

Understanding customer preferences to inform future energy pricing and technology solutions

Funded by Energy Queensland Australia



This project aimed to understand Queensland residential customers' preferences in service delivery and their behaviours concerning current and future energy technologies. This co-design project delivered research to extend understanding of Queensland residential customers' desires for service delivery along with current and future customer behaviour considerations. Residential customers participating in this research were asked to report key past technology and service purchases and they were asked to indicate their future intentions and willingness to pay for technology and service alternatives.

176 participants engaged in 17 co-design workshops, revealing key insights. Six customer personas, grouped into 3 macro needs groups named progressives, controllers, and connectors, provided an understanding of the energy needs and purchasing behaviours by group. Solar PV and Home Energy Management Systems emerged as the most popular ideas across various groups, while flexible pricing plans that align with individual lifestyles were highly sought after.

The study identified challenges, particularly the upfront costs and returns associated with adopting new technologies, especially for renters lacking control over energy choices. Participants expressed a need for real-time energy usage monitoring and flexible pricing plans tailored to household structures.

95% of respondents sought improved relationships with energy providers, desiring tailored solutions and clear, region-specific guidance on adopting new technologies. They emphasized the importance of transparent information outlining advantages, disadvantages, and long-term costs associated with technology adoption.

Key triggers for potential grid disconnection included rising electricity costs (86% of respondents) and distrust in energy providers. This highlighted the necessity for enhanced transparency, cost reduction in renewable technologies, and easy comparisons of alternative energy solutions.

This research offered vital insights for Energy Queensland, emphasizing the significance of understanding customer needs and behaviours. The data collected provided invaluable guidance for EQL's future business investments and pricing strategies, aimed towards contributing to a safer, more affordable, secure, and sustainable energy network aligned with customer expectations.

- 176 participants engaged in 17 co-design workshops
- Preferences by key macro energy needs group were identified.
- 95% of respondents sought improved relationships with energy providers, desiring tailored solutions and clear, region-specific guidance on adopting new technologies.

Read more:

- [Designing energy solutions: a comparison of two participatory design approaches for service innovation](#)