

Press Release 16 April 2015

APVI, SMA Australia and ARENA collaborate, to deliver enhanced Live Solar Map with data from more than 5500 individual PV systems.

With the release today of a new update to the APVI Live Solar Map, energy stakeholders will be able to access a more detailed and accurate estimate of the output from more than 5500 distributed PV systems across Australia.

The Australian PV Institute (APVI) <u>Live Solar PV Map</u>, funded by the Australian Renewable Energy Agency (ARENA) tracks the output of PV systems across Australia, and their contribution to meeting electricity demand in real time.

Since early 2014, the APVI Live Solar Map has been used to track and map solar output across Australia. The Map incorporates live data from individual PV systems, the Clean Energy Regulator, PVOutput.org and now SMA Australia. The data is used to estimate the output of all PV systems in different regions of Australia. PV output is then compared to electricity demand in each State to show the percentage of load being met by PV.

With the launch today of the enhanced version, the number of systems being monitored has more than doubled to over 5500, with data from additional systems provided by <u>SMA</u> <u>Australia</u> via the SMA Sunny Portal. With this extra data, the spatial resolution is increased so that live PV output is now shown at the 2-digit postcode level (e.g. all the postcodes beginning with 31XX are grouped).



PV Performance Mapped by Postcode

"These improvements to the solar map will help increase consumer and electricity sector confidence in solar PV by providing better information on how, when and where the 1.3 million PV systems in Australia are generating emissions-free electricity and reducing demand peaks." said Dr Anna Bruce from UNSW, the lead researcher behind the map.

"This will not only help to illustrate how householders can reduce electricity bills but also enable better integration of solar PV into the electricity system, which will help to reduce costs for everyone".

ARENA CEO Ivor Frischknecht said ARENA was pleased to provide funding support to enable the APVI to develop the map.



"Since it came online in 2014 the map has attracted significant interest, underscoring the value of translating raw data into visual information for electricity operators, the solar industry, government and consumers," Mr Frischknecht said.

In addition to these new features, the Solar Map which can be found at http://pv-map.apvi.org.au/ includes the following:

- The *Solar PV Status Map* provides an interactive guide to the location, capacity and annual performance of PV installations across the country. It provides detail on installed capacity, percentage of households with PV, and estimated annual PV production by state, city (local government area) and postcode.
- The Solar Potential Tool allows stakeholders to assess the potential output from PV on urban rooftops. At a city level, insolation maps allow identification of the best roofs, while on a specific roof surface, an estimate of annual electricity generation, financial savings and emissions offset from installing solar PV can be obtained. The interactive map uses 3D spatial data to allow users to zoom down to rooftop level and see information about the shading from surounding buildings and trees, the tilt and orientation of roof surfaces and the solar resource available on each surface.
- The *Solar Animation* provides a visualisation of the roll-out of solar across Australia from only 10MW total in 2007 to close to 3.6 GW in mid 2014.
- Market Analyses and Postcode Data keep track of the progress and impact of the technology.

Contact <u>chair@apvi.org.au</u> 0408 223 653

About the APVI

The Australian PV Institute is a not-for-profit, member based organisation which focuses on data analysis, independent and balanced information, and collaborative research, both nationally and internationally. Our objective is to: *support the increased development and use of PV via research, analysis and information.* In addition to Australian activities, we provide the structure through which Australia participates in two International Energy Agency (IEA) programs – PVPS (Photovoltaic Power Systems), made up of a number of activities concerning various aspects of PV, and SHC (Solar Heating and Cooling), concerned with new solar thermal products and services.



