

CASE STUDY / QUEENSLAND SCHOOLS SOLAR AND ENERGY EFFICIENT LIGHTING UPGRADE /



FAST FACTS /

- / 1365 Queensland sites to be upgraded under the National Solar Schools Program (NSSP)
- / Approx. 460 photovoltaic (PV) and 700 lighting installs
- / Use of local subcontractors to supplement PSG workforce



CLIENT /

QLD Government Dept of Education and Training (DET)

DESCRIPTION /

Solar and Energy Efficient Lighting Upgrades in QLD State Schools

TIMELINE /

May 2009 – June 2011

LOCATION /

Queensland – state wide

CONTRACT VALUE /

Est. \$25 – 30 million on completion

In late 2008 PSG Richard Flanagan and Origin Energy completed ten trial school photovoltaic (PV) and lighting upgrades for Queensland Government's Department of Education and Training (DET).

In April 2009 PSG Richard Flanagan successfully tendered to the Department of Education and Training to be one of three providers of PV systems and one of two providers of lighting upgrades across a further 1365 sites over 2 years.

Photovoltaic system (or PV) refers to the conversion of solar energy directly to electricity via solar cells. This work involved the installation of a PV system and upgrade of older style T8 fluoro fittings with retrofit T5 kits.

This Queensland Schools program is about installation of a solar system as an alternative energy supply and the lighting retrofit is to ensure less energy is being used. No doubt some of the solar energy generated will help power lighting and air-conditioning and other power usage in the school.

PSG Richard Flanagan's unique service delivery method included utilising Queensland's Master Electricians as our subcontractor assisting with lighting upgrades. This had two substantial benefits. It provided the Queensland Government with local labour content for regional installs and secondly, it enabled us to carry out concurrent works on multiple sites across the entire State. Perfect.

The lighting upgrades involve the fitment of a T5 electronically ballasted retrofit incorporated into the existing T8 fixture in a number of predetermined areas in a school. The PV systems comprised 2, 4 or 6kW installations with data output to a web-linked IT system. This in turn will enable the schools to use the system to educate the students on energy efficiency and how power is 'pumped' back into the grid. Such studies can then be immersed into the curriculum. Yet another clever use of eco technology.