CSIRO Energise Insight – Released 14 November 2018



Powering up with the sun

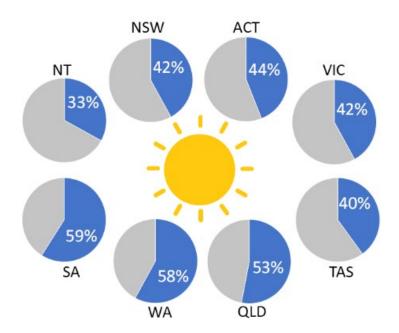
Solar power is a valuable source of renewable energy, plus it can help to reduce our electricity bills — a win-win situation! Australian households are the world's leading adopters of rooftop solar photovoltaics (PV), boasting the highest proportion of homes with panels on the roof in the world. So, how many of our citizen scientists are powering up with solar? With your help, our surveys have helped shed some light...

Who's already using solar?

Across the country, 46% of our citizen scientists reported that they currently have solar panels to generate electricity, which is noticeably higher than the proportion in the broader Australian population. Nationwide, it's estimated that about one in five households have solar panels – so it seems that our citizen scientists are well above the average.

It's important to note, however, that the figures vary from state to state. We found that among our citizen scientists, the highest uptake of solar panels is in South Australia, where around 59% of respondents indicated they have solar panels to generate electricity.

At the other end of the continuum, only 33% of those living in the NT reported having solar panels. But we only have a very small sample of citizen scientists from this area of Australia, which needs to be kept in mind when interpreting these results.



Uptake rates of solar panels among our CSIRO Energise citizen scientists.

Who's going solar in the future?

We also asked our citizen scientists about their future intentions to adopt solar later down the track. Nationally, among those without solar panels at the time of the survey, 58% reported that they planned to purchase them sometime in the future – either at their current home or at another future address. Moreover, over two-thirds of these people plan to do so in the next five years.

But not everyone who wants to harness the sun's power has the choice or capacity to do so. Financial costs, the type of building, one's rental status and even location can be barriers to installing solar. For example, among our citizen scientists with solar power, the vast majority (just under 90%) reported living in free-standing houses that were owner-occupied. So those who are renting or living in apartments, units or semi-detached dwellings might have a strong appetite for solar, but limited capacity to install panels on the roof.

What does the future hold?

While price and situation may be barriers for some, one recent and dominant trend has been the rapid fall in solar PV costs – so we can expect to see more and more people harnessing the power of Australia's sunshine. With this comes some challenges for networks, such as controlling the energy output from solar panels to ensure the grid remains stable. But with your help, we have gained more insight into current and future uptake rates for solar – and this can help prepare the nation's electricity network for all the wonderful citizen power coming its way!



Survey snapshots provide a quick look at some of the results provided so far by our citizen scientists.

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