Residential battery storage – disruptive technology, disjuncture between policy and reality

Short Abstract:

The aim of this study is to examine the factors influencing consumer acceptance of battery storage. An online survey was conducted with 609 homeowners in Australia. Partial least squares structural equation modeling (PLS-SEM) was used to test the hypotheses. An environmental self-identity, positive attitudes towards electricity conservation and the need for thermal comfort are associated with consumer acceptance of battery storage. The majority of respondents are likely to share and trade excess electricity that would support the grid. An estimated 24% of the sample are interested in leasing batteries, where a third-party maintains the battery and exports solar to the grid. Recommendations to increase the uptake of battery storage are made.

Keywords: battery storage, consumer acceptance, decarbonisation.

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