



## Adoption of solar power – why or why not?

With two million households across the country having rooftop solar panels, it’s clear that Australians love harnessing the power of the sun! But what are the main drivers and barriers to adoption? Here’s what we found in a recent survey...

### When it comes to solar photovoltaic (PV) panels, what are the main drivers and barriers to adoption?

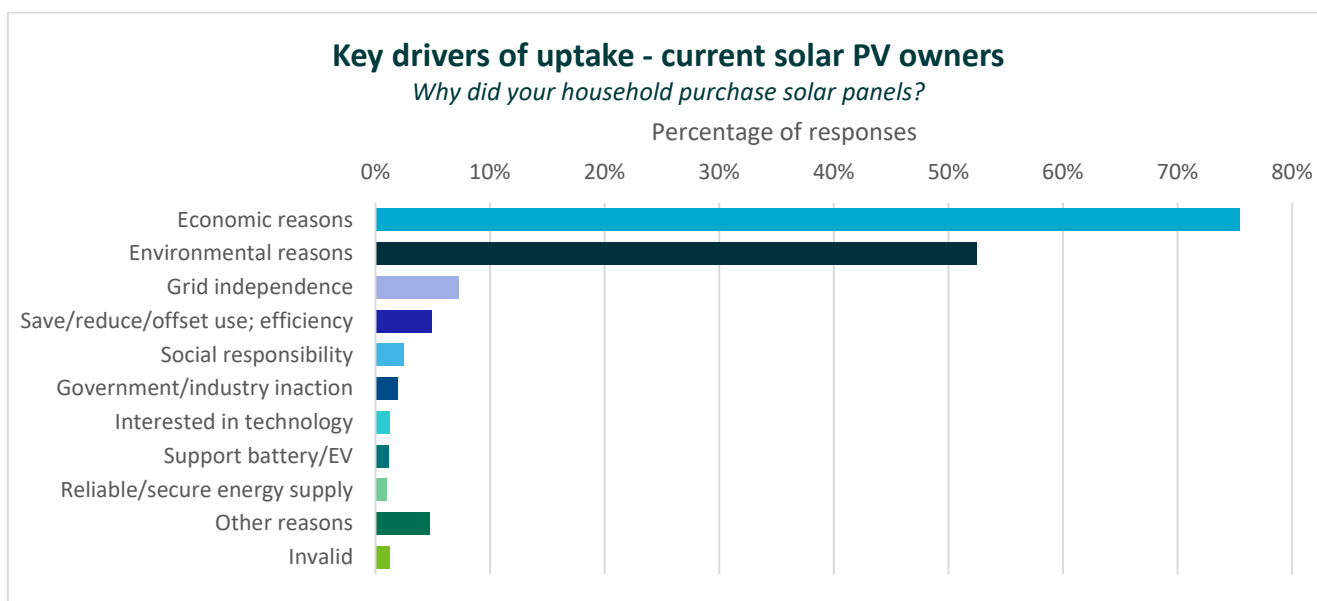
To explore this question in more detail, we ran a survey through CSIRO Energise on the topic of residential solar power. Almost half (~47%) of our survey respondents reported having solar panels to generate electricity. Nationwide, it’s estimated that about 20% of Australian households have rooftop solar PV, so the rate of adoption is much higher among our sample than the broader population.

#### What’s driving adoption?

Next, we asked those with solar to tell us in their own words what the reasons were for installing panels on their roof. Most of our respondents (~75%) gave financial reasons, such as saving money on energy bills, taking advantage of subsidies/rebates and attractive feed-in tariffs at the time of installation.

Environmental reasons were the second most common response, with over half (~53%) of those with solar reporting a desire to help the environment, reduce carbon emissions, contribute to sustainability and so forth.

A much smaller number of respondents (~7%) said that independence from the electricity grid – for instance, a desire for more control and autonomy, self-sufficiency and the ability to go off-grid – was a major reason for installing solar. Other less common reasons included a sense of social responsibility, a desire to offset home electricity use and a general interest in solar technology.

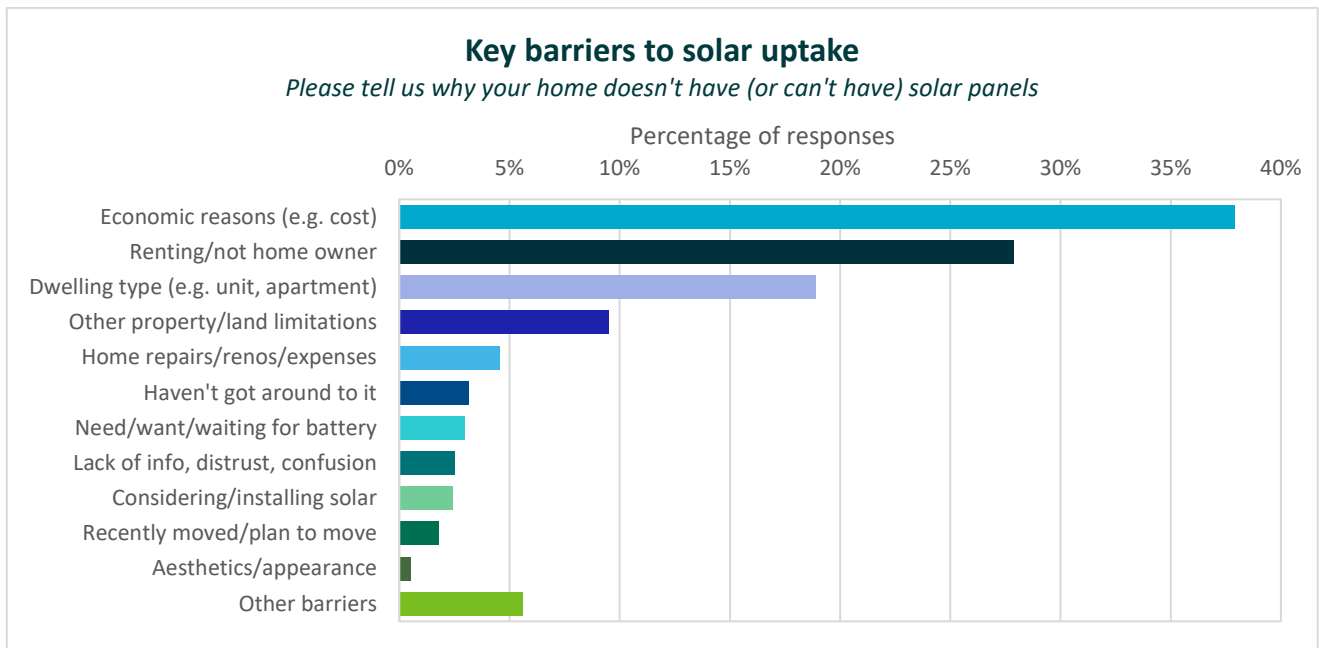


## What are the barriers to adoption?

For those respondents without panels on the roof, we asked why their home doesn't have (or can't have) solar. Financial reasons were the most common response (~38%), with many people stating that the upfront costs of solar panels and low return-on-investment were major barriers.

For some, installing solar panels simply wasn't possible because they were renting a property and/or not the home-owner (~28% of survey respondents), or because they lived in an unsuitable type of dwelling (~19%), such as an apartment, unit or property with body corporate restrictions.

Other less common reasons for not having solar panels included suboptimal land and property characteristics (e.g. too much shade/tree cover, limited roof space), the property needing other home repairs and renovations first, or simply not getting around to it.



## What have we learned?

It's clear that many factors contribute to the adoption of solar panels across Australia, with different people and households often having different motivations. There are also various financial and structural barriers that may make it difficult or impossible for households to adopt solar. Having a better understanding of these diverse drivers and barriers is important, as it may inform the design of future policies and programs to enable greater uptake of renewables across the country.



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

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