# **Resi-Flex Consumer Drivers**



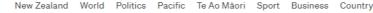
Bringing the consumer on the flexibility journey Evie Trolove - EEA Pre-Conference – The Future is Flexibility



## Households helping out

### Globally, household consumers are supporting electricity systems





#### NEW ZEALAND / WEATHER

### Cuts avoided after South Island asked to conserve power immediately

6:52 pm on 28 March 2023

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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 Follow

Updated Sept. 8, 2022 1:30 pm ET

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### National Grid's flexibility service reveals strong consumer demand



News



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.

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





## Unlocking the value of flexibility

We must increase the opportunities for consumers to provide flexibility





#### OUR PURPOSE

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





## **Project Phases**

Resi-Flex takes a learningby-doing and exploratory approach.

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



 Assess regulatory barriers and enablers

and enablers

requirements

 Identify network usecases and technical  Plan implementation of scalable solutions

TRA



### **Frameworks Used**

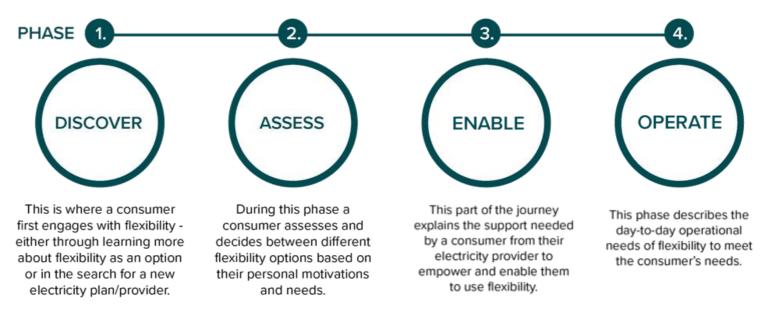
#### THE COM-B MODEL



#### FLEXFORUM JOURNEY MODEL

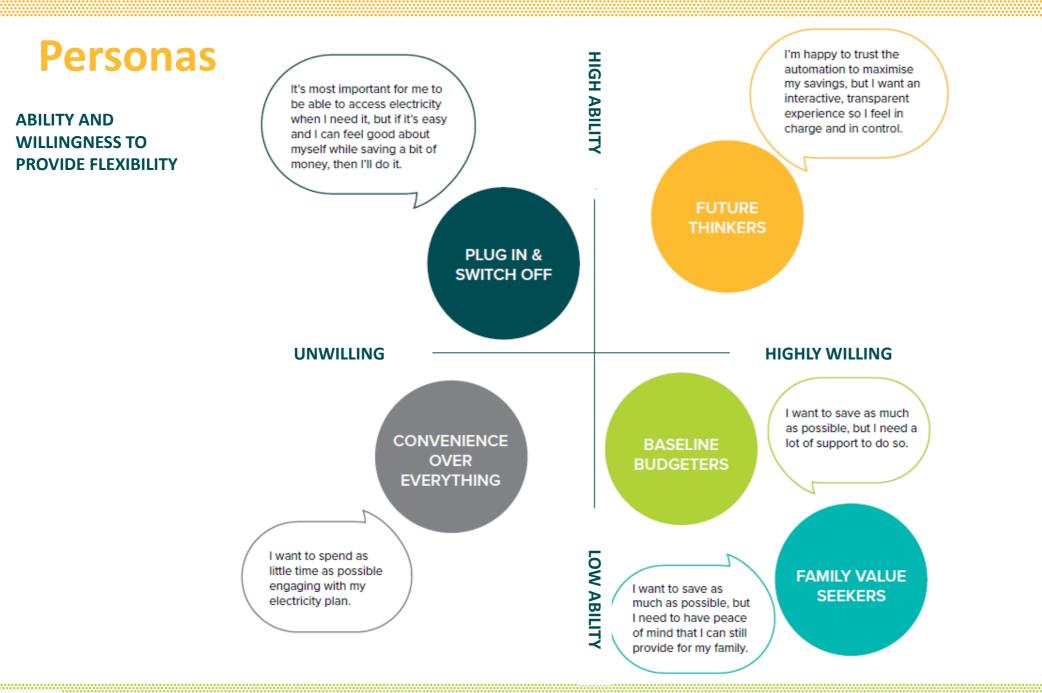
#### JOURNEY STAGES

To describe each consumer persona's journey to flexibility, we then used the 'Discover, Assess, Operate and Enable' journey developed by Flexforum<sup>15</sup>.





\*PERSONAS





\*PERSONAS

### Technology-use capability 5 CAPABILITY 4 3 Engagement with electricity provider Environmental motivation MOTIVATION 0 Cost motivation Household energy use OPPORTUNITY Ability to be flexible



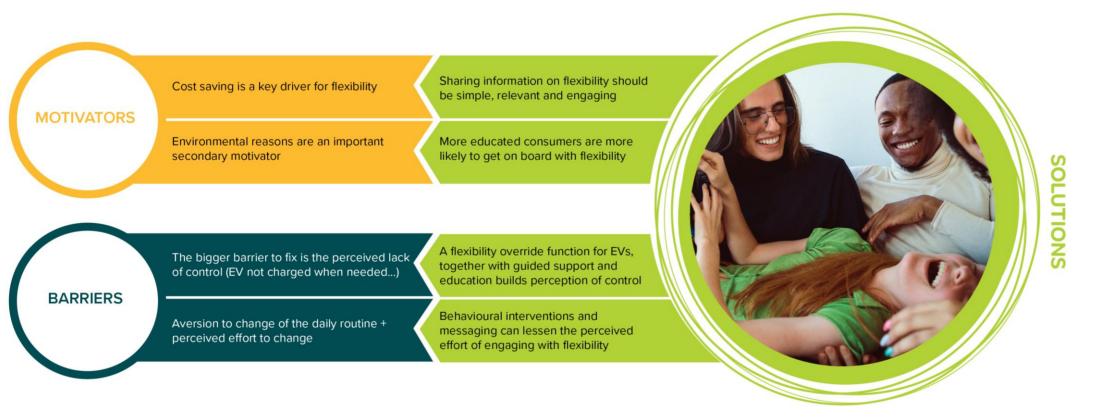


## **Personas' mapping**

Pg8

## **Motivations, Barriers and Solutions**

An International view

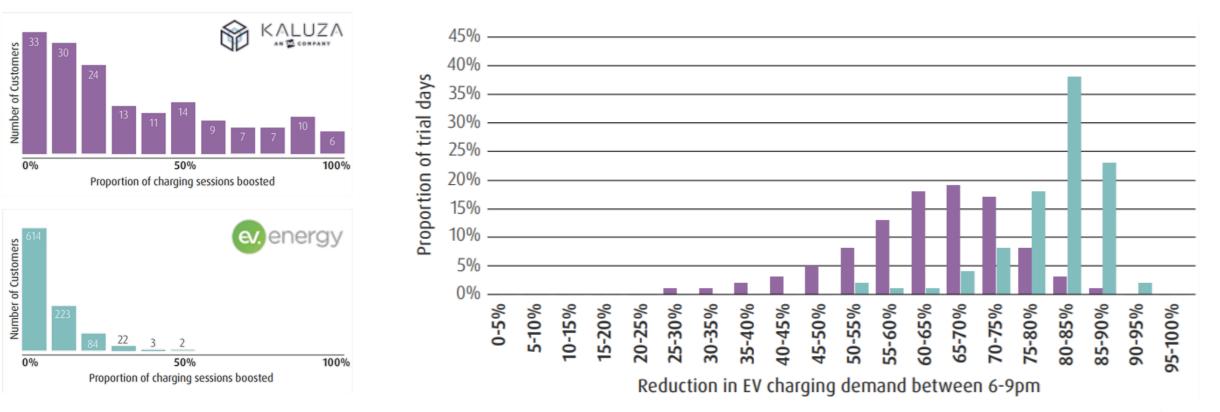




## **Consumer offerings impact network load**

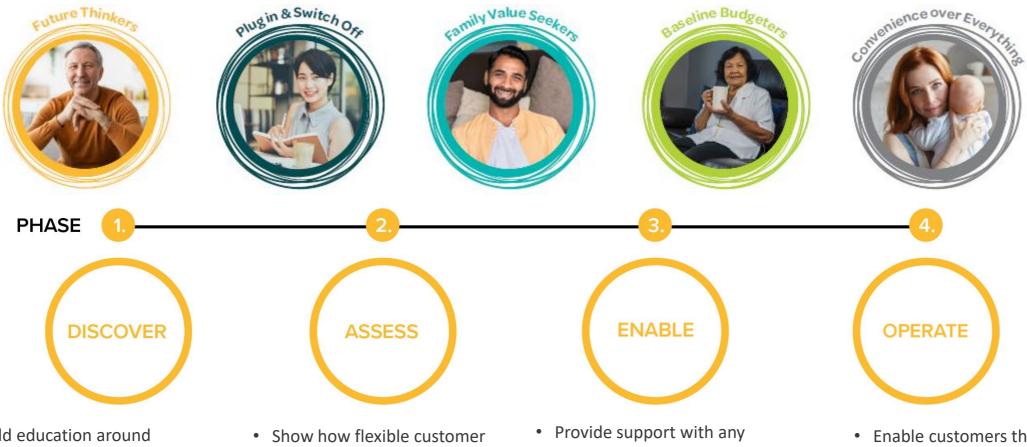
Electric vehicle drivers with incentives were less likely to override a smart charging session and provided more flexibility

Source: UK Power Networks Shift Project





## **Summary Journey Experience - The Opportunities**



- 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

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

Support coordinated action to streamline the consumer

journey through groups including the FlexForum and ENA



# Questions?



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