

Resi-Flex

Consumer Drivers



JUNE 2023

Bringing the consumer on the flexibility journey

EEA Pre-Conference – The Future is Flexibility

Orion + we*
wellington electricity

Households helping out

Globally, household consumers are supporting electricity systems



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Cuts avoided after South Island asked to conserve power immediately

6:52 pm on 28 March 2023 Share this     

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U.S.

California's Last-Ditch Effort to Avoid Blackouts: Texting Consumers

State implored businesses and households to cut power—and paid some of them—in successful last-minute bid to head off controlled power outages

By [Jennifer Hiller](#) 

Updated Sept. 8, 2022 1:30 pm ET



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National Grid's flexibility service reveals strong consumer demand

By [Jonathan Spencer Jones](#) · Dec 16, 2022



Image courtesy National Grid ESO.

National Grid Electricity System Operator's (ESO) demand flexibility service has delivered over 780MWh of demand reduction in five test events.

More than 1 million households and businesses have now signed up to participate in the service, which was launched to manage peak demand during the current winter months.



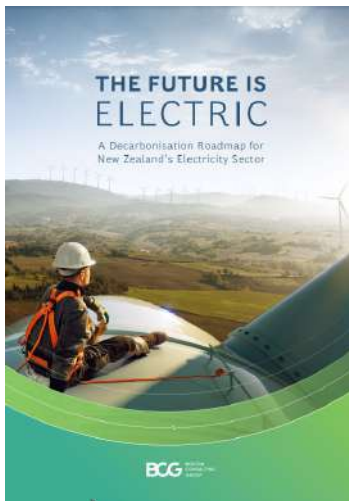
ABC News Search Login

How you can reduce your electricity usage while the network is under strain

ABC Everyday / By Patrick Wright

Unlocking the value of flexibility

We must increase the opportunities for consumers to provide flexibility



Enhanced peak price signals



Smart managed tariffs



Flexibility contracts



Mandated default off peak electric vehicle charging

Phase 1.

Discover the menu of flexibility options available given my preferences, circumstances, budget and equipment options

Phase 2.

Assess the flexibility options and decide which suit the consumer

Phase 3.

Enable the chosen options working through the investment and commissioning process(es)

Phase 4.

Day-to-day operation



OUR PURPOSE

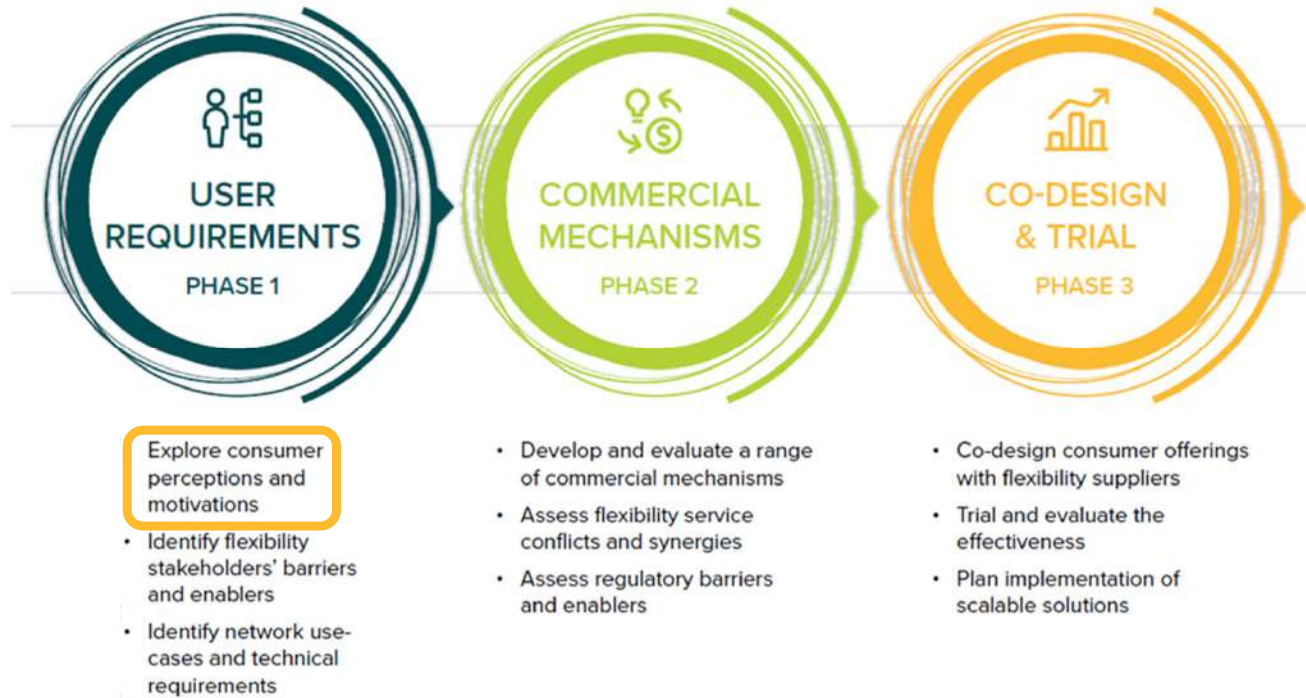
To incentivise flexibility from residential consumers by exploring commercial mechanisms in collaboration with flexibility stakeholders.



Project Phases

Resi-Flex takes a learning-by-doing and exploratory approach.

The project is live, so all findings shared are preliminary.



Frameworks Used

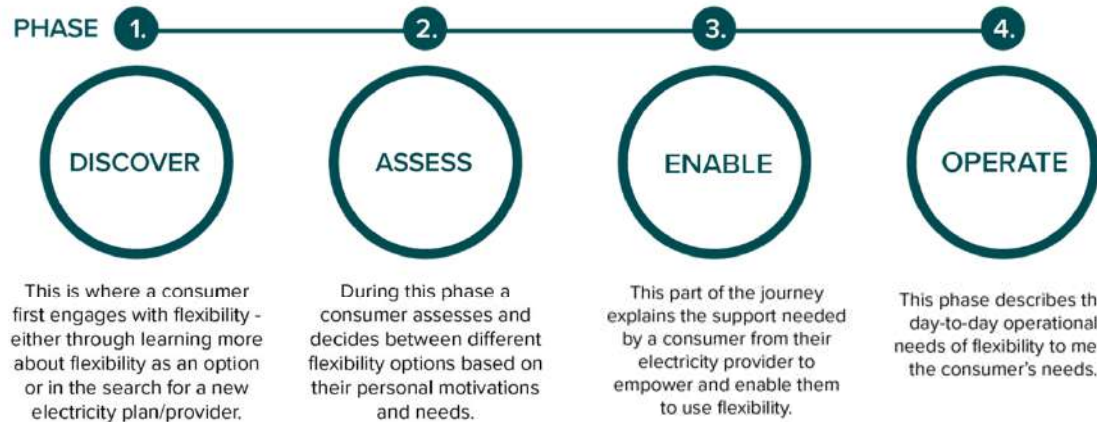
THE COM-B MODEL



FLEXFORUM JOURNEY MODEL

JOURNEY STAGES

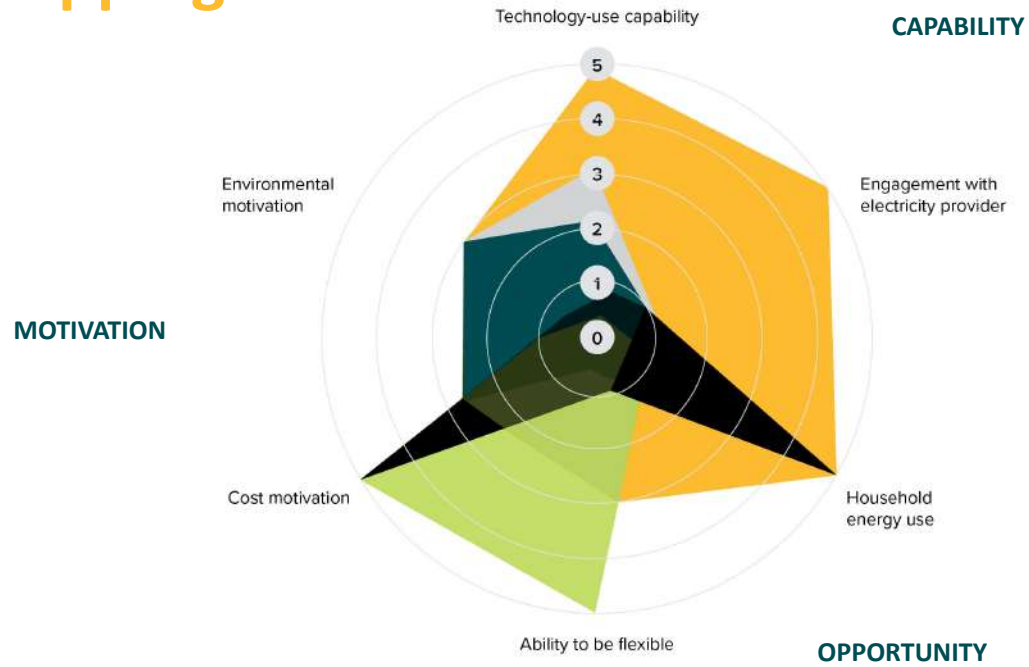
To describe each consumer persona's journey to flexibility, we then used the 'Discover, Assess, Operate and Enable' journey developed by Flexforum¹⁵.



Personas

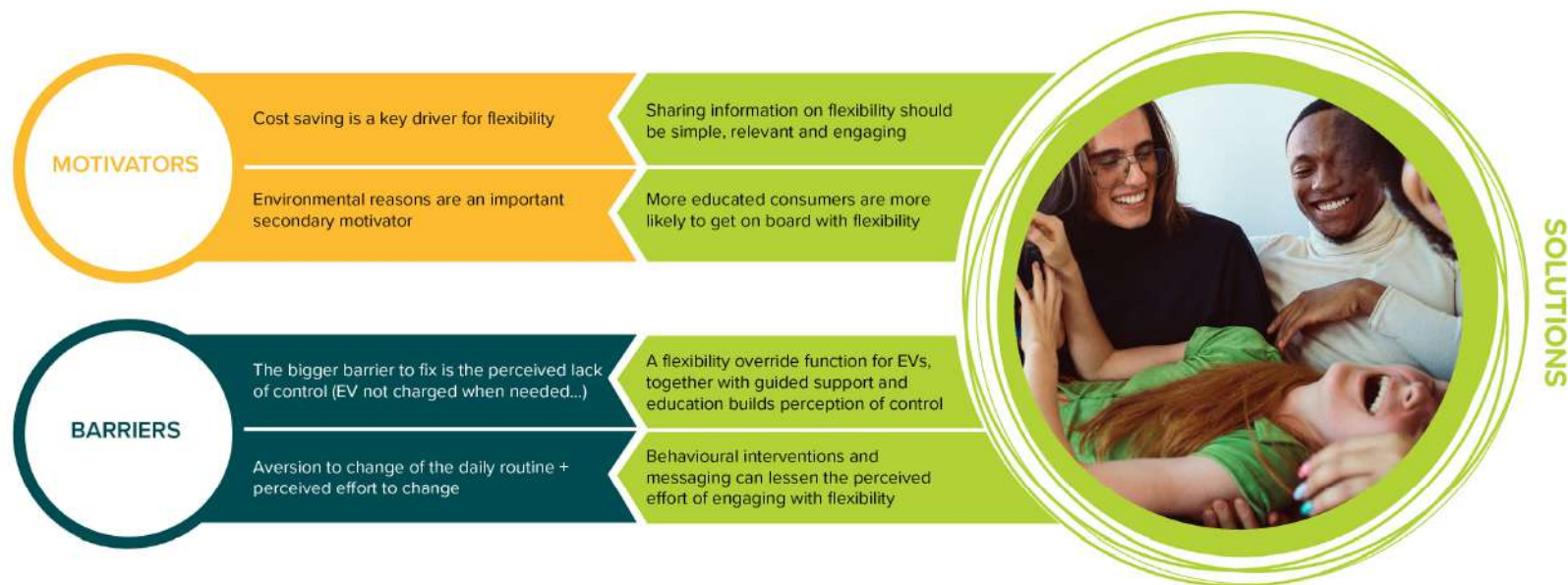


Personas' mapping



Motivations, Barriers and Solutions

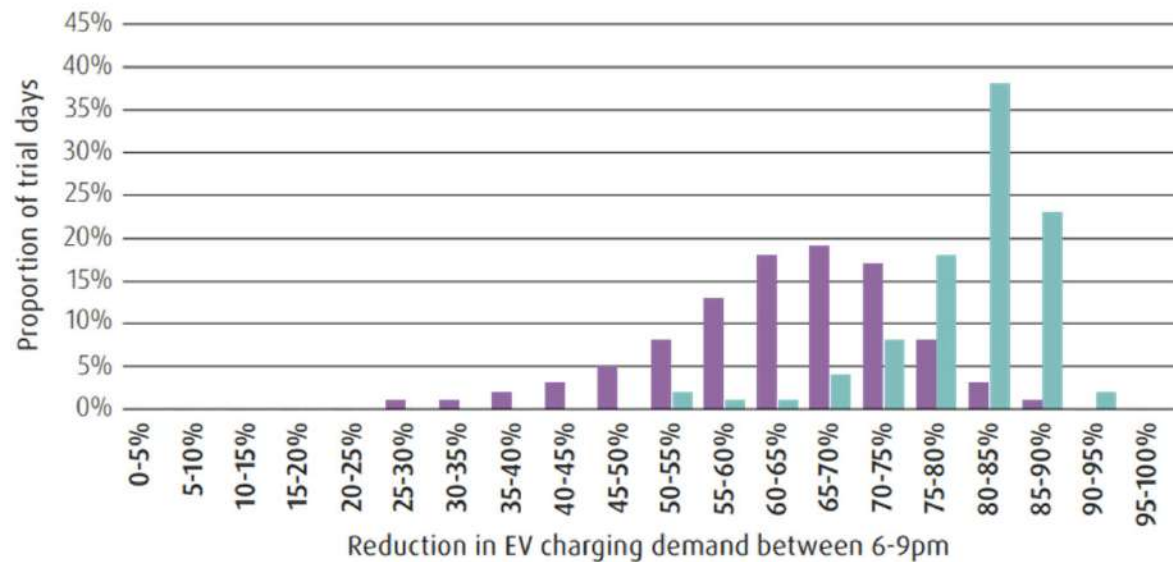
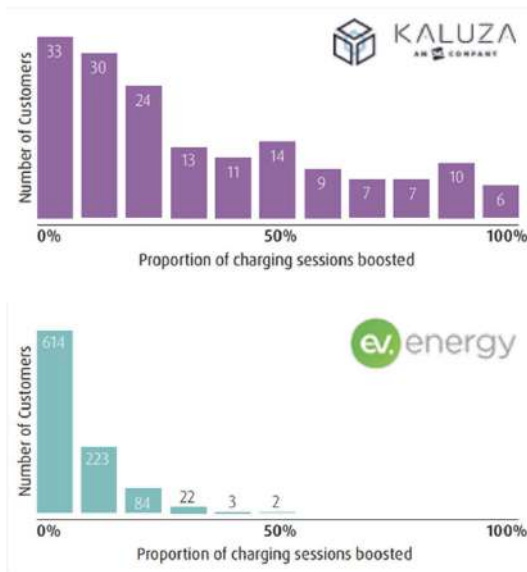
An International view



Consumer offerings impact network load

Electric vehicle drivers with incentives were less likely to override a smart charging session and provided more flexibility

Source: UK Power Networks Shift Project



Summary Journey Experience - The Opportunities



PHASE

1.

2.

3.

4.



DISCOVER



ASSESS



ENABLE



OPERATE

- Build education around flexibility
- Communicate that flexibility can reduce costs
- Use relevant channels and message framing to engage consumers

- Show how flexible customer offerings can help consumers reach their goals
- Make it easy to compare customer offerings

- Provide support with any technology required for flexible customer offerings
- Simplicity and clarity in how flexible customer offerings work
- Work alongside existing habits and routines

- Enable customers the ability to manage their energy usage (e.g. 'set and forget', 'override' options)
- Support in operating any flexible customer offerings
- Ongoing motivation and encouragement to engage

What we learnt

NZ has limited consumer insight on flexibility in the public domain

Consumers engage with many stakeholders along the journey

There are many factors that influence real-world consumer behaviour

What we are doing

Creating a shared resource of household personas and consumer journeys for the sector to build on

Support coordinated action to streamline the consumer journey through groups including the FlexForum and ENA

We are preparing to partner with flexibility stakeholders to co-design consumer offerings and trial these with households

Questions?



THANK YOU.

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