Barriers to an innovative Energy Services Market

PRESENTED TO
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PRESENTED BY
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THE Brattle GROUP
There is a perception that innovative retail services are being offered overseas, but not in Australia

There is growing innovation in retail services for mass market customers in Australia

- Flexi-pay, prepay, green power, solar PV, demand response trials, advanced feedback (appliance disaggregation)

But still many established services have yet to make it ashore

- Energy efficiency devices, time of use, demand response, behavioural energy efficiency

We investigated barriers to innovative energy services for small consumers in Australia on behalf of Energy Consumers Australia (ECA)
We interviewed five innovative energy service providers about their experiences in Australian and overseas markets

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<tr>
<th>Australian</th>
<th>International</th>
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<td>Greensync</td>
<td>Simple Energy</td>
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<td>– Decentralised market for</td>
<td>– Behavioural demand side</td>
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<td>distributed energy resources</td>
<td>management</td>
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<td>Power Ledger</td>
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<td>– Peer-to-peer energy trading</td>
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<td>platform</td>
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<td>– Home electricity system</td>
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There was a common perception that change is already occurring, but is not being facilitated by the industry.

There are no major regulatory barriers to change. But there is a cultural resistance to change.

Barriers? What barriers?
“Forty plus years of career history is the biggest barrier we face”

Unfavourable Culture

- Current barriers are mostly cognitive
- There is a sense of inexperience or lack of comfort with new ideas/technologies
- Regulators have become far more reactive than proactive

Status Quo

- The current rule set is too complicated
- Difficult to access value stack
- Too many institutions creating and enforcing the rules
- Lack of standardisation for equipment and products

Glacial Change

- Customer driven change is outpacing regulatory change

Uncertain Future

- There is no clear leadership
- No agreed upon values, topology or standards
“Regulators don’t innovate, they regulate”

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“Regulators are so enamored of the process and the systems they are missing fast changes driven by the customers”

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There is a “lack of clarity, lack of certainty, lack of agreement on the future of the industry”

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There are several viable avenues for future research and testing

**Alternative regulatory arrangements**
- Sandboxes used in the United Kingdom and Western Australia
- Other industries have different levels of regulation depending on size/impacts

**National energy efficiency and demand response standards**
- Past efforts stalled in 2013
- Can network pricing be used to create a demand for services?

**Nodal/locational network pricing**
- Facilitating incentives to change

**Better standards on interoperability of devices**
- Including meters
Dr. Lessem assists utilities, policymakers and technology firms across North America, Asia, the Middle East and Australia on rate design, energy policy, innovative pricing, experimental design, technology adoption and policy impact measurement.

Dr. Lessem has worked with diverse clients across North America, Asia-Pacific and the Middle-East, including regulators, policy makers, utilities, system operators, consumer representatives, technology start-ups and infrastructure owners. He has published in academic journals such as the Journal of Economics and Environmental Management and Business and Society; and industry publications such as The Electricity Journal and the Public Utilities Fortnightly. He has presented on pressing energy topics to audiences in Brazil, Hong Kong, the United States, Canada, and Malaysia. In his graduate studies, Dr. Lessem conducted extensive research examining consumer adoption of environmentally-friendly products and conservation behaviours, utilizing both field experiments and utility data.

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