

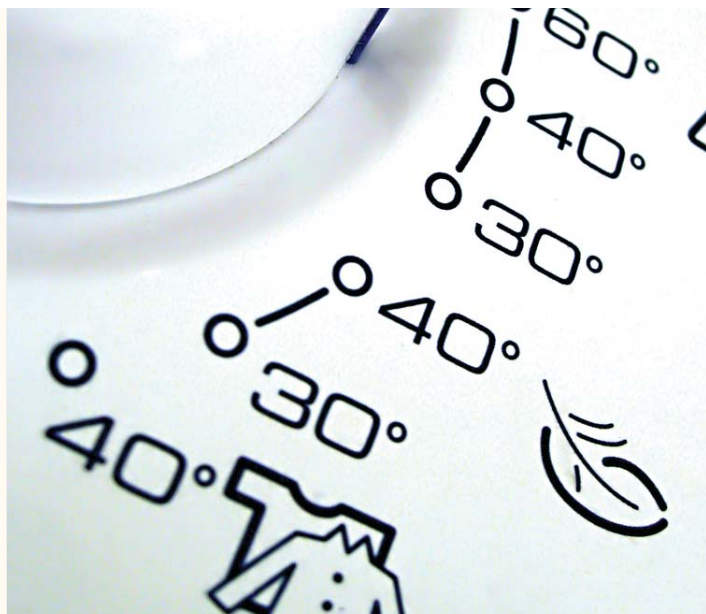
Consumer First

Demand Side Response research with domestic customers

This is a summary of our research into domestic consumers' views on how they could help to smooth energy peaks at times of high demand by using it at different times of day (known as 'demand side response').

Using our Consumer First Panel¹ we undertook deliberative research in January 2010 to understand the Panel's views on demand side response. An omnibus survey amongst 2,000 people was also undertaken in December 2009².

The research found that there is considerable interest in measures to manage energy use including involvement in demand side response to some extent. However, none of the measures received an overwhelming majority acceptance and some proved to be more unpopular.



Most likely change to consumer behaviour

Heating water at night

Using appliances after midnight

Responsibility for bringing about change

Consumers if financial incentives given

Manufacturers to build appliances which make it easier to use electricity outside of peak energy times

When discussing with Panellists, many were unaware of how energy use fluctuated during a typical day (the peaks and troughs of energy usage). It was felt that a higher level of awareness of both this and the benefits of using energy at different times of the day could help to change consumer behaviour. Panellists tended to think of overall energy usage as being important but could not immediately understand why shifting usage from evenings to night-time would make a difference.

¹ Facilitated by Opinion Leader, the Panel consists of 100 everyday domestic customers recruited from five locations across Great Britain (currently Aberdeen, Aberystwyth, Bradford, Bristol and London). They are a unique resource that Ofgem call on to provide feedback on key energy topics and regulatory issues, and act as the genuine 'voice of the consumer'.

² Ipsos MORI conducted 1,961 quota controlled face-to-face interviews. The research is based on data from a nationally representative omnibus (CAPIBUS) survey of the population of Great Britain aged 15 and over.

The most feasible changes to behaviour were:

Heating water at night

Across all demographics, a majority of consumers (both Panellists and those surveyed via the omnibus) considered they would be inclined to adopt this approach if it could save money, with 56% of those surveyed considering it very or fairly likely.

Using appliances after midnight

Some consumers considered adopting this approach, with 51% of those surveyed saying they would be very or fairly likely to, although there was recognition from Panellists that the noise from appliances may disturb both themselves and neighbours, especially those living in blocks of flats. There were also some concerns surrounding the safety of using appliances after midnight.

Less feasible behavioural changes:

Use of technology that would automatically switch off appliances when prices are high

Most Panellists were suspicious of this technology as they were unsure of the impact this might have on their appliances, e.g. would their freezer defrost when the supply was interrupted?

Panellists were open to having more information on their energy usage, and some spontaneously mentioned that smart meters could help consumers gauge their energy use. They felt that this would help them to make choices about their energy consumption based on the price of energy at certain times of day, and would encourage them to switch things off. Just under half of the respondents in the omnibus survey would be likely to adopt automatic switching of appliances. Interest was notably lower among social group DE compared to others. In terms of age, likelihood of adoption of this type of behaviour was a lot higher in the 15 to 34 group (50% stating this would be 'very/fairly' likely) but there was lower interest among the 65 and over group.

Carrying out household tasks at different times of the day

The Panel were given various examples where consumers might be able to undertake household chores at different times during the day to help smooth overall energy usage.

Most of these were dismissed as completely unfeasible, largely due to personal circumstances e.g. changing the times when meals are cooked. The younger demographic surveyed through the omnibus considered that carrying out household tasks at different times would be of most interest, older people being significantly less likely to adopt this measure.

Using storage heaters

Some Panellists were aware of storage heaters, but the majority saw them as inferior to gas central heating and so would not favour their use in the future.

Interruptible supply

The idea of an interruptible supply did not appeal to most Panellists. Some simply did not like the idea of receiving a limited power supply, even if these were planned. Those with young families said that this would not be a viable option for them. Some felt they might consider this for a reduced cost as they could arrange to be out at the time their power went off.

Some felt it might appeal to the most vulnerable consumers, who would be attracted by the lower cost implications, but who might be most affected by power cuts, e.g. pensioners or young families.

Overall thoughts

Panellists felt that some responsibility lay with manufacturers to build appliances which make it easy for people to use electricity outside of peak energy times e.g. washing machines with a timer function. However, it was also felt that upgrading equipment may require significant expenditure. More information on energy consumption and the introduction of financial incentives such as cost savings for changing energy usage were seen to be essential for encouraging behavioural changes.

