average of 4.7PSH. 2. Based on current electricity market rate

