CSIRO Energise Insight - Released 3 April 2019



The energy trilemma – what matters the most to consumers?

Our researchers are working hard to build a more sustainable, reliable and affordable energy future. But which of these three things is seen as most important to Australians? Below, you can read about how we have started to explore this topic.

Australia's energy landscape is undergoing significant transformation. Solar is growing rapidly, demand response technologies are emerging, energy efficiency is rising, and there is far more potential for battery storage and electric vehicles than ever before. At the same time, the climate is changing, energy tariffs are shifting, and tackling peak demand remains front of mind for networks. These are just some of the many challenges and opportunities facing Australia's energy industry.



Our CSIRO researchers are working hard to address various parts of the so-called 'energy trilemma' – the challenge of building a reliable and secure energy system, while also decreasing carbon emissions and keeping energy costs affordable for consumers. These three things – reliability, sustainability and affordability – are important for a range of reasons, not only for industry and governments, but for consumers too.

But what matters the most to everyday households, such as yours?

This is something we've started to explore in our CSIRO Energise Summer Energy Study. Earlier this year, we asked our citizen scientists to indicate which one of the following issues they felt was most important to them, as well as which one was least important:

- Affordability e.g. keeping energy prices down, making energy more affordable for households
- Reliability e.g. ensuring stable supply of energy at all times, preventing blackouts
- Sustainability e.g. increasing use of clean renewable energy, reducing carbon emissions

We also asked people to indicate which issue they thought was most vs. least important to other households across the country. We were interested in exploring whether people felt that the issues they rated as most and least important were similar or dissimilar to that of other Australians.

So, what did we find? Here's a snapshot of key findings, based on a sample of almost 1000 responses.

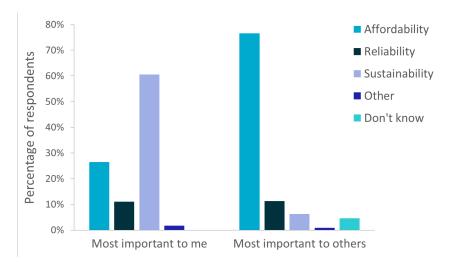
What matters the most?

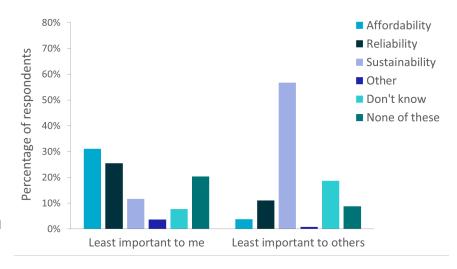
In terms of what matters the most, the majority of our citizen scientists (~60%) said that sustainability was the most important energy issue from their perspective. Just over one-quarter (26%) said affordability was most important, while about one-in-ten (11%) said reliability was most important.

But when asked what they thought mattered the most to other households across the country, the vast majority of our citizen scientists – about 77% – said that they thought affordability was the most important issue to others. Conversely, just 6% felt that sustainability was most important to other Australian households.

What matters the least?

In terms of what issue matters the least to our sample, about 31% of survey respondents rated affordability as the least important energy issue, with a slightly smaller number (25%) rating reliability as least important. Only a small proportion – just 12% – felt that sustainability was the least important issue among the energy trilemma.





But interestingly, when it came to judging what other households think is least important, this rate jumped up almost five-fold. Overall, about 57% of our citizen scientists thought that sustainability was the least important issue for other Australian households.

Some respondents said that none of the energy issues were least important (either to themselves or other households), while others said they didn't know which of the issues was least important.

So, what does this all mean?

Overall, these results suggest that among our sample, the majority of citizen scientists feel that achieving a cleaner and more sustainable energy future is the top priority. But at the same time, many people feel that other Australians don't hold this same view. Rather, they think that other households are more interested in keeping energy prices down and making energy more affordable. So there seems to be a gap between one's self-reported views and what people think are the views of others across the country – at least for our sample.

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

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