

RP1007

INTELLIGENT AUTOMATED MONITORING OF COMMERCIAL PV SYSTEMS.

Snapshot

To optimise the performance of a commercial PV system by measuring and simulating the performance of the system using actual system energy yield, local weather data and sophisticated algorithms.

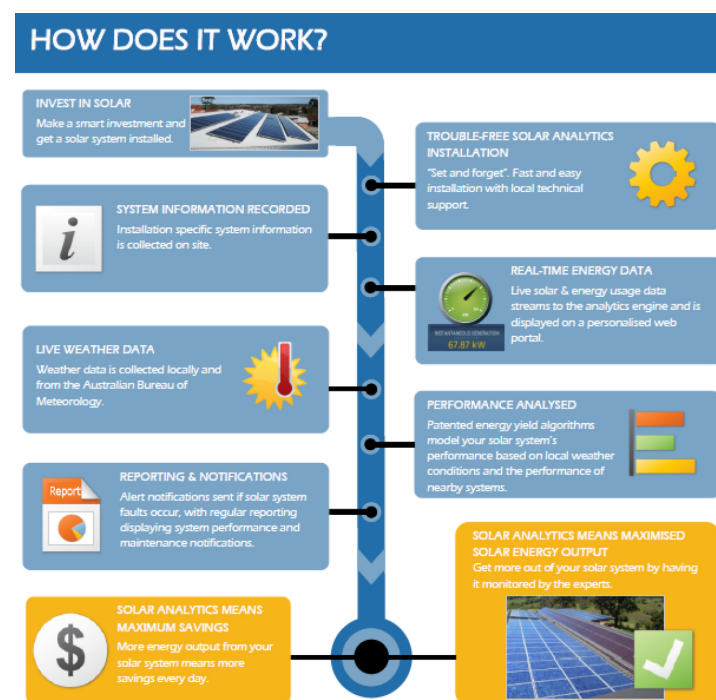
The object is to refine the Solar Analytics tool that predicts how much energy the PV system should produce and intelligently compare this prediction to the actual energy yield to accurately determine if the system is performing within specification.

Outcome

This project will develop intelligent algorithms using real time on-site weather, building and system inputs to automate the analysis of the electricity production and consumption. The monitoring solution developed in this project will monitor the energy generation of PV systems using energy modelling algorithms, and investigate integration into building management systems to provide a tool that monitors both energy generation and utilisation. This project will yield:

- (i) a solution for monitoring and analysis of energy generation and usage in commercial buildings addressing key research areas within the CRC
- (ii) a tool for engaging with community through real-time, public display of energy generation and utilisation

(iii) engagement between CRC partners in PV module technologies, building monitoring, and energy efficiency.



Integrated Building Systems

1. Harnessing the Australian sun

Project Leader

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Partners

UNSW; Suntech; AECOM

PROJECT START DATE: FEB-13

PROJECT DURATION: 1 YEAR