

UQ solar array reaches milestone

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“The concentrating photovoltaic solar tracking array is a high-visibility flagship for the overall UQ solar project.” Professor Paul Meredith

The University of Queensland's \$7.75 million solar power system at St Lucia in Brisbane has reached a milestone, with installation completed on one of the project's most visible components.

A seven-metre by six-metre 8.4 kilowatt high-efficiency, concentrating photovoltaic (CPV) array that tracks the sun has been installed on Sir Fred Schonell Drive, adjacent to UQ's multi-storey carpark.

Professor Tim Flannery, head of the Australian Government's Climate

Commission, will inspect UQ's CPV array today. He will be accompanied by commissioners Professor Will Steffen, Professor Lesley Hughes and Mr Gerry Hueston.

The CPV tracking array is one component of UQ's 1.22 megawatt solar generation system, which will be Australia's largest and most powerful flat-panel solar power system on completion in July.

The vast system will span four buildings at St Lucia, effectively coating the rooftops with 5000 [polycrystalline silicon](#) solar panels.

After being connected to the UQ power grid, the SolFocus CPV tracking array had its first full-sun, non-cloudy day on Wednesday, March 23, allowing it to be calibrated to the sun's position and to start generating power.

The CPV array is valued at about \$90,000, and has been donated by Ingenero, the Brisbane firm that won the contract to install the overall 1.22 megawatt PV solar array across four rooftops at St Lucia.

The CPV tracking panel is made up of 28 parabolic focussing, photovoltaic modules, each with 20 individual reflectors and a high-efficiency triple-junction semiconductor solar cell.

It is motor-driven on a dual axis to keep it closely aligned with the sun so optimum solar harvesting is ensured.

UQ's is one of only 31 CPV tracking panels in Australia; the other 30 are at the Alice Springs Airport.

Professor Paul Meredith, of UQ's School of Mathematics and Physics and Global Change Institute, said the January floods had set back the schedule of the solar project, so it had been “very gratifying” to see the

CPV array begin generating power in the past week.

“We have been busily installing the major parts of the [solar array](#) around the St Lucia campus since last October, but much of that activity has been out of sight, because it is on rooftops,” he said.

“The CPV solar tracking array is a high-visibility flagship for the overall UQ solar project.”

UQ Property & Facilities and the interdisciplinary UQ Renewable Energy Technology Advisory Committee is coordinating the solar project, supported by industry partners Ingenero, RedFlow, Energex and Trina Solar.

The 1.22MW system will position UQ as a leader in solar power research, working closely with industry in a key renewable energy growth area.

In another step forward for the UQ [solar project](#), RedFlow's zinc-bromine battery modules arrived on site at St Lucia this week.

Provided by University of Queensland

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