



# AER Public Forum Demand Management

**Customer Led Transformation**

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**Presented by**  
Stephanie Bashir

**Date**  
September 2016

Energy in  
action.

Since 1837



# Agenda.

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Overview of  
transformation  
drivers



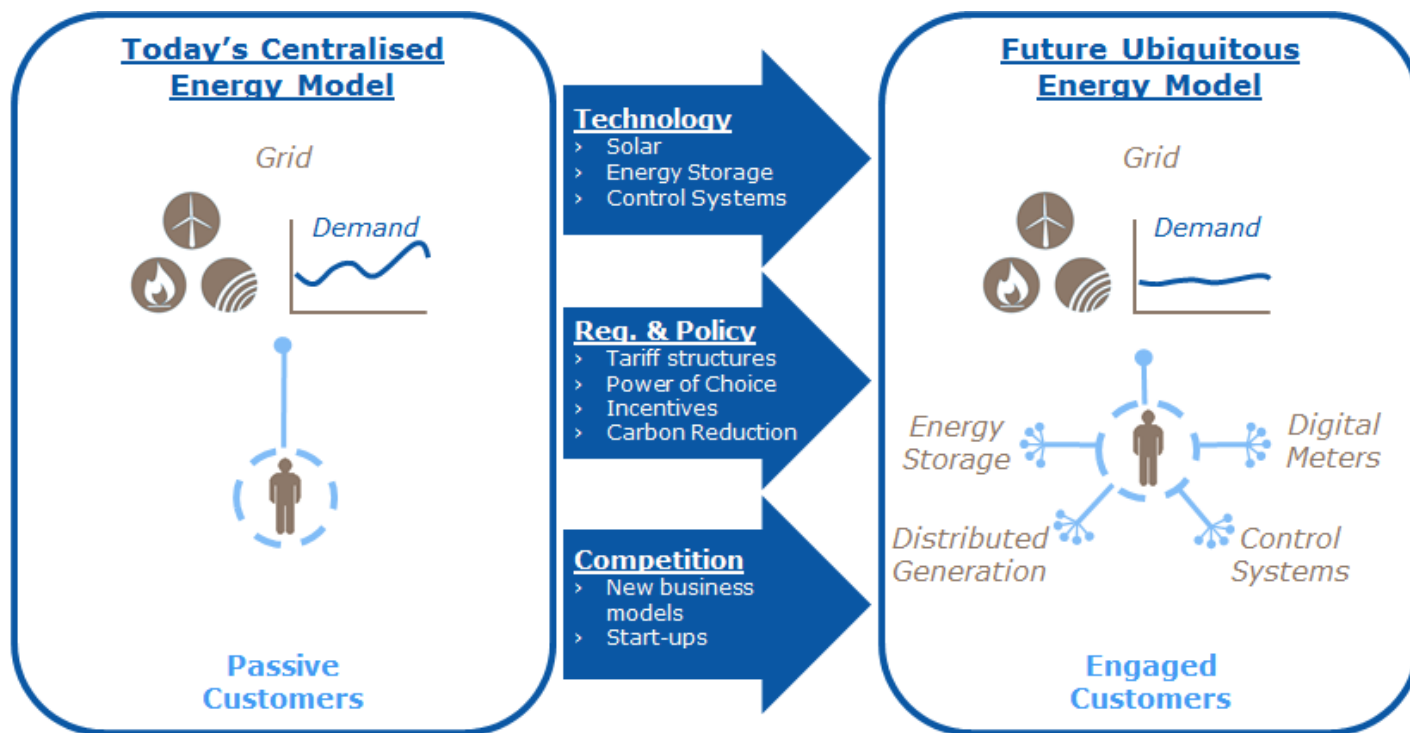
AGL's customer  
led DR  
initiatives



Regulatory  
outcomes  
required

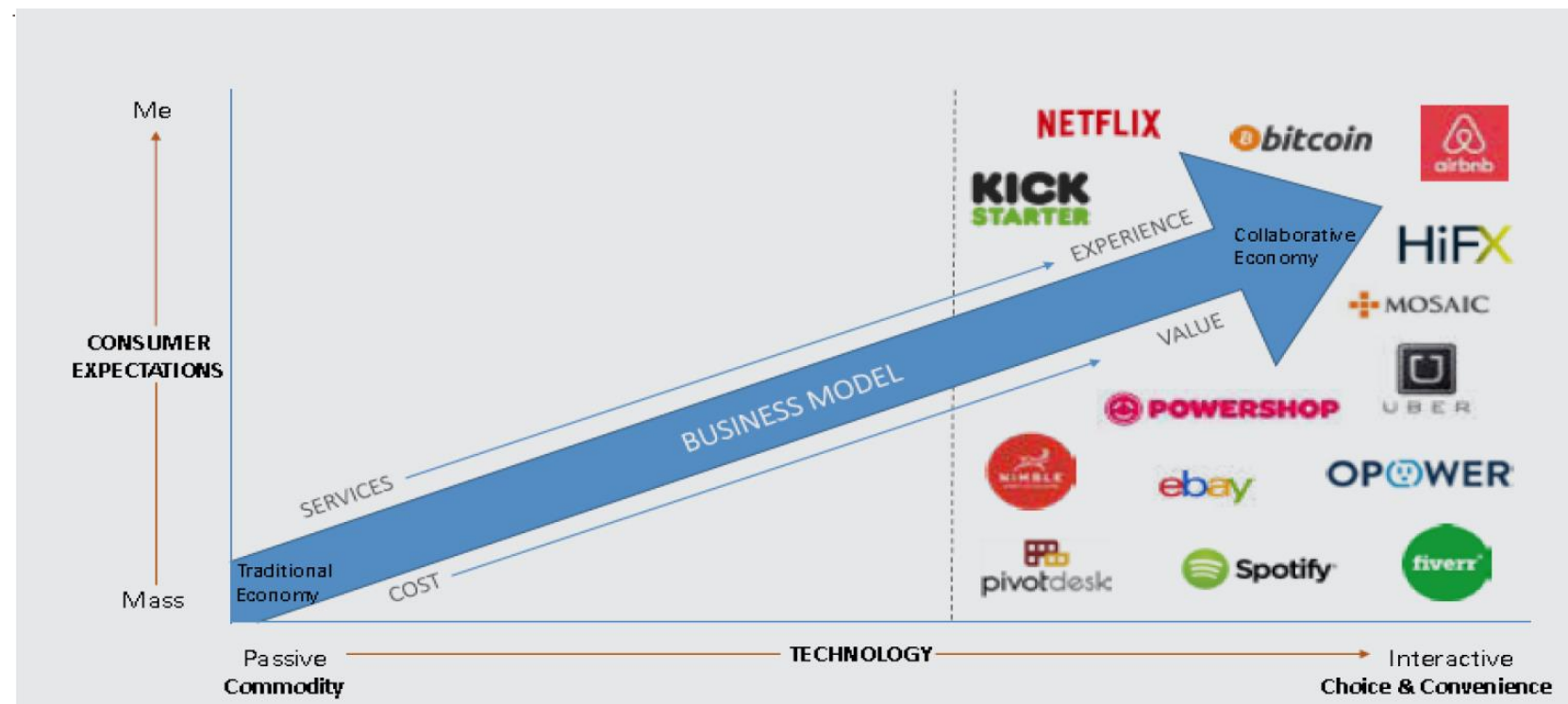
# Customer led energy market

3 main factors that resulted in change in customer demand



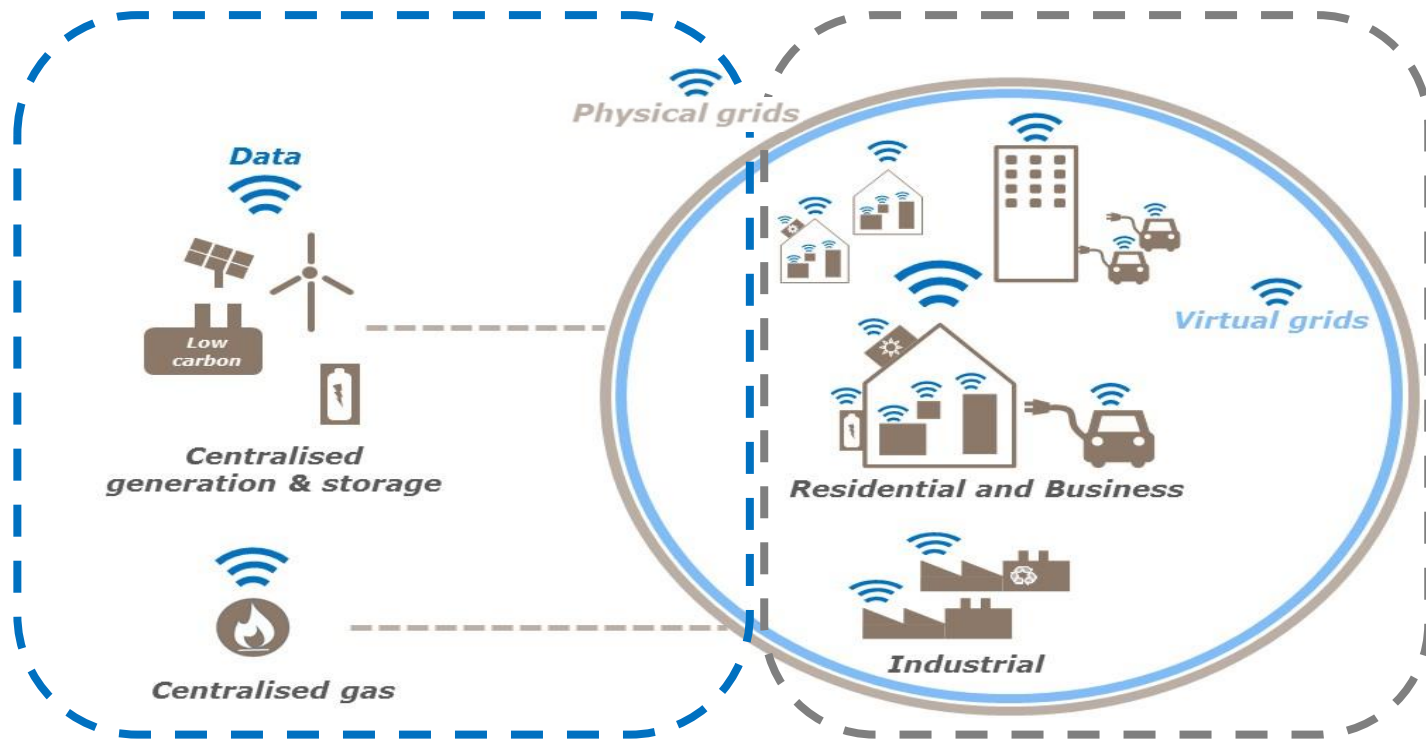
# Customer preferences driving change

New forms of competition and Business models



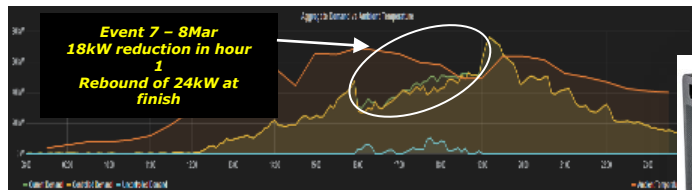
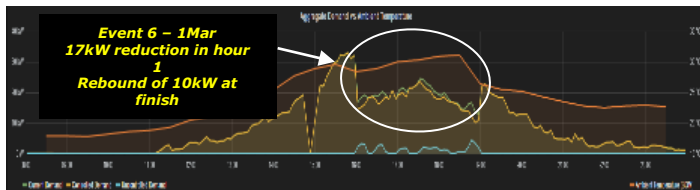
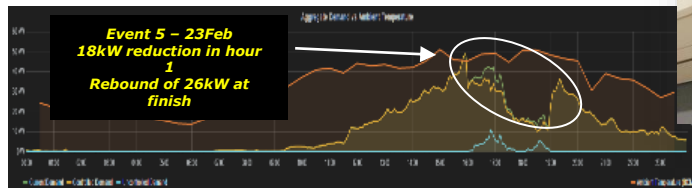
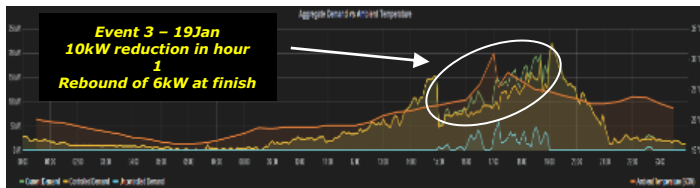
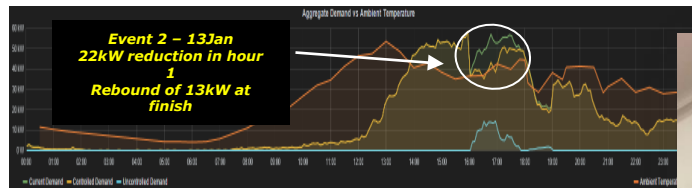
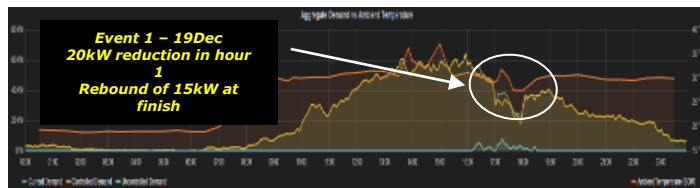
Source: Sinclair, R (Energy Consumers Australia), 2015, *Future energy customers*, CSIRO/ENA Customer-Orientation workshop, Melbourne, 11 August.

# Harnessing prosumer preferences to support the Grid is key



# DR Trial: 70 homes with mix of solar, battery and smart AC

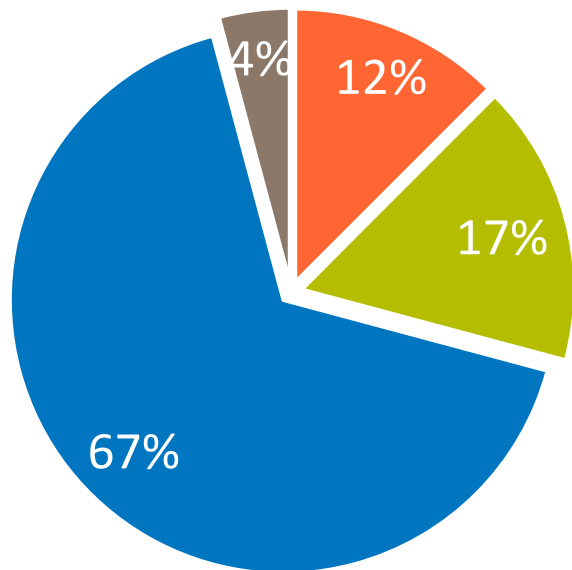
Hosted by United Energy DR Trial last summer



- Events 1, 2 and 3 had strong cool changes during the event
- 6 Batteries added 15kW to the overall AC delivery in each event

# Customer engagement was a key success factor

We achieved excellent satisfaction and engagement with real customers.

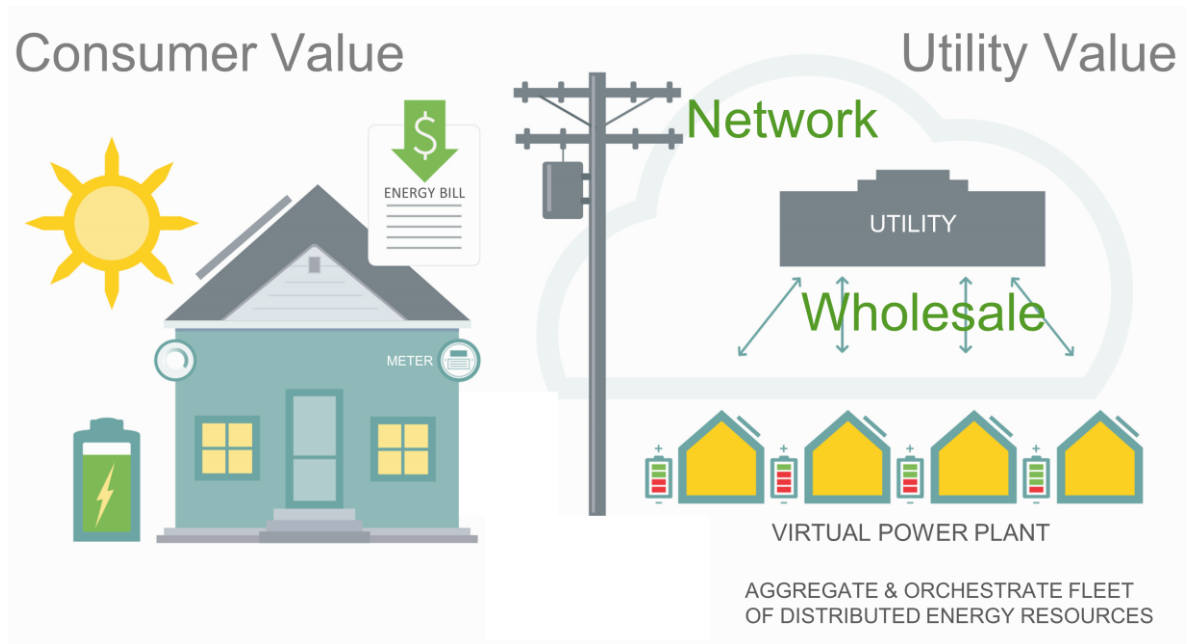


- Yes, the adjustment caused some discomfort
- Yes, but the adjustment didn't affect my level of comfort



83% OF PARTICIPANTS SAID THEIR  
**COMFORT  
WAS  
UNAFFECTED**  
BY THE ADJUSTMENT

# Virtual Power Plant -SA Project



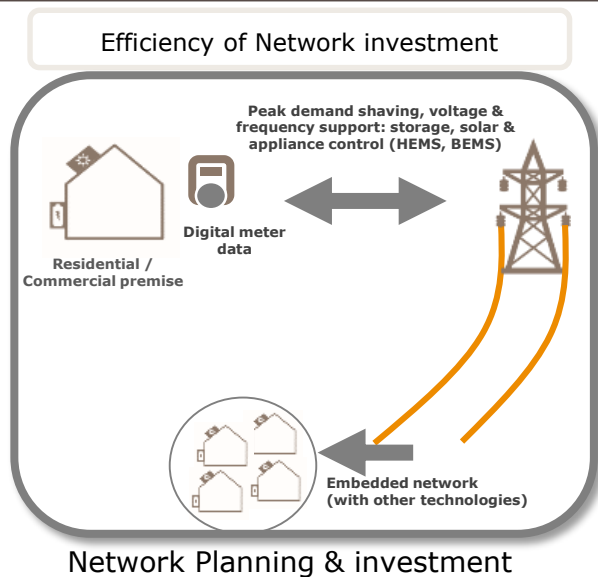
- > Create the worlds largest Virtual Power Plant (VPP) of 5MW in South Australia
- > Incorporate 1,000 controllable batteries to SA homes and/or small businesses who have solar

## Keeping Network investments relevant to meet long term interest of consumers in NEM

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- > **Customer choice/ led** – demand response participation requires customers in the heart of the discussion
- > **Price transparency** – cost reflectivity of network pricing will drive increased uptake of Demand side participation where its cost effective for the whole system
- > **Efficient investment** – reduces the cost of investment through competitive delivery of innovative non network solution options and enables a more future proof network adaptable to the changing environment
- > **Innovative services** – introduces new competitive markets and players which drives lower costs and enhances customer services and offerings
- > **Reliability** – partnerships with networks to ensure safety and reliability solutions delivered

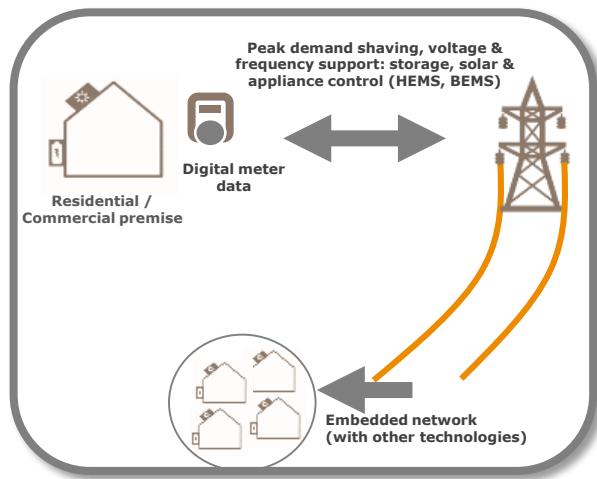
# Opening the market for non-network solutions: Issues.



- > Where a non-network solution is identified, no requirement for networks to go to competitive markets to deliver that solution.
- > Mechanisms potentially allow the distribution business to engage directly with customers in beyond-the-meter activities in pursuit of these benefits.
- > Ongoing bias towards network options under RIT-D: high investment thresholds, long term (uncertain) outlook, repx excluded.

- > **Customer impact:** potentially higher network costs where the most efficient network operation and investment outcomes are not achieved.

# Opening the market for non-network solutions: Requirements.



## > Efficient Network Planning

- > Upfront network planning (incl. new connections, constraints & aged asset replacements), coupled with network tariff reform, is fundamental to driving efficient investment.
- > Network planning must be transparent (incl. sharing of underlying data, forecasts and assumptions) and involve genuine consideration of non-network solutions.

## > Incentivising Non-Network Solutions

- > Non-network solutions (grid level and behind-the-meter) should be procured / delivered on a contestable basis.
- > Incentives meet the NEO which is to deliver efficient outcomes in the long term interest of consumers
- > An independent assessor should be involved to actively manage the incentives for networks to overinvest in traditional network solutions