



Citizens' panels on the role of future fuels in a low-carbon future energy mix in Australia

This report provides a summary of five citizens' panels held in February/March 2021 and April/May 2022 funded by the Future Fuels Cooperative Research Centre. The project objectives were to i) identify and document what Australians see as the opportunities, challenges and considerations in relation to the implementation of future fuels in the future energy mix; ii) collectively devise principles that can guide Australia's path to a low carbon future and iii) track participants' journey (pre- and post- panel) and evaluate the citizens' panel process based on participants' experience. Pre- and post- surveys along with transcriptions of recordings from each of the deliberative sessions informed the research outcomes.

Each citizens' panel brought together a sample of members of the public from Greater Melbourne, Illawarra/Wollongong, and South Australia in 2021 and Western Australia, and a national young persons panel comprised of 18-29 year olds in 2022. Participants from each panel met twice a week over a period of three weeks to learn about climate change, Australia's current energy system, future low carbon energy possibilities including future fuels, and then discuss and deliberate on the role they see for future fuels in Australia's future energy mix. All panels were conducted online, due to the continued uncertainty surrounding COVID-19 restrictions and to maintain consistency with the earlier 2021 panel processes conducted online.

Our findings show:

The citizens' panels provided insights into the factors the Australian public prioritise when considering the transition to low-carbon futures, with or without future fuels. Benefits, challenges and considerations were identified when the participants considered transitions in energy systems in relation to the implementation of future fuels in the future energy mix:

Opportunities for future fuels: participants perceived that future fuels would be a new technology to reduce carbon emissions in the energy sector and produce cleaner sources of energy, thereby addressing climate change concerns. A future fuels economy was seen as a way to create employment and offer a chance for workers to migrate across from fossil fuels. Future fuels were seen as an option to keep Australia's energy system resilient by offering diversity and choice in the system.

Challenges for future fuels: participants perceived a lack of strong leadership and acknowledged uncertainty about the impacts and expected benefits of introducing future fuels at the household level. They identified the importance of public education campaigns about renewable energy, future fuels and any necessary changes at the household level. They were concerned about social justice and how the costs and burdens of implementation would be ameliorated, particularly for vulnerable people in the community. They also questioned how waste and redundancy triggered by the transition would be managed.

What should be considered in the implementation of future fuels: participants relayed a desire for strong political and government leadership on climate change issues. They sought greater clarity on how cost, economic and financial implications would be addressed in the transition to low-carbon energy future, particularly at the household level. Participants are seeking more information and public education campaigns about decarbonising the energy system. They relayed a desire for integrated planning and assessment of a range of technology options. Equity in affordability, reliability and access remains an important consideration.

Principles: Each panel collectively developed a set of principles to guide the energy transition reflecting values that are important to them. By comparing the five sets of principles, many commonalities have been identified suggesting that despite regional (and age) differences, Australians share many of the same values when it comes to energy systems.

The following amalgamated statement reflects commonly held values and – in the Australian public's own words – describes a clear path to follow for both government and industry stakeholders.

Well-funded research into technology and innovation should underpin the formation of coordinated policies that guide industry and the public in their decisions that provide economic benefits but not at the expense of the environment. Clean, safe, reliable, affordable energy should be accessible and available to all Australians at all times.

Quantitatively evaluating the citizens' panel process based on participants' experiences: The quantitative results show that the citizens' panel process was effective in enhancing participants' understanding of future fuels. Enhanced understanding led to greater support for future fuels.

Recommendations:

This report has elicited and documented what the Australian public values about the energy system today and what they would like protected or changed in the future. Organisations, irrespective of whether from government or industry, can use the findings of this report to assess whether their own value propositions align with the views of the public.

Where organisations are able to demonstrate their contribution towards the values and aspirations discussed in this report, it is more likely that social acceptance will follow. Communication strategies should therefore clearly articulate values alignment and demonstrate how these values translate into action.

The aggregated themes in the final report can be used as criteria for developing more 'wholesome' policies and processes. Wholesome is a term deliberately coined here to describe policies and processes that are 'holistic' in the sense of considering the 'whole system' but that go further to promote shared values in the creation of social, economic, environmental and political conditions in which individuals and communities can flourish. In other words, wholesome policies and processes consider the whole and promote community wellbeing. Wholesome approaches are particularly needed during a period of significant change and disruption such as the energy transition.

Where organisations find that their approach is not well aligned with the values reported here, then this report can be starting point for reforming organisational value propositions and communication strategies.

Where organisations find that the communities they seek to understand or work with are not represented here, this report is a chance to discover how deliberative engagement processes can be of value in getting to know communities and learning how best to work with them.

Future work

For many, future fuels were seen as having a valuable role in the future energy system as they were seen to provide choice to consumers and maintain diversity and resilience in the energy system. Understanding the importance to consumers of maintaining choice and diversity in the system is an area for further research. Continued dialogue and ongoing deliberative engagement with communities can continue to enhance awareness, education and support for future fuels in a meaningful way.

Designing factual and neutral information material for general public consumption was identified as an area of need.

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