

Evaluating market transformation in the residential energy market – what to measure?

A Case Study

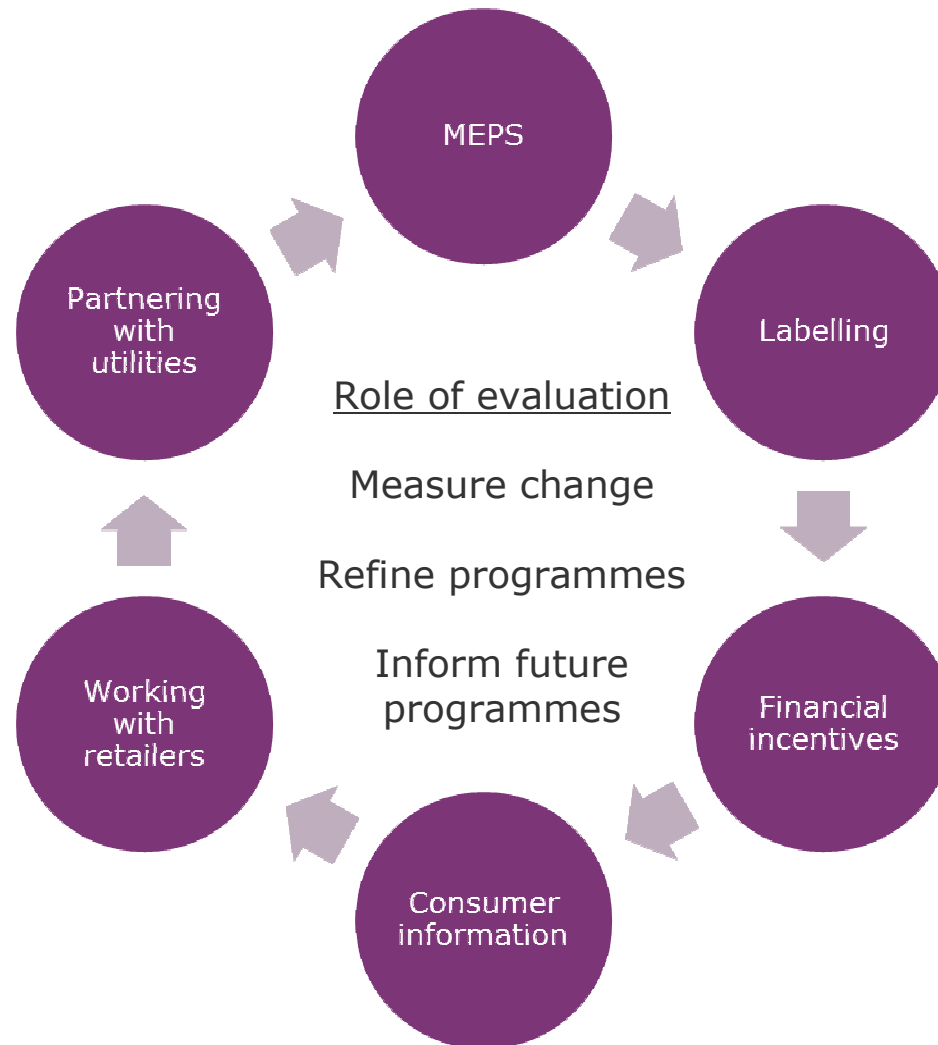


To cover

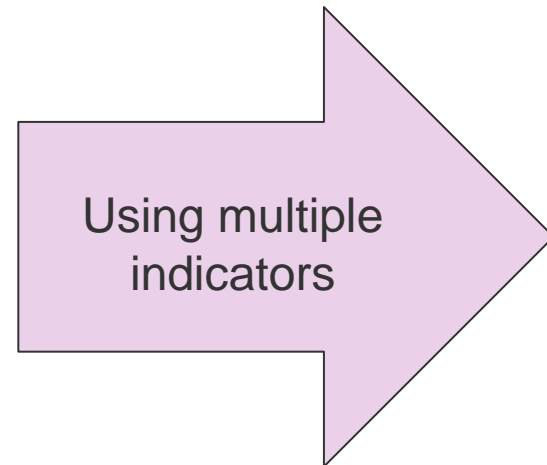
- The challenge
- Case study: lighting behaviour
- Implications and considerations from case study



The challenge: why measure?



The challenge: what to measure? E.g.



Case study: background

- Small scale study for understanding residential lighting use:
 1. Establishing lighting use behaviour
 2. Understanding attitudes and preferences



Case study: approach

- Data were collected from a cross-section of owner occupied and privately rented homes through:
 1. A lighting audit – counting number of lights including data on lamp type and wattage
 2. Self-completion survey – how lights are used and preferences with regards to lighting and lamps

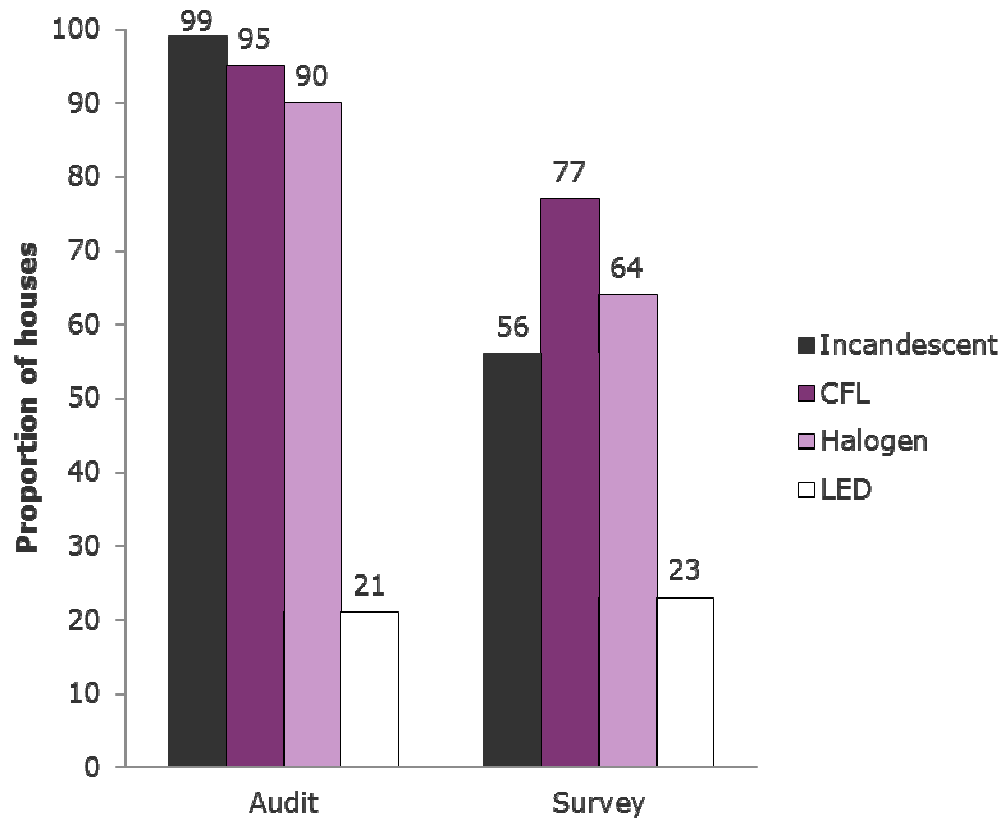


Case study: key findings

- A lack of consumer knowledge and understanding and misconceptions with regards to light bulbs and information on light bulbs
- Building related issues as a barrier to energy efficient behaviour
- Considerations consumers make when purchasing light bulbs
- Idiosyncrasies in consumer purchasing behaviour



Consumer knowledge and understanding



Lamp comparison between audit and survey (n=149 homes)

Respondents did not recognise the lamp type by name?

Respondents only focus on most used lights when they consider bulb types within their home?

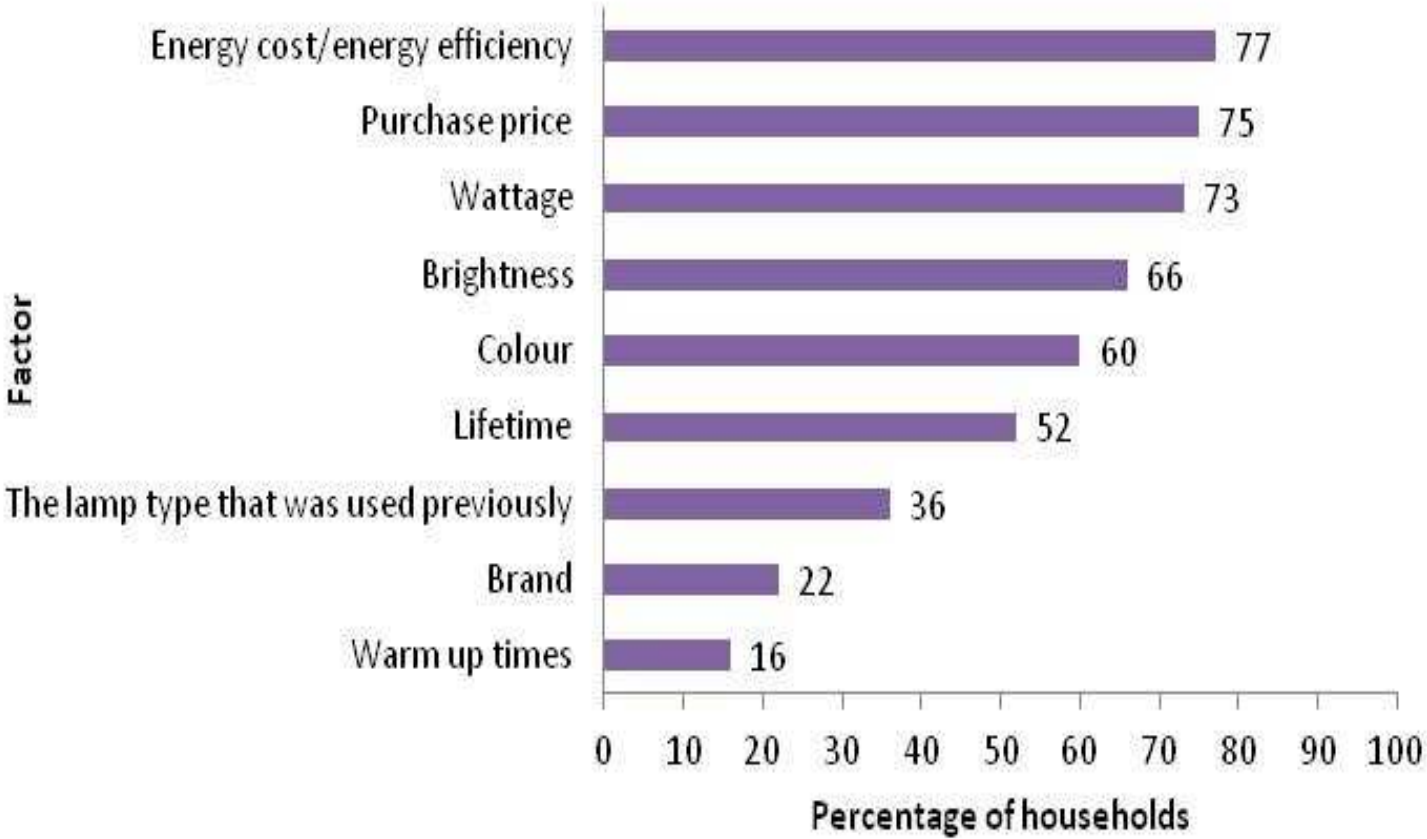


Barriers to energy efficient behaviour

- More lights installed than used:
 - Compensating for lamps that were no longer working / needed to be changed
 - Creating a brighter light
 - Creating a softer light



Influences on purchasing decisions



Factors influencing purchasing decisions (n=149 homes)



Idiosyncrasies in consumer purchasing behaviour

- Purchasing:
 - 82% said they purchased new lamps when required
 - 17% said they bulk bought lamps in advance
 - 11% said they bought when they were discounted in some way
- Anecdotally reported mistakes
- 79 out of 147 respondents said they had spare light bulbs in a drawer or cupboard they could no longer use



Case study: Summary observations

- Potential weaknesses in:
 - Survey based approaches to establishing uptake of technologies – respondents did not recognise technologies by name
 - Measuring number of installations as a measure of uptake – respondents not using all installations
 - Using indicators of purchasing behaviour in isolation – respondents not always coherent in attitudes and behaviour
 - Using sales data to get a full picture of uptake – respondents had not always installed lamps they had purchased



Case study: Implications and considerations

- Need a variety of indicators to tell true story
- Behavioural indicators help mitigate against over claim of market transformation
- Evaluation indicators need to be used in an integrated way
- Considering behavioural indicators uncovers policy implications



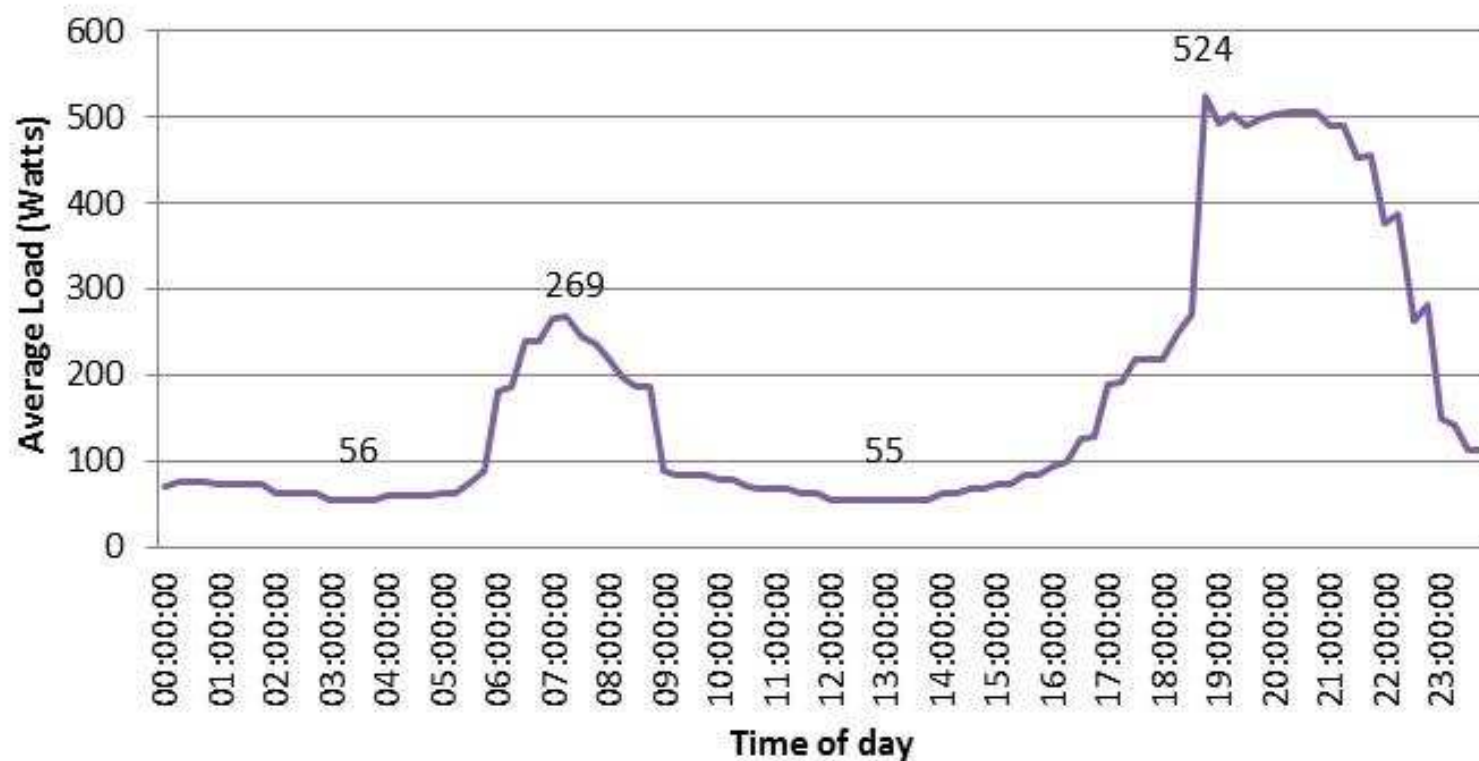
Questions....

michelle.mcguire@data-build.co.uk



Iris Inspiration

Lighting load profile



Lighting load profile (n=147 homes)

