

RISE

# Living green

STEPHEN WILLIAMS



GREEN HOUSE

## Happily carrying solar CAN

The Hunter's sunny disposition is saving the planet – and purses.

THE Hunter is well on the way to becoming the solar energy capital of Australia. This is largely due to the work of Climate Action Newcastle (CAN), a not-for-profit grassroots organisation that formed in Newcastle in 2006 to do something about preventing runaway global warming.

Coal-fired electricity generators are a large part of the problem, so the production of clean, renewable electricity – such as solar electricity – is a large part of the solution.

CAN member Ian Wilcox had heard about community bulk buy schemes for solar electricity panels and took the idea to CAN in May last year. Bulk buy schemes result in significant discounts for participants following a tender process.

Round One of CAN's bulk buy scheme resulted in about 150 Hunter households signing up for the heavily discounted panels.

A company called Aussie Solar, based in the Blue Mountains, won the tender for Round Two. Round Two, now under way, has also attracted about 150 Hunter and Central Coast households.

The end result is the largest community solar bulk buy rollout in Australia, and it's still growing. CAN estimates that the project has accounted for about 10 per cent of all NSW solar panel installations to date, worth more than \$6 million so far.

**How it works**  
Under Round Two, households end up paying as little as \$140 to have a 1 kilowatt solar electricity system fully installed on their roof.

Such a system would normally cost about \$2,000, but there is an \$800 Federal government rebate available, although the rebate ends on June 30 next year.

With the Federal Government's recently announced stimulus package, homes \$800 for many people's was an almost getting the system for free.

With this system, six solar panels convert the sun's energy into electricity. This electricity is taken back to the electricity grid in the household or to a new electricity meter, in conjunction with an inverter, both installed as part of the \$1400 price-keep track of how much electricity the solar panels generate, how much electricity is used by the household, and how much electricity is fed back to the grid.

Importantly, the household does not need any special technical knowledge, nor does the household need to make any special adjustments – the system works automatically. What is needed, though, is a section of roof that faces north and is not shaded for most of the day.

**History**  
The system on offer is called a "grid interactive system" because it can feed electricity into the grid or draw electricity from the grid in the normal way. Such systems have now been operating for about 10 years.

Before that, people with solar systems had to have large expensive batteries to store the electricity. With a grid interactive system, no batteries are needed.



CAN-00: Duncan Clarke, Al Wilcox, Jane Galchrist, Ben Her and Ois Wilcox, from left by Jona C

### Clock ticking on solar rebate

The Federal Government's \$800 rebate for solar electric panels will end on June 30. To qualify, households need a household income of less than \$100,000.

After June 30, there is a bad news and good news in new non-rebate-tied schemes will come into force, resulting in households who qualify for the

**The bottom line**  
The main problem with home solar electric systems (also known as photovoltaic systems) is that the panels, based on silicon cells, are relatively expensive compared with heavily subsidised conventional electricity from coal.

The cost is best described in dollars per watt. A figure of \$10 per watt, just for the panels, is a rough guide: a 1000-watt system (1kW) would normally cost about \$10,000 in total, or \$12 per watt.

By paying \$1400 through CAN's bulk buy scheme, the cost is \$1.40 per watt.

**The payback period**  
Calculating the time by which the panels will pay for themselves is difficult for two reasons. First, the price of conventional electricity is set to rise in the years to go by. It is likely to be

about eight weeks to process applications.

Aussie Solar, the company providing and installing the solar systems for CAN's Round Two, recommend people get their rebate applications in then by March 30.

For rebate details, go to [environment.gov.au/rebate](http://environment.gov.au/rebate) or phone 6274 1111.

significant. The more it rises, the quicker your solar panels pay for themselves.

Second, it is still uncertain how much money people with solar panels will receive for their green electricity, and whether they will be paid a premium for all the electricity they generate, or just for excess electricity they generate.

This pricing is called a feed-in tariff and the NSW Government is deciding what it will prescribe. The solar industry wants a "gross feed-in tariff" a premium for all the energy generated.

With this caveat in mind, CAN estimates the \$1400 systems will pay for themselves in about six years, after that, make profits for 20 or 30 years.

To find more information about CAN's solar bulk buy, go to [climateaction.org.au](http://climateaction.org.au) and click on "Newcastle's Going Solar". Sign a petition for a gross feed-in tariff at [feedintariff.com.au](http://feedintariff.com.au).

### DIARY DATES

- February 26: Free seminar, assign habitat in friendly meetings, 5.30-8pm, Tomara Library and Community Centre, Saltwater Bay.
- February 28: Newcastle Outdoors Movement, leaving 15km hike followed by cafe at Meet at Barn at corner of West Waghburn, Abernethy, West end, meet at Barn at 10.30am (15th St, Toroni (opposite Liberty Market) 4844 7869.
- March 1: Clean Up Australia Day, [cleanup.org.au](http://cleanup.org.au).
- March 1: Farmers market, Newcastle Showground, Griffiths way, Barn 1pm.
- March 4: Climate Action Newcastle meeting, 6.30pm, Hamilton Public School, on Sea and Tade street, Hamilton.
- March 4: Information session: free marine ecology course, Tomara Library and Community Centre, 6.30-8pm. Bookings essential. Phone Malissa Anderson on 4980 0251 or email [malissa.anderson@portstephens.nsw.gov.au](mailto:malissa.anderson@portstephens.nsw.gov.au).