

PROJECT DESCRIPTION

As part of our continuing push to demonstrate sustainable futures at MacKillop College, we are pleased to announce that a 2100 Watt grid-connected photovoltaic (solar power) system on B Block is now operational. That is, we are making electricity from sunlight and according to Aurora Energy we are the first school in Tasmania to undertake such works.

Brett Carter Solar Energy designed and installed the system. Aurora Energy donated a meter and specialty software that will allow us to better see the ebbs and flows of the electricity as well as enable data download, analysis and display for use in science and maths classes. An estimated 4500 kWh will be produced annually, saving the school up to \$700 per year in this initial stage at current (but rising) electricity tariffs. This will be more than enough to power our science labs.

This first stage was co-funded from the Federal Government's Photovoltaic Rebate Program (PVRP) and the school. We will seek additional funding over time to add additional solar panels to the array. We aim for a 5000 Watt system in the near future with solar hot water systems as well.

A student-designed interpretive display has been established around the meter, inverter and computer to showcase solar and alternative energies. Keep an eye on that space as it evolves to see the technical and creative output of our students.

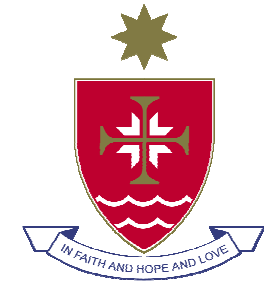
PHOTOVOLTAIC PROJECT SUPPORTERS

Brett Carter Solar Energy

Catholic Earthcare Australia

MacKillop College

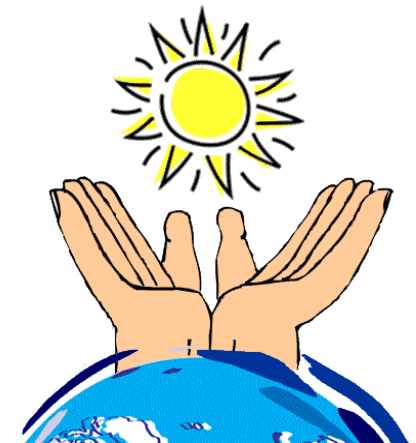
Parents and Friends



MACKILLOP COLLEGE

Photovoltaic Rebate

Program Project



“Catch it if you can!”

Photovoltaic Systems



PV solar systems, also known as photovoltaic solar panels generate electricity direct from sunlight, which can be used to power electric appliances and lights.

How it works: the solar panels are set up facing north, on a roof. These panels generate power when the sun is shining, even through clouds but not as efficiently. The panels are connected to an inverter which converts the sunlight (DC power) to 240V AC power, used to power lights and electric appliances. This is then attached to an energy meter which measures how much solar electricity has been generated and efficiently reduces our power bills. Written by Kate Stephan Year 10, 2008

Thanks to the Federal Government, Brett Carter Solar Energy, and Aurora Energy, **Mackillop College is the first Tasmanian school to install a grid-connected photovoltaic system.**

Help us save power...

- Install energy efficient lighting.
- Turn off the lights and heaters when you leave a room.
- Switch off appliances at the power point as stand-by uses almost the same power as leaving the unit on.
- Wash clothes in cold water and avoid using a clothes dryer. Try letting the sunlight and air dry them.
- Use energy-saving settings on your dishwasher.
- Install a solar hot water system.
- Install your own photovoltaic system!!

For more information, visit these websites —

Mackillop College

<http://www.mackillop.tas.edu.au/sustainability>

Federal Department of Water, Environment, Heritage and the Arts

<http://www.environment.gov.au/education/index.html>

Sustainable Living Tasmania

<http://www.sustainablelivingtasmania.org.au>

Catholic Earthcare

<http://www.catholicearthcareoz.net>

Aurora Energy

http://www.auroraenergy.com.au/residential/energy_saving_tips

The Green Pages Eco Directory

<http://www.thegreenpages.com.au>



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