



News from Australia's Solar Cities



Australian Government

Solar Cities

Solarise

Issue 1

May 2009

In this issue

- Welcome
- Australia's largest roof mounted PV system
- Townsville smart meter installation
- Spotlight: a profile
- Adelaide panels turn one
- Australia's newest Solar Cities
- Blacktown pool pump saver trial



Welcome

Welcome to the first edition of *Solarise* – the newsletter for Australia's Solar Cities. It has been produced to celebrate the news and findings of the Solar Cities program and bring city participants together.

Solar Cities is an Australian Government initiative that assists whole communities to rethink the way they use and produce energy. Governments and industry work with communities in the program to trial solar technologies, energy efficiency measures, pricing arrangements and metering technologies. Data collection is key to measuring the outcomes of the trials.

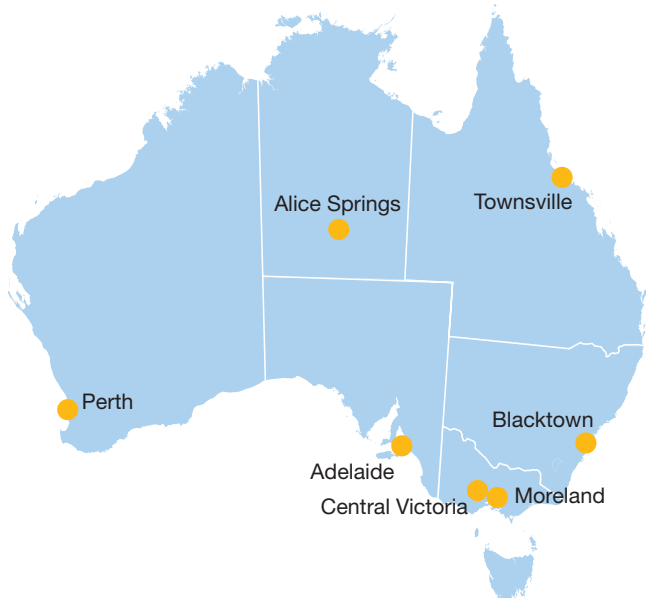
Australia's seven Solar Cities are located in Adelaide, Alice Springs, Blacktown, Central Victoria, Moreland, Perth and Townsville. The Solar Cities are at different stages – for example, Blacktown Solar City has been running for over a year and a half, while some of our other Solar Cities are working towards their public launch. The program continues until 2013.

Solarise will be issued quarterly.



Crowne Plaza Alice Springs 305 kW photovoltaic installation (image courtesy of Crowne Plaza)

Australia's Solar Cities



Australia's largest roof mounted PV system

Australia's largest roof mounted PV system has been switched on at the Crowne Plaza Hotel in Alice Springs through the Alice Solar City. The 305 kW iconic project includes over 1320 photovoltaic (PV) panels and will generate enough power to meet 40–80 per cent of the hotel's daily energy needs.

The solar PV system tops off significant energy and water efficiency measures already undertaken by Crowne Plaza such as energy efficient lighting, flow reduction shower heads and automatic air conditioning controls.

Hotel guests can learn about the system and see the energy being generated on displays at the Sustainability Corner in the hotel foyer or on the internal television channel.

solar cities



Townsville smart meter installation

Energy information from participants in the Townsville Solar City is starting to be collected, with over 350 smart meters now fitted to homes in the Magnetic Island Solar Suburb.

Smart meters record and store electricity consumption data. Solar energy generated from homes with rooftop PV installations is also measured. Half-hourly metered data is remotely read and downloaded by electrical retailers.

Data collection is a vital part of the Solar Cities program as it will be analysed and used to find the most effective energy management solutions for our communities. In addition to energy data, information from home energy surveys in Solar Cities will be used to measure the results of the Solar City trials.

Participants in the Townsville Solar City are already seeing reductions in their energy use after their home energy surveys. Residents of the Magnetic Island Solar Suburb have collectively reduced their energy use by 11 per cent compared to other island residents.



Smart meter being installed in Townsville Solar City household (image courtesy of Townsville: Queensland Solar City).

The first Solar Cities Progress Report will be released later this year. Stay tuned for more details.

Spotlight

In this column, we introduce someone involved with Solar Cities and learn about their role in the program.

In this issue we meet Michael McCartney, Project Director of the Central Victoria Solar City.



How long have you been working on the Central Victoria Solar City?

I joined the project at the time the Expressions of Interest were being submitted, late in 2005.

What issues do you deal with in a typical working day?

Our Solar City is undertaking a mixture of 'start-up' activities (including employing staff, setting up office systems, communications plans) as well as finalising product specs and putting all the contracts for delivery of the program into place... there's never a dull moment at present.

What excites you most about your Solar City?

Our Solar City is truly a community led initiative. It's the most challenging as well as exciting aspect of our model. I also trust it will be the most rewarding when we see our centralised PV Parks being utilised and ultimately owned by local community members.

Describe the energy saving measures you have undertaken in your own home?

We have become much more conscious of the issues around climate change in our own home. We have ordered a solar hot water system to replace our electric system, made appliance purchases based on energy star ratings, have switched to GreenPower, replaced old light globes, put appliances on separate power-boards to make them easier to take off standby and reset our timers on some appliances like our pool pump.

We have also only used our second fridge for three days in the last year and hardly ever use our clothes dryer. Interestingly, because our home is not suited to having clear north-facing unshaded roof-space, I hope to be one of many locals who will acquire their PV by subscribing to our PV Park product. I have not been to any meetings in Melbourne (two hours away), other than by train or by car-pooling with others. How times have changed for me.

solar cities



Adelaide panels turn one

The Adelaide Solar City Central Bus Station iconic project celebrates its first birthday this March.

The 50kW system consists of 320 PV panels mounted on the rooftop of the Adelaide Central Bus Station. The system powers 'Tindo' – the world's first solar electric bus.

During the daytime, solar power generated by the PV panels is fed into the electricity grid. At night time, Tindo is plugged into a special charging station that charges Tindo's 11 batteries.

The PV system has had a very successful first year and produced more electricity than expected. Tindo is entirely powered by electricity generated by the solar PV panels and excess electricity is fed into the grid as 100 per cent clean, green, solar energy.



Above (left to right): Adelaide Central Bus Station rooftop array, charging station for Tindo's 11 batteries (images courtesy of Adelaide City Council).

Below: The Adelaide City Council's Adelaide Connector Bus 'Tindo'.



Australia's newest Solar Cities

Our next issue will introduce some of the features of the Perth, Moreland and Central Victoria Solar Cities. As Australia's newest Solar Cities, these cities have not yet launched to the public. If you are a resident in these areas, stay tuned to see how you can become involved.

Blacktown Pool Pump Saver Trial

As Western Sydney draws to the end of another hot summer, many residents found relief from the heat in their backyard swimming pools. Yet swimming pools can be expensive to maintain and pool pumps consume a lot of energy if left on all day long. Blacktown Solar City is helping residents reduce their electricity use and the costs of maintaining a pool by running Energy Saver Trials.

The Pool Pump Saver Trial fixes a small control device to the pool pump electricity supply. For up to 12 days of peak electricity demand per year, pool pumps will be remotely turned off between 1pm and 8pm. The control devices are supplied and installed free of charge for participants in the trial through Blacktown Solar City. The information collected from the trials will help manage energy demand at peak times.

Further information

Visit the Solar Cities website:
www.environment.gov.au/settlements/solarcities

© Commonwealth of Australia, 2009

Information contained in this publication may be copied or reproduced for study, research, information or educational purposes, subject to inclusion of an acknowledgment of the source.