

# The Affordability Problem: Households

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# Beyond Behaviour Change Research Program

- **In-home** research about:
  - Electricity demand in households with children (ECA)
  - Experiences of involuntary disconnections (CALC)
  - Case studies of 'hidden energy poverty' (VCOSS)
  - Smart home control products (ECA)
  - Heatwave vulnerabilities (ECA)
  - Direct load control and peak incentive/rebate research (NSW utilities)
  - Cost-reflective pricing forms (NSW utilities)



Too much



# 'Choice'

- As invariably positive and desirable
- Many misunderstand or lack of confidence about own tariff
  - Flat (or inclining block) or Time-Of-Use?
  - Understandings that electricity already cheaper at night
  - Tariff times
- Tariff complexity discourages engagement and switching
  - cannot be sure process will be worth Time+Effort involved
  - 'deliberate disengagement'

**Not Enough**



# How households actually live

- Home occupants don't 'decide' to consume energy
- They warm and cool themselves, wash, cook, clean, learn and play
- Impact of Australian culture - including marketing - on lifestyles
- Hectic daily lives, complex social dynamics and health issues



# Most households are not like us!

- not as numerate and/or literate (in English and/or digital)
- don't find energy interesting
- not paid to read and think about energy
- are overwhelmed by the (inconsistent) terminology, rapid change in energy sector and market
- face *decreasing visibility of energy in the home* due to direct debit and electronic billing

# Risks from new tech solutions (e.g. smart control)

- Suit tech enthusiasts with spare time
  - small minority of consumers
  - don't necessarily use tech to save energy
- Marketing that encourages energy intensive lifestyle
- Of little interest to over 55s
- Rely on expensive smartphones, reliable internet, sufficient data

→ Need realistic real-life assessments **before** energy policy is made based on assumptions about outcomes





# Households in the middle





# Simplicity

Most don't want to spend time...

- accessing, understanding, and analysing energy data
- researching energy issues
- comparing and switching
- thinking about energy



# A strategy to build trust and engagement

- National
- Communicates peak demand problem, but presents households not just as cause but solution
- Not just giving information – as experts to users. Need to partner with consumers.
- Engages in the social value of the electricity network, DR for social outcomes
- Counters political or other misinformation
- Accessible, recognisable and long-term

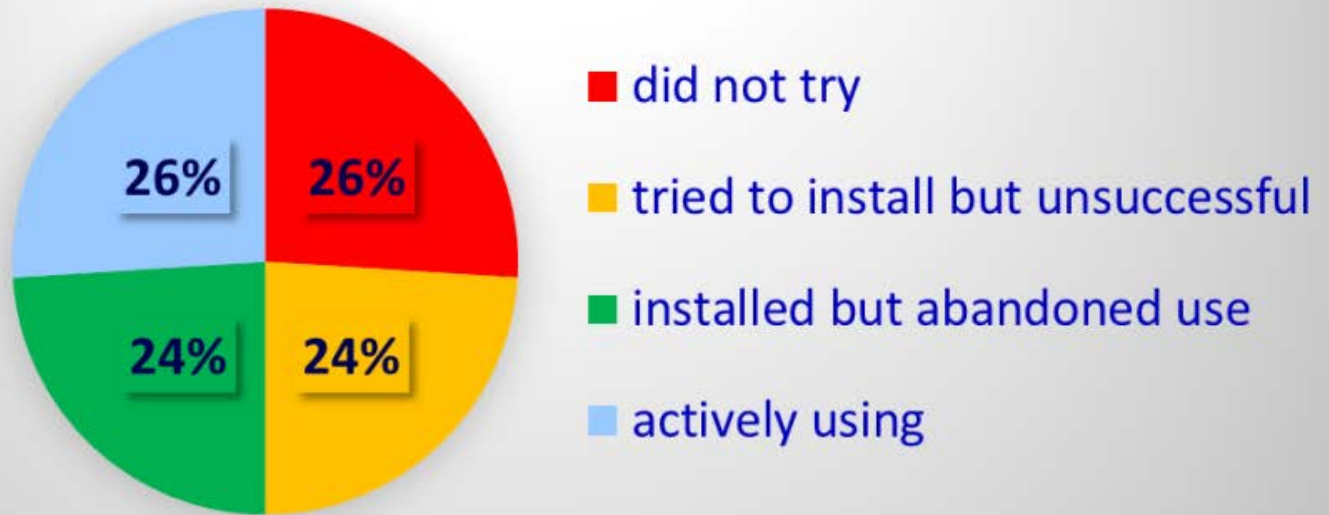
# Thank you

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# Smart technologies are not an easy or equitable answer

## Self-Install Trial households





# Impacts of hot weather on vulnerable households (instead of the network)

- Many households have health conditions exacerbated in extreme heat
  - reliance on air conditioning
- Older people self-rationing air conditioning - and even fans - due to fears of electricity cost
  - health risks associated with peak pricing in these households
- Parents of infants relying on air conditioning and experiencing high bills/ hardship
- Community-minded older people susceptible to appeals to reduce demand during heatwaves

# Opportunities

1. Simplicity and consistency in tariffs
2. Build trust in energy sector
3. Develop understandings of the role of peak demand in sector challenges
4. Encourage flexibility on an occasional basis, e.g. heatwaves, with approaches that don't financially penalise the vulnerable
  - direct load control
  - acknowledge health inequities in peak demand/ heatwaves
  - appeal to younger, healthy households for DM
  - rewards and non-financial programs (appeal to social good)

