National Energy Efficiency Data-framework (NEED) – Stakeholder Event

29th November 2011

NEED Stakeholder Event

As part of NEED stakeholder engagement, an event was held on 29th November 2011. The event was intended to:

• Improve stakeholders knowledge of NEED and it's potential.
• Help DECC learn how NEED has been used so far and capture views on how initial analysis could be improved.
• Gain knowledge of other relevant research and ideas for future work.
• Understand stakeholders' priorities for the future of NEED.

Attendees included:
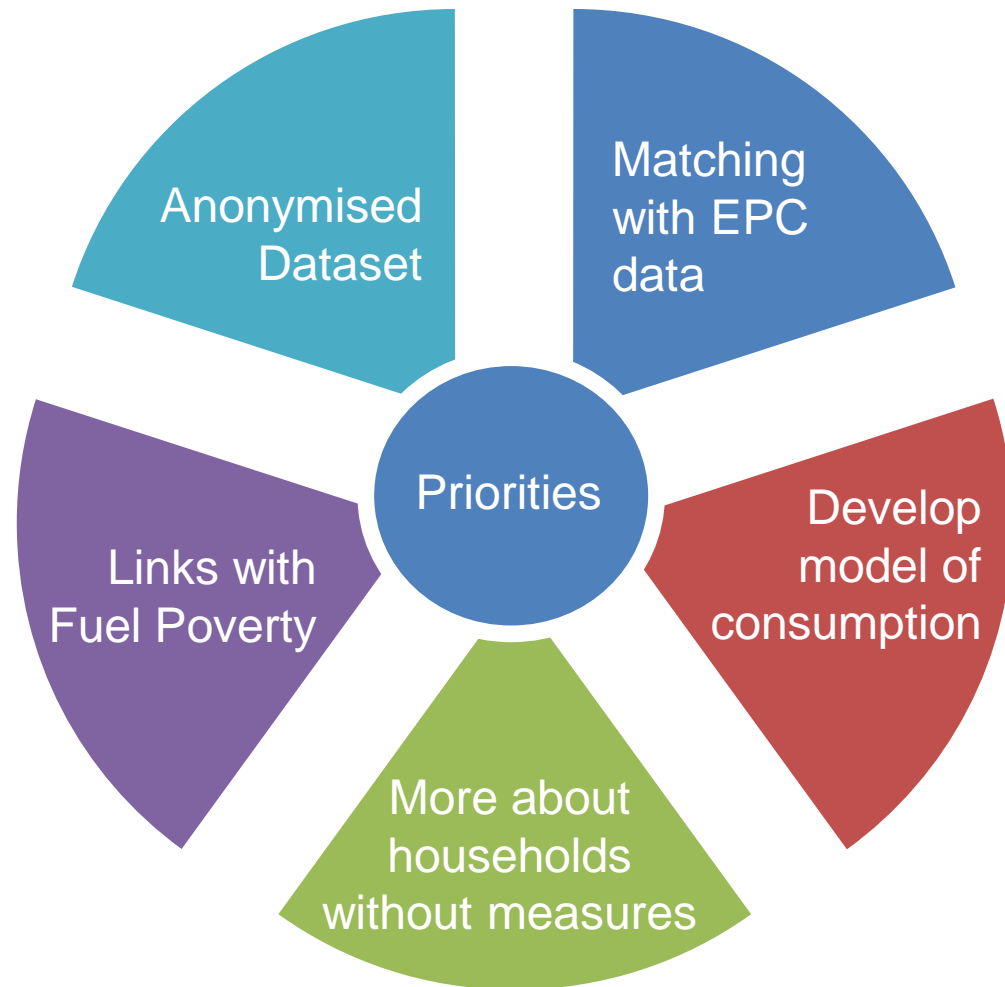
Academics
Devolved Administrations
Other Government Departments
Others – such as Local Authorities, EST, Ofgem

The following slides provide a summary of the event.

Priorities from Stakeholder Event

A large range of ideas for the future of NEED were suggested at the event (see following slides), these were then refined to give a short list of priorities for the future of NEED.

Ideas - domestic

Research using current data	• Understanding rates of take up of different energy efficiency measures. • Understand characteristics of low & high energy users. • Distribution of savings from energy efficiency measures. • More about households not installing energy efficiency measures ("control group"). • Technical potential of energy efficiency measures v observed saving. • Anonymised dataset for external use (subject to data protection). • Refined regression analysis, inc. panel regression
Research requiring new data	• Improve understanding of measures not picked up in HEED ("hidden measures"). • More about electrically heated and off gas homes. • Improve understanding of comfort taking, looking at housing types and consumer types (& winter comfort levels pre measure). • Impact of change of occupant on energy use. • Energy savings by fuel poverty status. • Impact of insulation in areas with high radon levels. • Understand how "leaky" a home is pre and post insulation. • Characteristics of those who show an interest in energy efficiency measures but decide not to install measures • New social trends e.g. impacts of people working from home. • Calculating peak gas demand. • Deaths from cold weather.
Other ideas for related future research	• Understanding the customer journey and how this might be relevant in other circumstances would feed into Customer Insight. • Understanding more about metered water might provide insight into use of metered gas and electricity.

Ideas - non-domestic

Matching with Energy Performance Certificates (EPCs)

Energy Intensity of buildings (by industry)

Model of energy demand

Analysis of change of occupant

Distribution of energy use (by building/sector)

Other discussion from Stakeholder Event

Feedback on NEED Report

- Aware of the report
- Generally used to validate their research
- Publish data in SPSS format (not just Excel)
- More detail about methods (e.g weather correction & control group)
- Consider Peer Review for future outputs.
- More on other possible data

Additional Variables/data

- Modelled consumption
- Number of occupants
- EDRP trials data
- Change in owner or occupier – land registry
- Welsh Health Data
- Sales of non-metered fuels/off gas grid properties
- EPC/DEC data
- Method of payment
- Other property attribute data
- Unadjusted gas consumption
- Internal temperature

Other relevant research

- Widen et al (2009) - Constructing load profiles for households electricity and hot water from time use data.
- Choudhary (2011) Energy Analysis of the Non-Domestic Building Stock of Greater London.
- BREEAM.
- Scott Kelly: Do homes that are more energy efficient consume less energy?
- The Centre for Research in the Built Environment - non-domestic Green leases.

Future Plans

Autumn 2012

- Publication including:
  - Further information on energy consumption by property type.
  - Updated information on impacts of measures (including refining methodology and inclusion of data for additional years).
  - More details of methodology and QA.
  - (Potential) Initial non-domestic results.

Beyond

- Medium Term
  - Input into DECC policy development and evaluations.
  - Inclusion of EPC data in NEED.
- Long Term
  - Production of an anonymised dataset for use by academics.
  - Development of evidence for Scotland.
  - Develop non-domestic outputs.
  - Inclusion of new sources of data on microgeneration and heat.
  - National Statistics outputs.