Department of Energy & Climate Change

Quantitative Research into Public Awareness, Attitudes, and Experience of Smart Meters

(Wave 2)

Research conducted by Ipsos MORI for DECC

21st February 2013

Executive Summary

Background to the research

Installation of smart meters has been adopted by the Government as a way of helping consumers have more control over their energy use and spending, while also helping meet environmental and security of supply objectives. The programme aims to install smart meters in all homes in Britain by 2019.

DECC commissioned Ipsos MORI to undertake research to measure the public's views on smart meters and in-home displays (IHDs), including their information needs. The overall objective of this project is to understand consumer awareness, understanding of and attitudes towards smart meters and to see how these are changing over time. The study is comprised of biannual nationally representative surveys, conducted face-to-face in homes across Great Britain

The first wave of the survey was conducted in April 2012 and was comprised of 2,396 in-home, face-to-face interviews. The second wave was conducted during October 2012 and was comprised of interviews with 2,159 bill-payers. (The third wave will take place in April 2013.) The respondents were all adults who were at least jointly responsible for paying their household energy bills. Data were weighted to provide nationally and regionally representative results.

The key findings from waves one and two are presented below.

Awareness and attitudes towards smart meters

Results indicate that smart meter awareness levels have not changed in the six months between Waves 1 and 2: half of energy bill-payers living in Great Britain had heard of smart meters (50%, compared to 49% in Wave 1), with one in twenty claiming to have one installed (5%, equal to Wave 1). The ownership figure is thought to be an overestimate, which the report authors believe is principally due to some respondents perhaps misunderstanding what a smart meter is even with the explanation provided.

Half of all respondents remained undecided about the installation of smart meters in every home in the country. Support showed little evidence of change with around three in ten bill-payers (29%) expressing support for the roll-out, and one in five bill-payers remaining opposed (19%).

Interest in installing a smart meter remained static: four in ten of those without a smart meter in their home were interested in having one installed. Support for smart meters, and interest in installation, remained highly correlated to age and size of household; with younger and larger households expressing greater support and interest. Families with younger children also tended to be more supportive than respondents overall.

Spontaneous mentions of the perceived benefits of having a smart meter installed were fairly consistent with Wave 1, and again included being able to budget a bit better (31% for Wave 2), to help avoid waste (26%) and produce a greater accuracy of billing (19%). Perceived disadvantages included cost (either to themselves, the taxpayer, the government or the energy companies) (17% for Wave 2) and data security (9%). Younger age groups were more likely to

cite the costs for themselves rather than others. Prompted benefits remained similar: monitoring and reduction of energy usage were the options most likely to be selected by bill payers (39% and 36% respectively for Wave 2).

Also consistent with Wave 1, the data from Wave 2 shows that higher levels of perceived knowledge of smart meters were correlated with increased support and interest.

Experience of self-reported smart meter customers

Respondents who claimed to be smart meter customers continued to be largely satisfied with the installation process and their overall experience of using meters.

Public attitude to IHDs

There was little difference in ownership of IHDs between Waves 1 and 2. The majority of bill payers still do not have an IHD, with only one in six bill-payers in Great Britain claiming to have one in their home. Again, over half of those who claimed to have one said they looked at it at least occasionally, with most checking either the energy usage or the money display.

Customers tend to have received IHDs from their energy suppliers rather than have actively requested or purchased them. Interest levels among those who do not have one were comparable to smart meters, with four in ten expressing interest. Interest remains lowest amongst older respondents, single person households and those without qualifications.

Customers who look at their IHDs remained generally positive about their impact in helping them understand and reduce their energy use. Overall satisfaction with IHDs was 64% in Wave 2.

Again, as with Wave 1 it is clear that not everyone who has an IHD is using it.

Further information needs about smart meters and IHDs

There was an increased interest in information, with half expressing an information need around smart meters and IHDs during Wave 2 compared to one in three in Wave 1.

Reflecting their relatively low engagement with smart meters, older bill-payers tended to have fewer information needs than respondents overall, although cost was also their key information need. Other groups which typically expressed fewer information needs, again reflecting a lower level of engagement, included those without children and those with a disability.

Internet search engines (36%), energy companies (27%), the government (10%) and word of mouth (7%) were the main sources of information about smart meters or IHDs for bill payers who wanted to know more.

When prompted, the most trusted sources of information about smart meters and IHDs still include energy companies, Which?, the government and the Energy Saving Trust.

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1. Introduction

1.1 Background to the research

Installation of smart meters has been adopted by the Government as a way of helping consumers have more control over their energy use and spending, while also helping meet environmental and security of supply objectives. The programme aims to install smart meters in all homes in Britain by 2019. It will involve a visit to every home, and many businesses, in Great Britain, and the replacement of around 53 million gas and electricity meters. Smart meters can pave the way for a transformation in the way energy is supplied and used. They will provide consumers with near real-time information about energy use, and more accurate bills.

Households in Britain are responsible for 32% of the UK's final energy consumption. Since the early 1970s there has been a steady upward trend in domestic energy consumption, however, the latest statistics from DECC show that domestic consumption has actually fallen in the most recent years. The drivers of this downturn include high fuel prices, relatively warm weather and also actions by consumers, including making physical improvements to their homes such as insulation, and changes in behaviour such as turning electrical equipment off instead of leaving it on standby. Greater change is required, however, to ensure Britain is less exposed to risk in terms of energy supply and that emissions are reduced in line with targets.

Trials of smart meters have been shown to effect reductions in energy use of between 5% and 15%. Much of this reduction is achieved through consumers seeing the direct impact of their day-to-day behaviour at home on their energy usage. Providing greater levels of feedback on energy usage also encourages consumers to invest in better energy saving equipment and micro-generation. DECC estimates that the introduction of smart meters will generate direct benefits to domestic consumers through saved energy of around £4.6bn between now and 2030.

The overall objective of this research project was to understand consumer awareness and understanding of and attitudes towards smart meters. More specific objectives were to assess, among the general public:

- Awareness – had consumers heard of smart meters and, if so, from what source?
- Understanding and attitudes – what did those aware of smart meters understand about them and what were their attitudes towards them? Among those not aware, when presented with the concept, what was their reaction? What were the perceived benefits? Were there any concerns?
- Experience of and attitude towards installation of a smart meter – had respondents had a smart meter installed and, if so, how was the experience for them? What was the reaction to the idea of having their meter replaced with a smart meter?
- Awareness, understanding and experience of in-home energy display units (IHD) – did respondents have one installed? If yes, where did they get it (e.g. from supplier) and what has their experience been?
- Information needs – to explore where consumers would expect to find out about smart meters/IHDs, what were considered the most trusted sources of information and what type of information consumers would be looking for.

1.2 Methodology

DECC commissioned Ipsos MORI to undertake research to measure the public's views on smart meters and IHDs, including their information needs. The study comprises biannual nationally representative surveys, conducted face-to-face in homes across Great Britain.

Two of the three waves have been completed to date: Wave 1 in April 2012 and Wave 2 in October 2012. Wave 3 will take place in April 2013. Further details are provided below.

1.2.1 Methodological approach

Before Wave 1 Ipsos MORI drafted an initial questionnaire for piloting which was agreed with DECC. A cognitive pilot was then completed with 15 respondents who were at least jointly responsible for paying their household energy bills. The purpose of the cognitive pilot was to ensure that respondents were able to interpret the questions correctly and provide a meaningful response. Following the pilot a number of revisions were made to the questionnaire before it was signed off for use in the field.

Both survey waves have been conducted on Ipsos MORI's weekly omnibus, Capibus, which is conducted in-home using face-to-face interviewers. Wave 1 comprised 2,396 interviews, and Wave 2 comprised 2,159 interviews. The respondents were all adults who were at least jointly responsible for paying their household energy bills. Data were weighted to provide nationally and regionally representative results by:

- age (by gender);
- working status (by gender);
- region (by gender);
- social grade (by gender);
- household tenure; and
- ethnicity within region.

After reviewing responses to Wave 1, Ipsos MORI and DECC agreed a number of question amendments for Wave 2, detailed below:

- Additional pre-codes were added to certain questions including:
    - Source of awareness of smart meters (QSM6)
    - Disadvantages of smart meters (QSM9)
- An additional statement was raised about the use of gas IHDs (QSM15)
- An open-ended question on information needs around smart meters was changed to a spontaneous pre-coded question using responses from Wave 1 (QSM19).

Any impact on trends as a result of these changes is commented on in the main body of the report.

More information about the omnibus survey can be found in Appendix 1.

1.3 Reporting the findings

This report presents the findings from the second wave of the study. Findings from a recent qualitative research study for DECC around public attitudes and understanding of smart meters is also referenced where appropriate. See https://www.gov.uk/government/publications/smart-meters-research-into-public-attitudes

As with the first wave report, each section begins with a summary of the findings followed by analysis of each question in text and chart format. Reference is made to the previous wave where relevant, and in some sections with smaller bases, to combined data from Wave 1 and Wave 2 in order to allow for more robust analysis of different sub-groups. Analysis by sub-group is included under each chart, although it has not been possible to include *all* statistically significant differences. Each question has been analysed and the most relevant and interesting differences included.

Within the sub-group analysis specific attention is paid to groups of particular interest or identified as vulnerable by DECC. These include:

- Those aged 65 and over;
- Those on lower household incomes, less than £15,500 per annum;
- Those with a disability or long-standing illness;
- Those who do not speak English as their first language; and
- Those with children aged 15 or under, living with them.

Findings from any survey have a confidence interval, or margin of error, associated with them due to the fact that we have taken a sample of the population and have not interviewed everyone. Approximate confidence intervals for various sample sizes related to this survey are shown in Appendix 1. This report only highlights differences in the behaviours and attitudes of specific groups of bill-payers where the difference between the two findings is statistically significant, taking account of their confidence intervals.

Where figures do not sum to 100%, this is due to computer rounding or multiple response answers and an asterisk (*) denotes a figure less than 0.5% but greater than zero.

2. Main findings

2.1 Awareness and attitudes towards smart meters

Results showed little change between Waves 1 and 2: half of energy bill-payers living in Great Britain had heard of smart meters (50%, compared to 49% in Wave 1), with one in twenty claiming to have one installed (5%, equal to Wave 1). The ownership figure is thought to be an overestimate, which the report authors believe is principally due to some respondents perhaps misunderstanding what a smart meter is even with the explanation provided.

Half of all respondents remain undecided about the installation of smart meters in every home in the country. Support levels show little evidence of change with around three in ten bill-payers (29%) expressing support for the roll-out, and one in five bill-payers remained opposed (19%).

Interest in installing a smart meter remained static: four in ten of those without a smart meter in their home were interested in having one installed. Support for smart meters, and interest in installation, remained highly correlated to age and size of household; with younger and larger households expressing greater support and interest. Families with younger children were also more supportive than respondents overall.

Spontaneous mentions of the perceived benefits of having a smart meter installed showed a similar pattern to Wave 1, and again included being able to budget a bit better (31% for Wave 2), to help avoid waste (26%) and produce a greater accuracy of billing (19%). Perceived disadvantages included cost (either to themselves, the taxpayer, the government or the energy companies) (17% for Wave 2) and data security (9%). Younger age groups were more likely to cite the costs for themselves rather than others. Prompted benefits remained similar: monitoring and reduction of energy usage were the options most likely to be selected by bill payers (39% and 36% respectively for Wave 2).

Consistent with Wave 1, the data from Wave 2 again shows that higher levels of perceived knowledge of smart meters were correlated with increased support and interest.

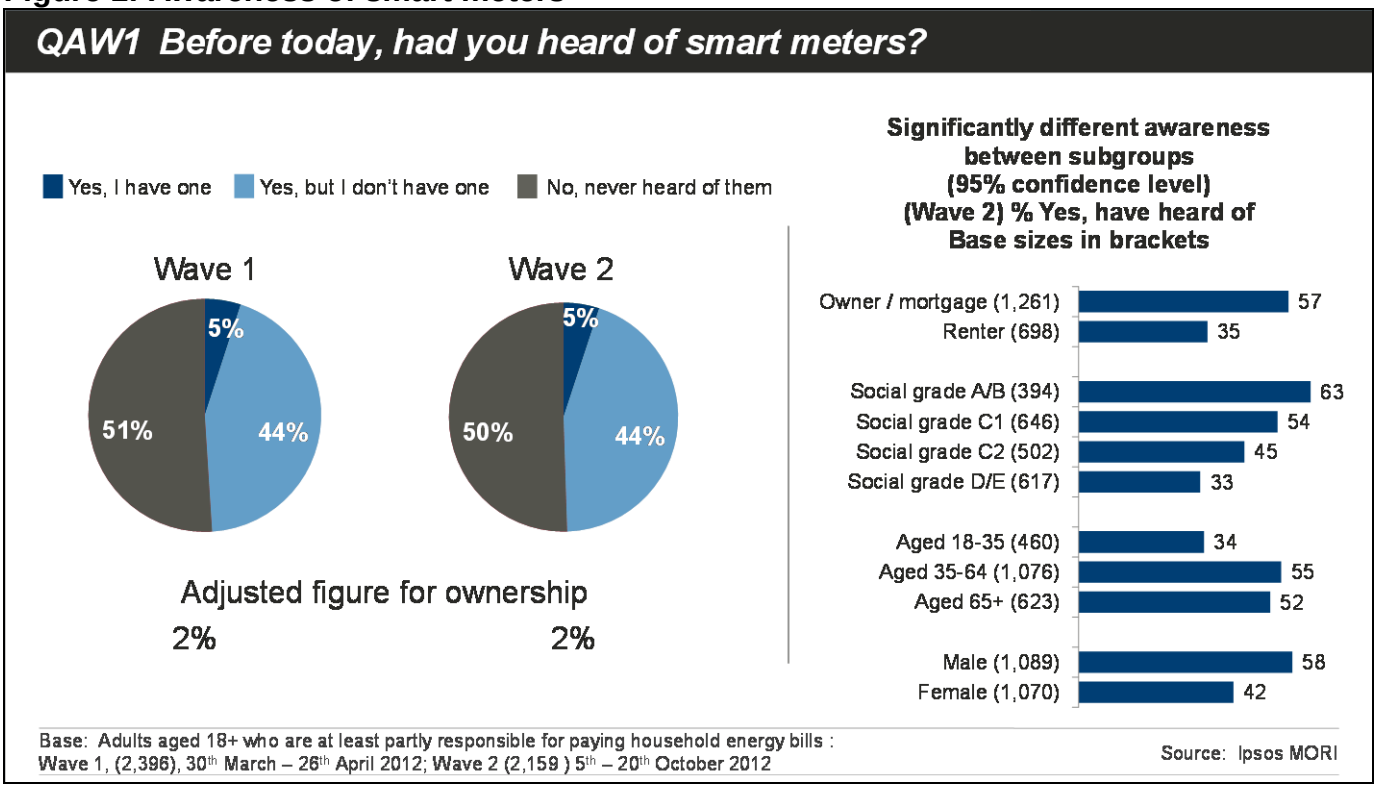
2.1.1 Awareness

Awareness levels were almost exactly the same between Waves 1 and 2 (see figure 1 below). Half of all energy bill-payers living in Great Britain had heard of smart meters (50% vs. 49% Wave 1). One in twenty claimed that they owned one (5%, equal to Wave 1), while the remaining 44% claimed that they had heard of them without owning one (again, equal to Wave 1).

As with Wave 1, each respondent was read a thorough description of a smart meter before they were asked this question (see questionnaire at Appendix 2 for details) and this description was cognitively tested. However, the 5% ownership figure should be treated with some caution as, despite best efforts, some people could still be mistaken about the exact definition of a smart meter. Previous studies have shown that smart meters are often confused with In-Home Displays (IHDs).

Consistent with the previous wave, editing rules have been applied to the data to obtain a more likely ownership figure: anyone who said that they did not have an IHD was excluded, as was anyone unable to say whether they were satisfied or dissatisfied with at least two of the three statements about the installation and satisfaction with their smart meter. This revision produces an ownership figure of 2%, which is in line with Wave 1 (2%).

Figure 1: Awareness of smart meters



The analysis showed a number of demographic differences in terms of awareness of smart meters which were statistically significant.

As in Wave 1, men were more likely to claim to have heard of smart meters (58% vs. 42% of women).

Awareness of smart meters continued to be lowest among younger adults; around a quarter of bill-payers aged 18-24 had heard of smart meters (26%). This rose steadily to around six in ten aged 55-64 (63%) and 65-74 (56%). Those aged 75+ were less aware (47% claiming to have heard of them) although this has increased from 40% in Wave 1.

Other demographic splits also remained consistent with Wave 1; those in the higher social classes were more aware, with around six in ten in the AB grade having heard of smart meters (63%), dropping to a third from the DE grade (33%). A similar pattern emerged when looking at the highest education level achieved, with knowledge as low as 38% among those with no formal qualifications, rising to 56% with A-Level qualifications or higher.

A number of the key groups of interest to DECC had lower awareness than respondents overall (50%). These included those with children (43%); bill payers who have a household income of less than £15,500 (40%); and those who do not speak English as their first language (22%). In contrast, awareness was consistent between those with a disability and those without (48% and 50% respectively).

Homeowners were more aware than those living in rented accommodation; 57% had heard of smart meters compared to 35% living in rented accommodation. Those paying their electricity bills by Direct Debit were also more likely to have heard of smart meters (55%).

2.1.2 Source of awareness

As with Wave 1, the media and energy companies remained the main sources of people's awareness in Wave 2 (see figure 2 below).

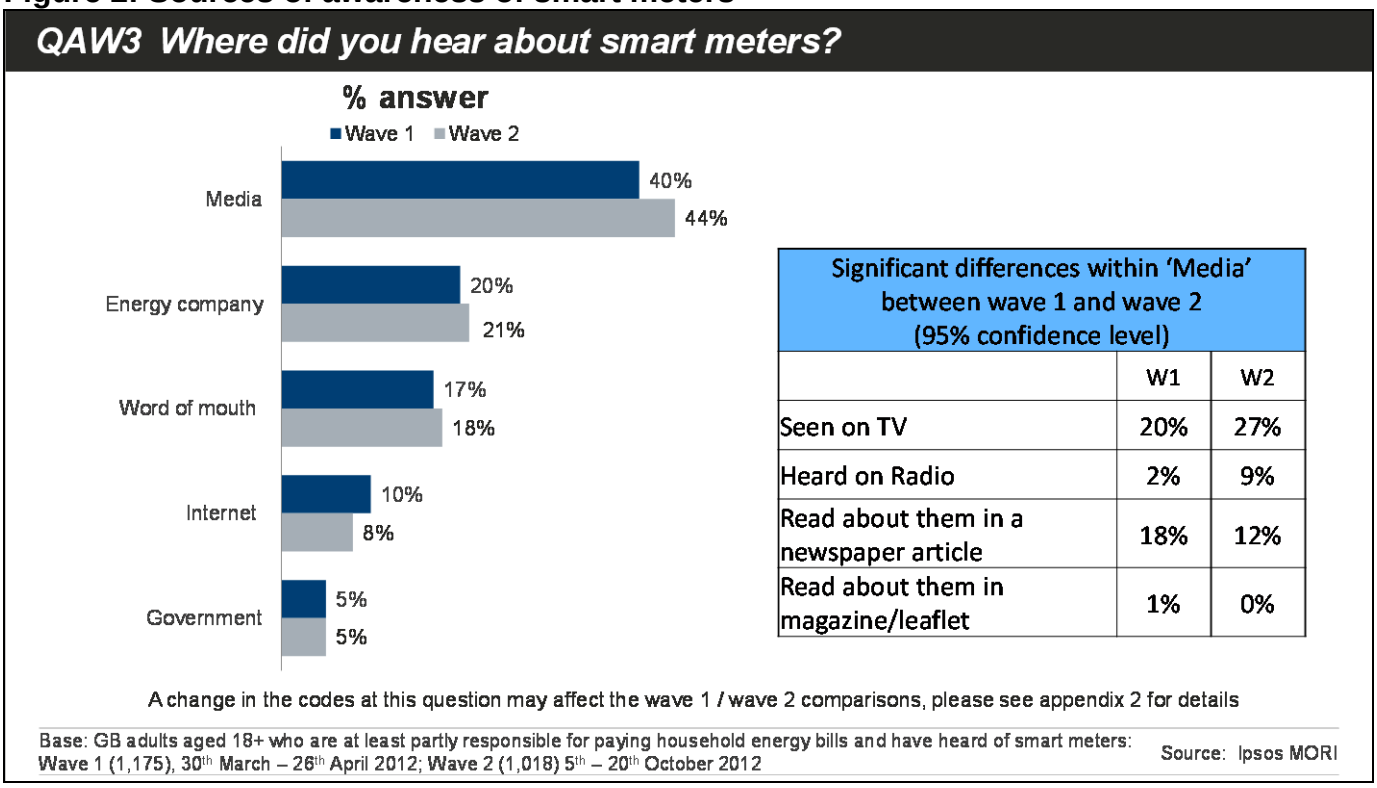
The proportion of those that had heard of smart meters via the media had not changed since Wave 1, with just over two in five people having heard about them in this way (44% in Wave 2 vs. 40% in Wave 1). A higher proportion had heard about them on TV – 27% compared to 20% in Wave 1; this increase is potentially due to the launch of the British Gas smart meter adverts over the summer, although the change in the codes that interviewers used to categorise the respondents' answers may also have had an impact[1]. Those who claimed to have heard about smart meters via the radio (either on a programme or via an advert) also increased, to 9% from 2% during Wave 1. However, a lower proportion claimed to have heard about them from a newspaper article (down to 12% from 18% in Wave 1).

Just over one in five learned about them through an energy company (21%), which was in line with Wave 1 (20%). 'Word of mouth' was also a popular medium in Wave 2, with almost one in five having heard of smart meters through a friend or relative (18%).

Also consistent with Wave 1, one in twenty had heard of smart meters from the government, with 3% specifically mentioning DECC.

[1] The pre-code 'Seen on TV' from Wave 1 was split into 'Seen on TV ad' and 'Seen on TV (news/current affairs programme - Panorama, World in Action, Dispatches, etc.)' for Wave 2.

Figure 2: Sources of awareness of smart meters



Wave 2 continued to highlight that different demographic groups were more likely to be have heard about smart meters from different sources, albeit with some contrasts between waves. Again the sub-group differences highlighted below are statistically significant.

For instance, during Wave 1, women were more likely to mention 'word of mouth' than men; one in five did so (21%) against only one in seven men (14%). In Wave 2 there was no difference, with 17% of both women and men mentioning this. Other differences remained, however; men continue to be more likely to say that they read about them in a newspaper article (15% to 10% of women).

Younger bill-payers remained less likely to have heard of smart meters through the media than respondents overall. Just 16% of those aged 18-24 had heard of smart meters in this way, compared to 44% of all respondents. There were few statistically significant differences between older people and the total population, although having read about smart meters in a newspaper was highest for those aged 65-74 (17%) and 75+ (15%) compared to just 5% for 25-34 year olds and zero for 18-24 year olds.

The media was much more important as a source of awareness for higher social grades (55% for ABs compared to 41% C1s, 36% C2s and 32% DEs). It was noted in Wave 1 that bill payers from the lower social grades, DE, were less likely than respondents overall to have heard of smart meters from their energy supplier. However, in Wave 2, this group were just as likely as respondents overall to have heard about smart meters through their energy company (20% compared to 21% of all respondents).

There were few differences in the source of awareness between households with and without children (aged 15 or under) although the government was a more important source for those households with children (8% vs. 4% for households with no children).

In Wave 1, bill-payers who do not speak English as their first language, were more likely to have heard of smart meters through the government (14% compared to 5% overall), yet in Wave 2 it was in line with the overall finding for all those that had heard of smart meters (3% compared to 5%).

Bill-payers in households with lower incomes (less than £15,500) were less likely to be made aware of smart meters through the media (34% compared to 44% overall); and in particular through a press article, or a TV news or current affairs programme.

In terms of other key groups of interest to DECC, there were no differences of note between respondents who are disabled (or have a long-standing illness) and those who are not.

As in Wave 1 those who claimed to have a smart meter installed were much more likely to have heard about them through their energy company (51% compared to 21% of all who had heard of smart meters) and less likely to mention the media (16% compared to 44% of all who had heard of smart meters).

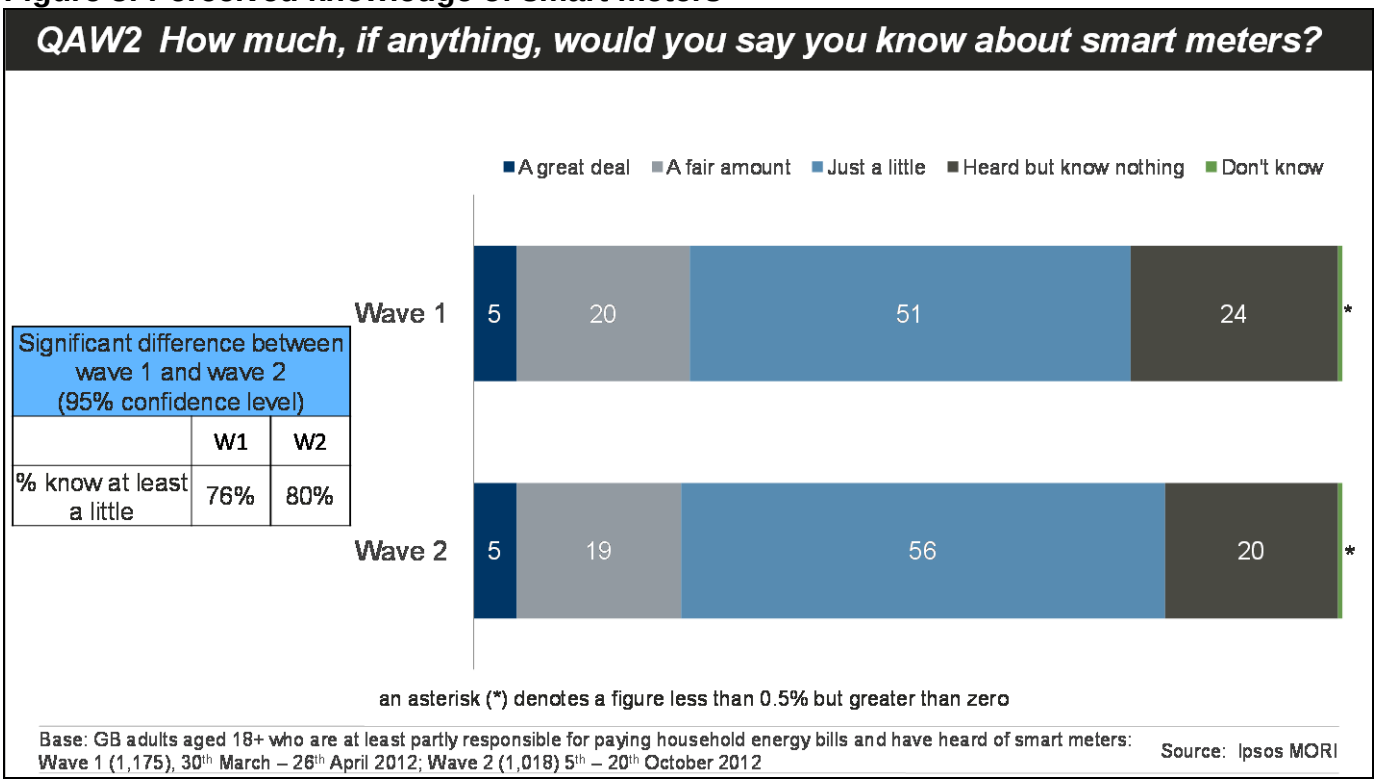
Some of the differences noted in Wave 1 between those who supported and opposed the installation of smart meters in every home, were observed again in Wave 2. The differences may indicate where respondents were likely to hear positive messages about smart meters, and more negative ones. Those who supported smart meters were more likely to have heard about them through an energy company (25% vs. 16% who opposed it). Those who opposed installation were more likely to have read about it through a newspaper article than respondents overall (18% vs. 12%).

2.1.3 Perceived knowledge of smart meters

There has been a slight increase in knowledge around smart meters since Wave 1, but there continues to be potential to increase knowledge much further (see figure 3 below). For instance, 80% of British bill-payers who had heard of smart meters said they know something about them compared to 76% in wave 1. However, the majority (56% of all those aware) say they only know a little, while 19% say they know a fair amount and 5% a great deal.

These figures equate to 12% of all British energy bill-payers knowing at least a fair amount about smart meters, and just 2% claiming to know 'a great deal' – i.e. exactly the same as Wave 1.

Figure 3: Perceived knowledge of smart meters



Demographic differences in terms of claimed knowledge persist from Wave 1. Once again those differences highlighted below are statistically significant.

Men claimed to be more knowledgable about smart meters than women; among those who had heard of smart meters, three in ten men (30%) said that they knew at least a fair amount about them (compared to 16% of women). The level of knowledge was fairly consistent by age but the oldest age group were the least knowledgable; 12% of those aged 75+ knew at least a fair amount (compared to 24% of all repsondents who had heard of a smart meter).

As in Wave 1, perceived knowledge was lower among the lower social grades. Only 16% of DEs claimed to know at least a fair amount about smart meters compared to 24% of all respondents who had heard of smart meters. This finding was reflected to some degree in the variation in knowledge according to income level. Only 2% of bill payers with a household income of less than £15,500 claimed to know a great deal about smart meters (compared to 5% of all those who had heard of smart meters). This was zero for bill payers with a household income of less than £7,500.

In terms of other key groups of interest to DECC, those bill-payers with a disability or long-standing illness claimed to be less knowledgable than other consumers who had head of smart meters. They were more likely to claim they had heard of them but knew nothing about them (26% compared to 20%). However, knowledge did not vary significantly by presence of children in household or whether English was the respondent's first language or not.

As with Wave 1, bill-payers who had access to the internet (at either home or work) claimed better knowledge; just over a quarter who had access knew at least a fair amount (26%), falling to 11% among those without internet access and rising to 30% if they had access to the internet at work.

Again, knowledge was limited even among those who claimed to have a smart meter installed - only 51% claimed to know a fair amount.

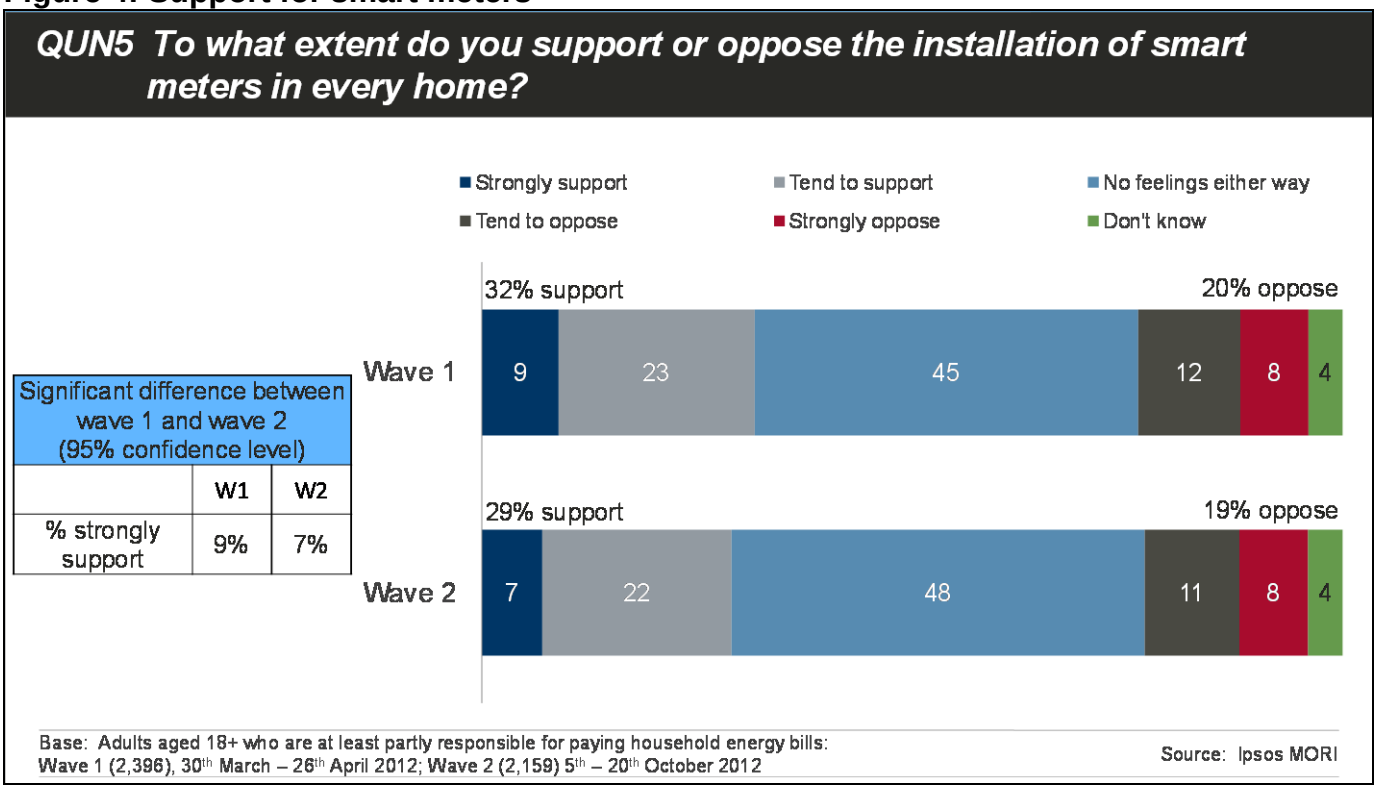
2.1.4 Support and interest

A large proportion of British bill-payers were undecided about whether smart meters should be installed in every home (see figure 4 below). Just under half, 48%, claimed to have no feelings either way (compared to 45% in Wave 1; a significant difference). Around a third of bill-payers (29%) were still supportive of the installation of smart meters in every home, but there was a slight statistically significant decline in the proportion that strongly supported the roll out of smart meters (from 9% to 7%). Less than one in five bill-payers were opposed to the roll out (19%).

The DECC qualitative study on smart meter attitudes[2] concluded that the way in which the installation process was presented to people would have an impact on their level of support; if people thought that the installation would be compulsory, they would be more likely to oppose it and, if it was a choice, would be more supportive. This study attempted to be as neutral as possible in all question wording and, while a smart meter description was given to each respondent, care was taken not to provide any information about the proposed installation.

[2] https://www.gov.uk/government/publications/smart-meters-research-into-public-attitudes

Figure 4: Support for smart meters



Wave 2 confirms the findings from Wave 1 that there is a clear correlation between knowledge and support, with the most knowledgeable also the most likely to support smart meters; just under half (47%) of those who know at least a fair amount support their installation compared to one in four (24%) who have never heard of them or one in five (21%) who have heard of them but know nothing about them.

Support across demographics continues to vary. Middle aged respondents (35-44) remained most likely to support the installation of smart meters (36%), whereas opposition was highest amongst those aged 75+ (27%).

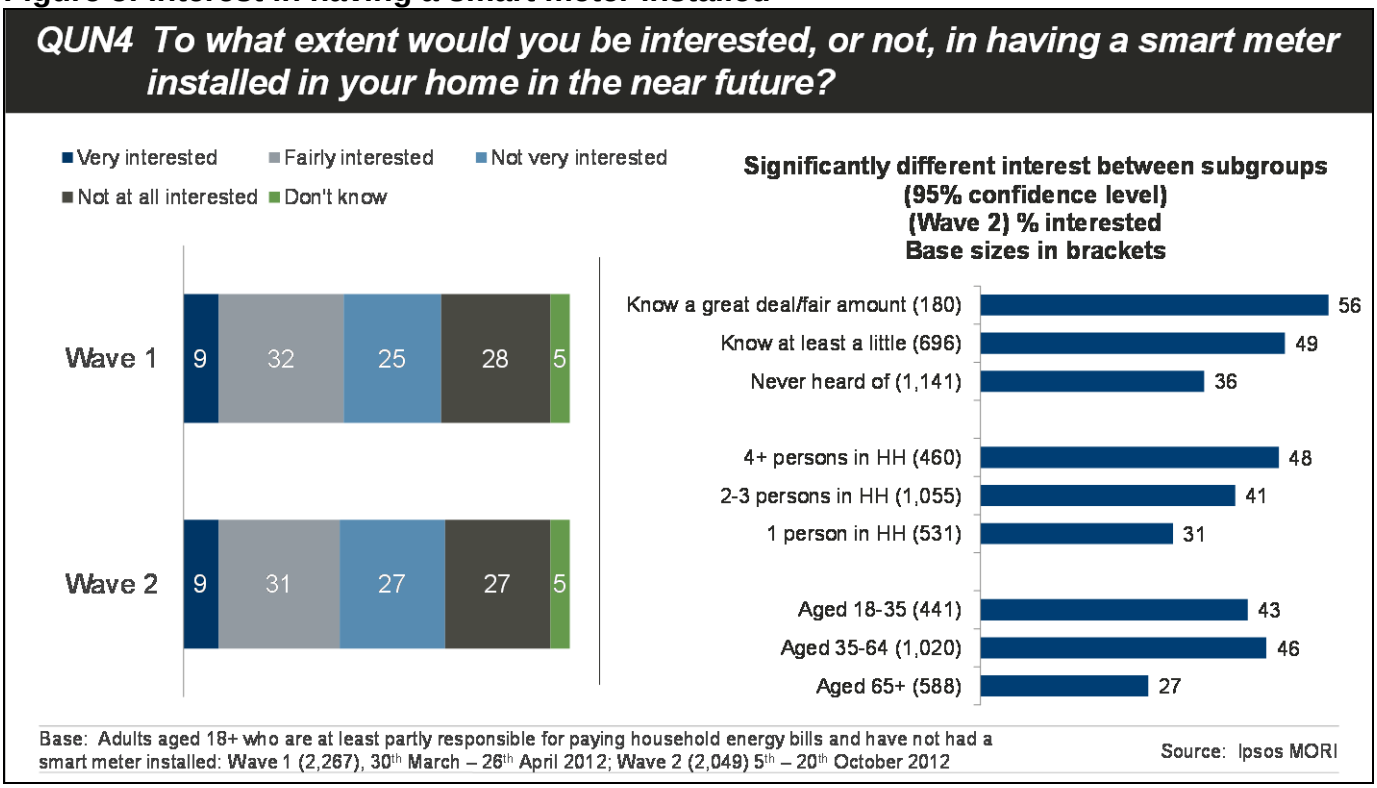
Families with children were more likely to support the installation of smart meters (35% vs. 26% with no children).

In terms of other key groups of interest to DECC, opposition was higher amongst those with a disability or long-standing illness (24% compared to 19% of all respondents), but there were no differences in support for those with lower incomes or who do not speak English as their first language.

As in Wave 1, support was also higher among those who claimed to be concerned about climate change (33% vs. 23% unconcerned). It also continued to be notably higher among those who claimed to have a smart meter (52%), although interestingly 17% of smart meter owners were opposed to the installation of a smart meter in every home.

Figure 5 shows bill-payers remained split in terms of their interest in having a smart meter installed in the near future. Four in ten bill-payers who did not have a smart meter were at least fairly interested in having one installed (40%); while more than half would currently not be interested (55%) with just over a quarter 'not interested at all' (27%). There were no significant differences in levels of interest between the two waves.

Figure 5: Interest in having a smart meter installed



As was the case with support, knowledge was closely correlated with interest. Interest among those who knew at least a fair amount about smart meters was 56% compared to 36% who had never heard of them and 32% who had heard of them but knew nothing about them.

In terms of demographic groups the main difference continues to be between small and larger households. Less than a third of respondents living alone were interested (31%), compared to almost half of those living in a household with four or more people (48%). In line with this finding, those respondents with a child aged 15 or under were more interested than those without (52% vs. 36%).

Older respondents continued to be less interested in the idea of installing a smart meter, with fewer than one in five aged 75+ interested (19%), rising to just under half among those aged 35-44 (49%). This difference in age groups is also reflected in tenure, with those with a mortgage expressing greater interest (49% compared to 40% of all respondents without a smart meter installed) while it was lower amongst those who owned their property outright or those who rented social housing (34% for both).

Those in the highest social grades were still the most interested, 50% of ABs compared to 42% of C1s, 33% of C2s and 32% of DEs. This is reflected within the highest achieved education level where similar proportions of those with a degree or above were interested as not interested (50% and 46%) compared to those with no formal education where around half as many were interested as not interested (28% and 66%).

Households with higher incomes remained more interested. For instance 58% of those with a household income of £50,000 or more were interested in having a meter installed compared to 37% of those with a household income of less than £15,500.

In terms of the other groups of particular interest to DECC, there was no significant differences in interest levels between those bill-payers with a disability and not, and those who do not speak English as their first language and those who do.

As with Wave 1, interest was higher among those who were concerned about climate change (47% vs. 31% not concerned), energy bills (43% vs. 29% not concerned) and household finances (43% vs. 37%).

2.1.5 Perceived benefits of smart meters

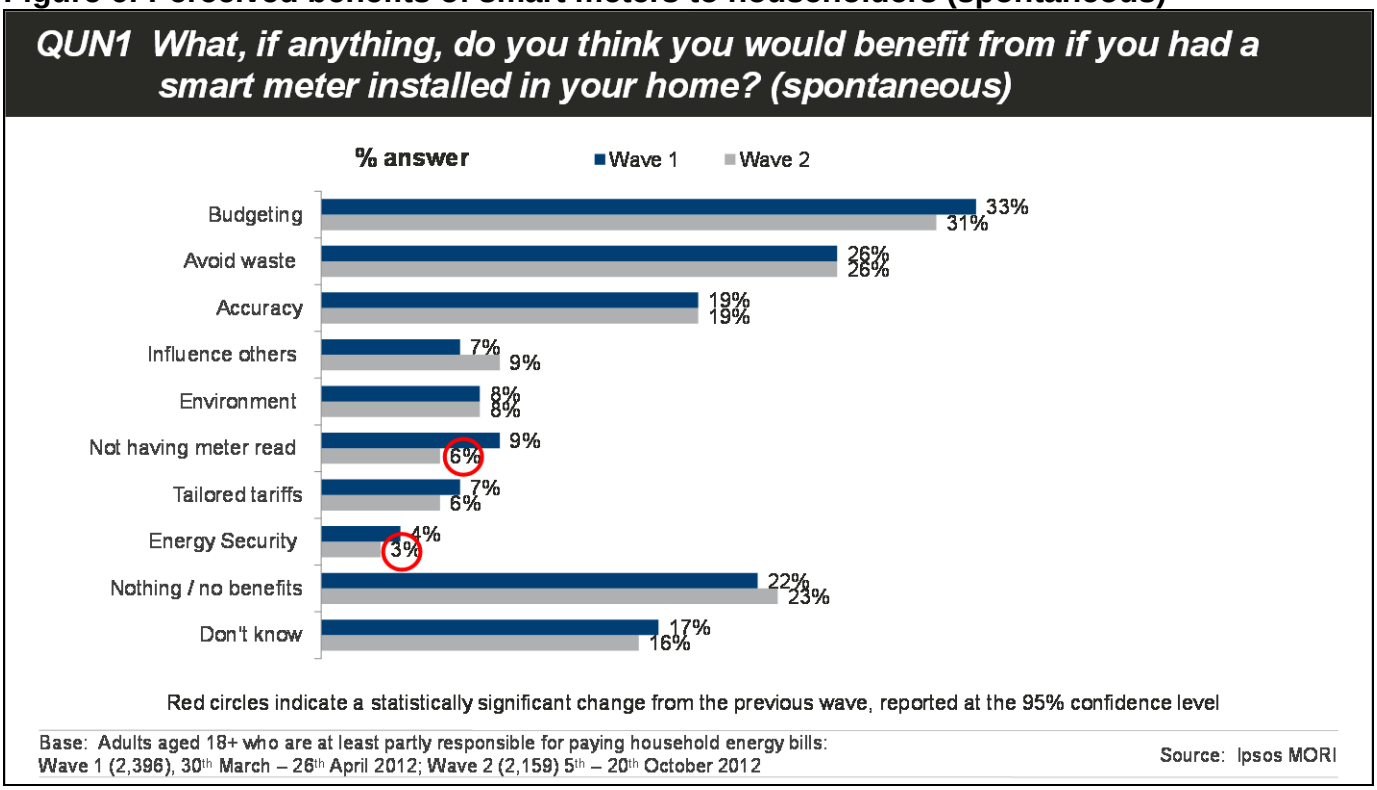
Results were markedly similar to Wave 1 in terms of perceived benefits of smart meters (see figure 6). Again, just over six in ten respondents were able to spontaneously think of at least one benefit to having a smart meter installed in their home (62%); just over a fifth said explicitly they could not think of anything (23%) while a further 16% said that they did not know.

Again, the most frequently mentioned advantages were related to budgeting; almost a third (31%) mentioned either helping to reduce bills, helping to budget and to see what is being spent. This was followed by benefits linked to avoiding waste (26%) and the accuracy of bills (19%). Just 6% mentioned not having to have the meter read (compared to 9% for Wave 1) or doing their bit for the environment (8% - the same as Wave 1).

The qualitative study on smart meter attitudes[3] suggested that not everyone associates reducing their energy usage with reducing their bills; there was a perception that energy companies would raise their prices so that a reduction in usage wouldn't necessarily lead to a reduction in cost.

[3] https://www.gov.uk/government/publications/smart-meters-research-into-public-attitudes

Figure 6: Perceived benefits of smart meters to householders (spontaneous)



A number of sub-groups were less able to name a benefit. These were the same as those identified in Wave 1 and included: people with no access to the internet (52%), those with no formal qualifications (50%), those with a disability (51%); those who were retired (49%) and those living in a single person household (45%). These sub-groups all overlap with one another.

Older respondents remained less able to think of the benefits of smart meters; almost six in ten bill-payers aged over 75 could not think of a single benefit (58%), and almost half of those aged 65-74 (47%). The middle-aged (those aged 35-44) continued to be the age group most able to name a benefit (71%).

In contrast to Wave 1 the types of benefits mentioned by respondents was less likely to vary by age.

However, in line with Wave 1, those bill-payers with higher household incomes were more likely to mention many of the various benefits of smart meters than those with lower household incomes. However, under budgeting, higher income groups were more likely to specifically state that smart meters would enable them to reduce their energy bills as opposed to help them to budget. For lower income groups, their responses were more evenly split between these two answers.

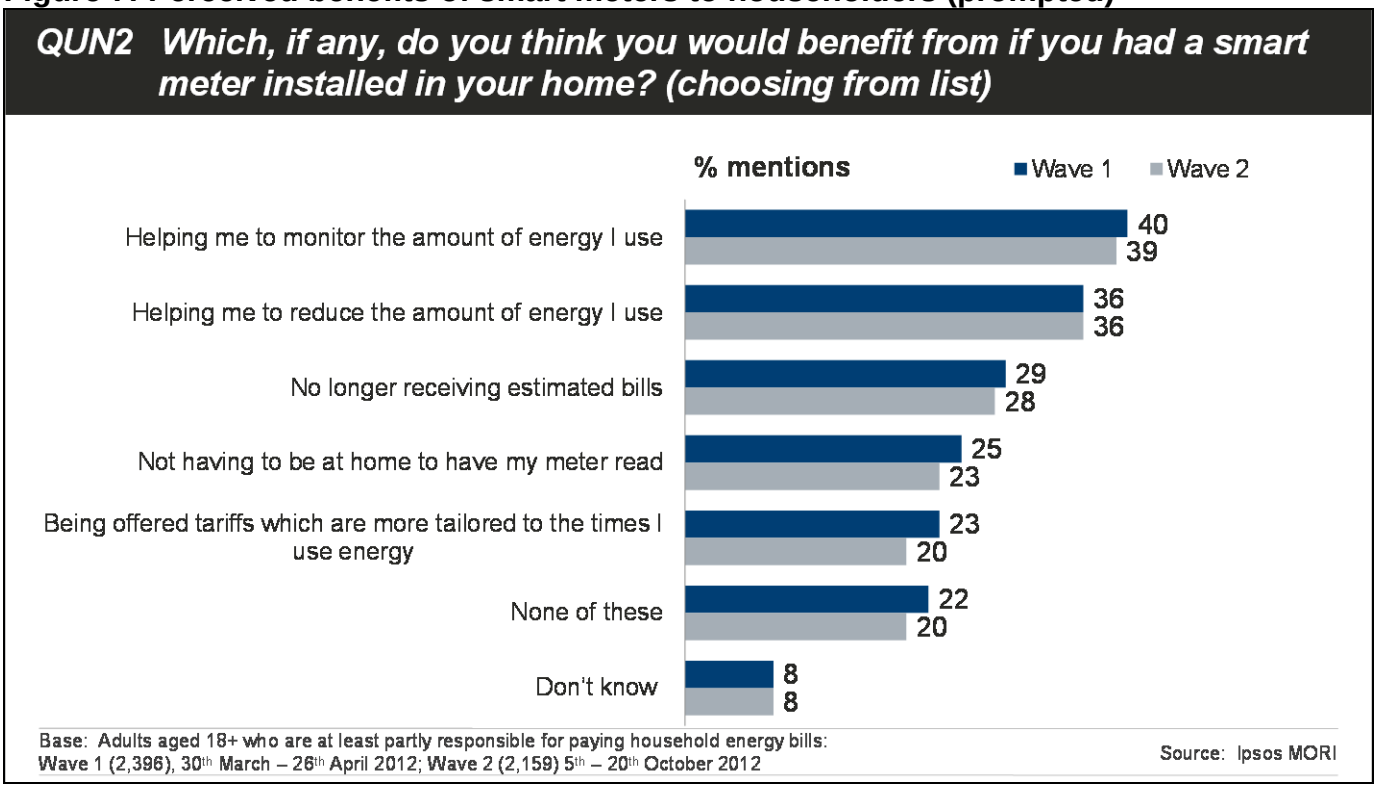
Bill-payers with children were more likely to mention a benefit than those without (68% compared to 59%). In particular they were more likely to mention budgeting (35% compared to 29%) and influencing others (13% compared to 7%).

Those with a disability or long-standing illness were less likely to be able to name a benefit; 49% compared to 64% of bill-payers without a disability. Those with no disability were more likely to mention budgeting (32% vs. 26% of those with a disability) and the difference was even more marked in terms of avoiding waste: 28% vs. 17%. The proportion of bill-payers who do not speak English as their first language but were able to name a benefit was consistent with those for whom English was their first language, although the former group were more likely to mention the idea that smart meters would allow them to budget (19% compared to 12%), and less likely that it would help them to reduce their bills (18% compared to 11%).

Those who support smart meter installation in every home were again more likely to be able to think of at least one advantage (85% vs. 55% of those against). As in Wave 1, a minority of those who supported smart meter installation said that they didn't know of any benefits (8%) or could not think of any (7%).

Consistent with the pattern shown in Wave 1, when prompted, over seven in ten (72%) felt they would benefit from one of a number of possible advantages. This compared to six in ten who spontaneously named a benefit. Once more, as with Wave 1 the most common answers related to monitoring energy use (39%), reducing energy consumption (36%) and avoiding estimated bills (28%).

Figure 7: Perceived benefits of smart meters to householders (prompted)



A consistent trend is that older bill-payers have less positive opinions towards smart meters; only 57% of those aged 65+ felt one of these factors would be a benefit to them compared to 72% of all respondents.

Once again, those in higher social grades were more likely to feel that at least one of these would be a benefit (78% among ABs, falling to 66% among DEs). Similarly, those with a degree or higher qualification were more likely than those without any formal qualifications to feel they would experience one of the suggested benefits (80% compared to 54%), while those without internet access were less likely to feel one of the benefits applied to them than respondents overall (55% compared to 72% overall).

People living on their own were less likely to see any benefits (only 64% chose one compared to 72% of respondents overall). In line with this finding those with children aged 15 or under were more likely to see a benefit that applied than those without (78% compared to 69%).

In terms of other groups of interest to DECC, those with a disability did not see as many benefits as those without (62% selected a benefit, compared to 74% without a disability), while those who do not speak English as their first language were less likely to select a benefit (59%) than respondents overall (72%).

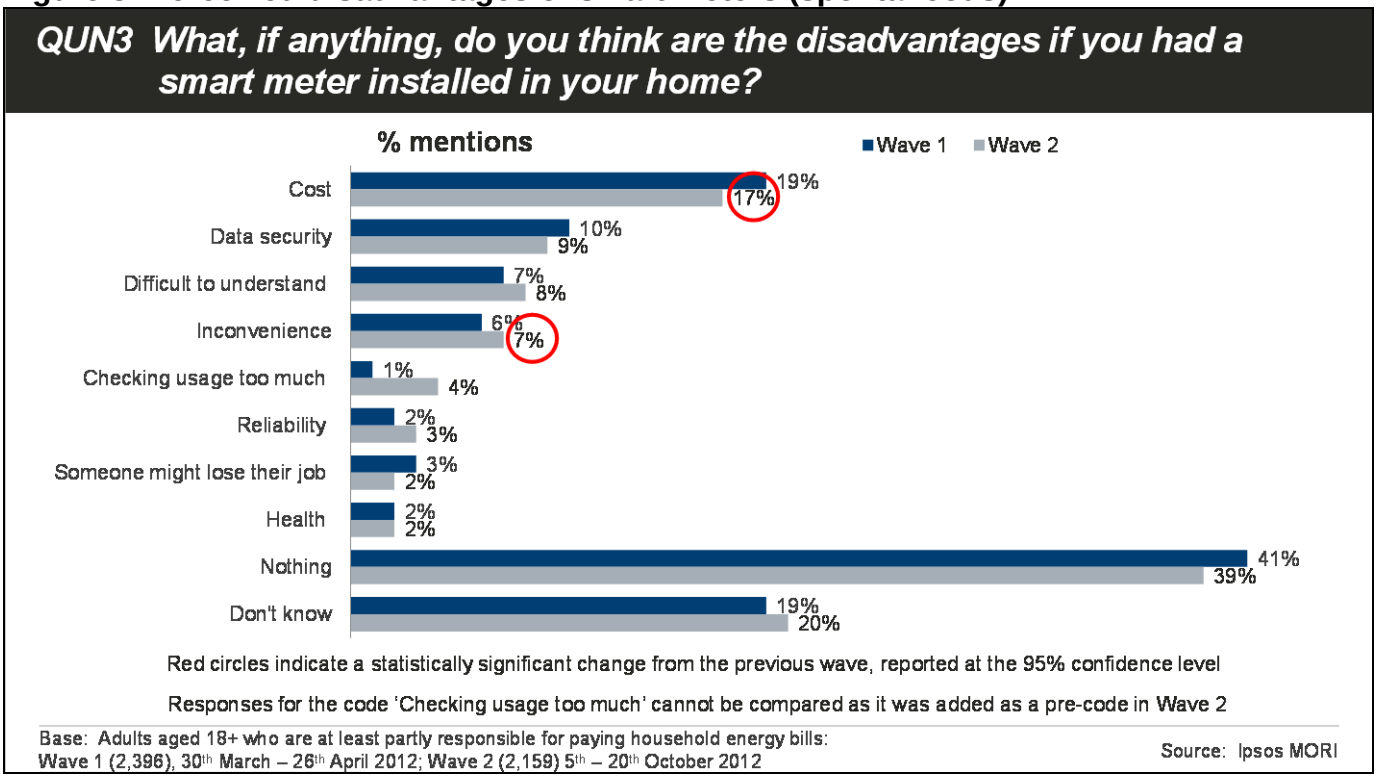
Once again, most of those who supported the installation of smart meters perceived at least one benefit, although as in Wave 1, 7% did not feel any of the potential benefits were applicable to them, while 3% did not know.

2.1.6 Perceived disadvantages of smart meters

As in Wave 1, whilst a majority were able to spontaneously name a benefit, only two in five were able to spontaneously name a disadvantage of having a smart meter installed in their home (41%) (see figure 8). Just under four in ten bill-payers said that there were no disadvantages in installing a smart meter (39%), and a further two in ten could not think of one (20%).

The main concerns were related to costs (17% compared to 19% during Wave 1); either for themselves through higher energy bills, for the energy companies, for taxpayers or for the government. There were also concerns around data security (9%), that the smart meter would be difficult to understand (8%) and that it would be inconvenient to have the meter installed (7%). The pattern of responses was largely consistent between waves although the circles on figure 8 indicate some small statistically significant differences. It should be noted that checking usage too much was only added as a pre-code in Wave 2 and so the results are not directly comparable for this response.

Figure 8: Perceived disadvantages of smart meters (spontaneous)



Different demographic groups continued to have slightly different concerns, reflecting their wider priorities. The differences highlighted between sub-groups are statistically significant.

For instance cost was mentioned more frequently by those aged 18-24 compared to those aged 75+ (23% compared to 14%), in particular that cost would be passed on through energy bills (9% compared to 3%). Again the middle-aged were the most worried about data security, with 12% aged 35-44 mentioning this compared to 6% of those aged 75+.

As with Wave 1, the oldest group (aged 75+) were most likely to think that smart meters would be 'difficult to understand'; 13% of this group said this compared to 8% of all respondents. In Wave 2 the middle aged were most concerned about the inconvenience to them (11% of those aged 35-44), compared to 7% of all respondents. Inconvenience was also the key difference in terms of concerns between those with children aged 15 and under and those without (11% compared to 5%).

The higher social grades were less likely to flag data security as a concern than in Wave 1, and the proportion who mentioned this (12%) was more in line with the finding for respondents overall for Wave 2 (9%). Once again, alongside cost, the leading concern for the lower social grades was that smart meters would be difficult to use (mentioned by 16% of DEs compared to 8% of all respondents).

Those with lower household incomes (less than £15,500) were the most likely to be concerned that smart meters would be expensive for them personally (13% compared to 10% of all respondents), and that they would find them difficult to understand (12% compared to 8%). Those who do not speak English as a first language also expressed higher concern that smart meters might be difficult to understand (15% compared to 8% of all respondents). This appears to be one of the key reasons why this group were more likely to name a disadvantage than respondents overall (47% compared to 41%).

Those bill-payers with a disability were less likely to name a disadvantage of smart meters than those without (36% compared to 42%). Their concerns were broadly consistent with respondents overall although they were less likely to be worried about any inconvenience linked to having the meter installed. This is in contrast to Wave 1 when disabled bill-payers expressed greater concern than those without a disability about the meters being difficult to understand, but less so about the cost or data security.

2.2 Experience of smart meter customers

Respondents who claimed to be smart meter customers continued to be largely satisfied with the installation process and their overall experience of using meters.

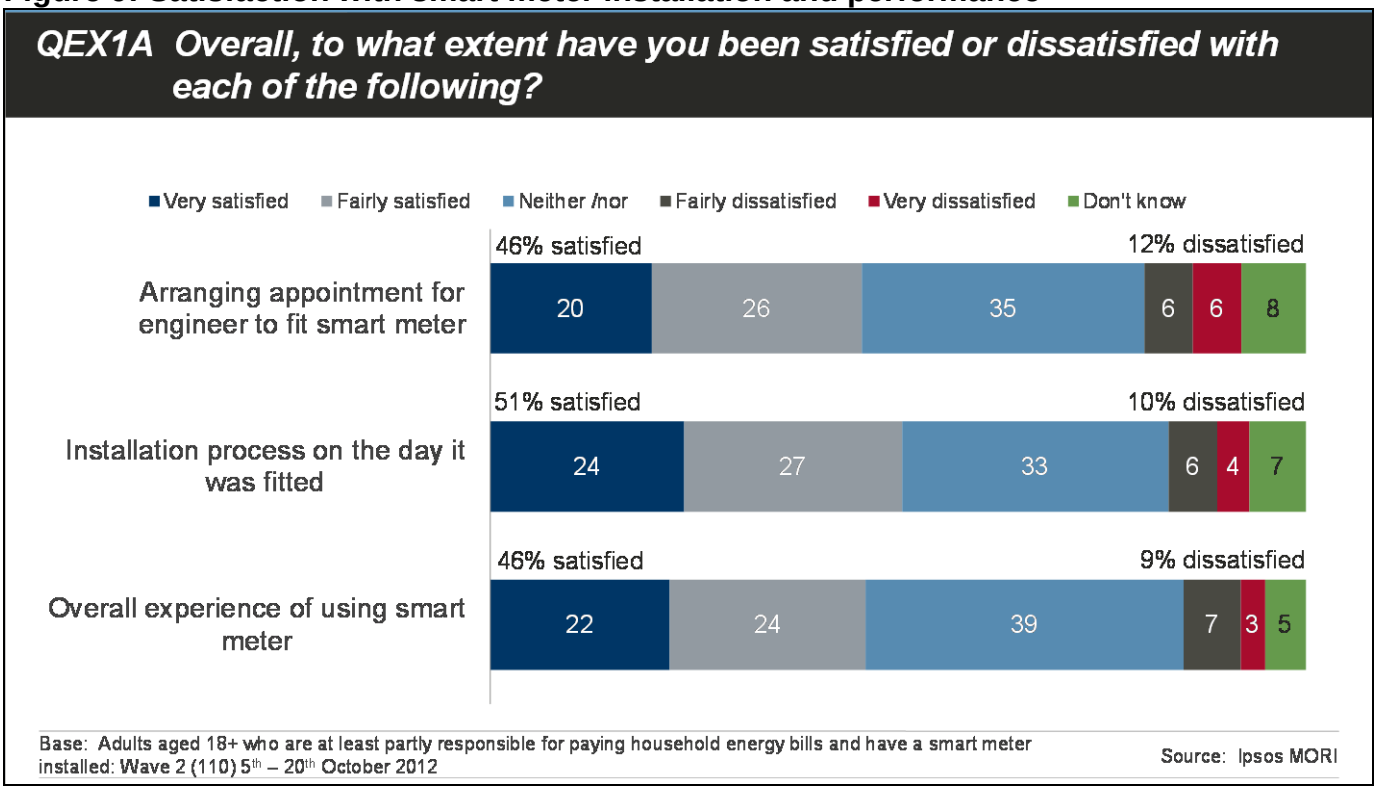
Respondents who claimed to be smart meter customers, and who supported the roll out of smart meters in every home, were more likely to express satisfaction with the installation process and their overall experience of using meters. This shows a correlation between perceptions of good customer service and support for the smart meter programme.

Those respondents who claimed to have a smart meter were asked a number of questions about their relative satisfaction with the installation process and their overall experience of the smart meter. It should be noted that the responses to these questions had relatively low sample sizes for both Waves 1 and 2 (129 and 110 respondents respectively). Therefore the findings should be treated be with some level of caution.

As with Wave 1, smart meter customers were broadly positive about their experience of the appointment and installation process, as well as their overall experience of using the smart meter. For all three measures the proportion satisfied greatly outweighed those dissatisfied (see Figure 9). However, dissatisfaction with arranging the appointment had increased significantly from 4% in Wave 1 to 12% in Wave 2.

On all three measures a high proportion are neutral or say don't know. It is felt this is likely to reflect some confusion on the part of respondents as to whether they do in fact have a smart meter, in spite of steps taken in the questioning to minimise this.

Figure 9: Satisfaction with smart meter installation and performance



The small base size for respondents with smart meters means it is not possible to conduct sub-group analysis on Wave 2 alone. However, by combining Waves 1 and 2 some statistically significant differences can be detected. Of note, is that respondents who supported the roll out of smart meters in every home were much more likely to express satisfaction with each of the three factors measured. Around seven in ten expressed satisfaction with each statement (compared to under half of all respondents who claimed to be smart meter customers), while dissatisfaction for each statement ranged from zero to 5%; the remaining responses were neutral. This shows a correlation between perceptions of good customer service and support for the smart meter programme.

2.3 Public attitude to IHDs

There was little difference in ownership of IHDs between Waves 1 and 2. The majority of bill payers do not have an IHD, with only one in six bill-payers in Great Britain claiming to have one in their home. Again, over half of those who claimed to have one said they looked at it at least occasionally, with most checking either the energy usage or the money display.

Customers tended to have received IHDs from their energy suppliers rather than have actively requested or purchased them. Interest levels among those who do not have one were comparable to smart meters, with four in ten expressing interest. Interest remains lowest amongst older respondents, single person households and those without qualifications.

Customers who look at their IHDs remained generally positive about their impact in helping them understand and reduce their energy use. Overall satisfaction with IHDs was 64% in Wave 2.

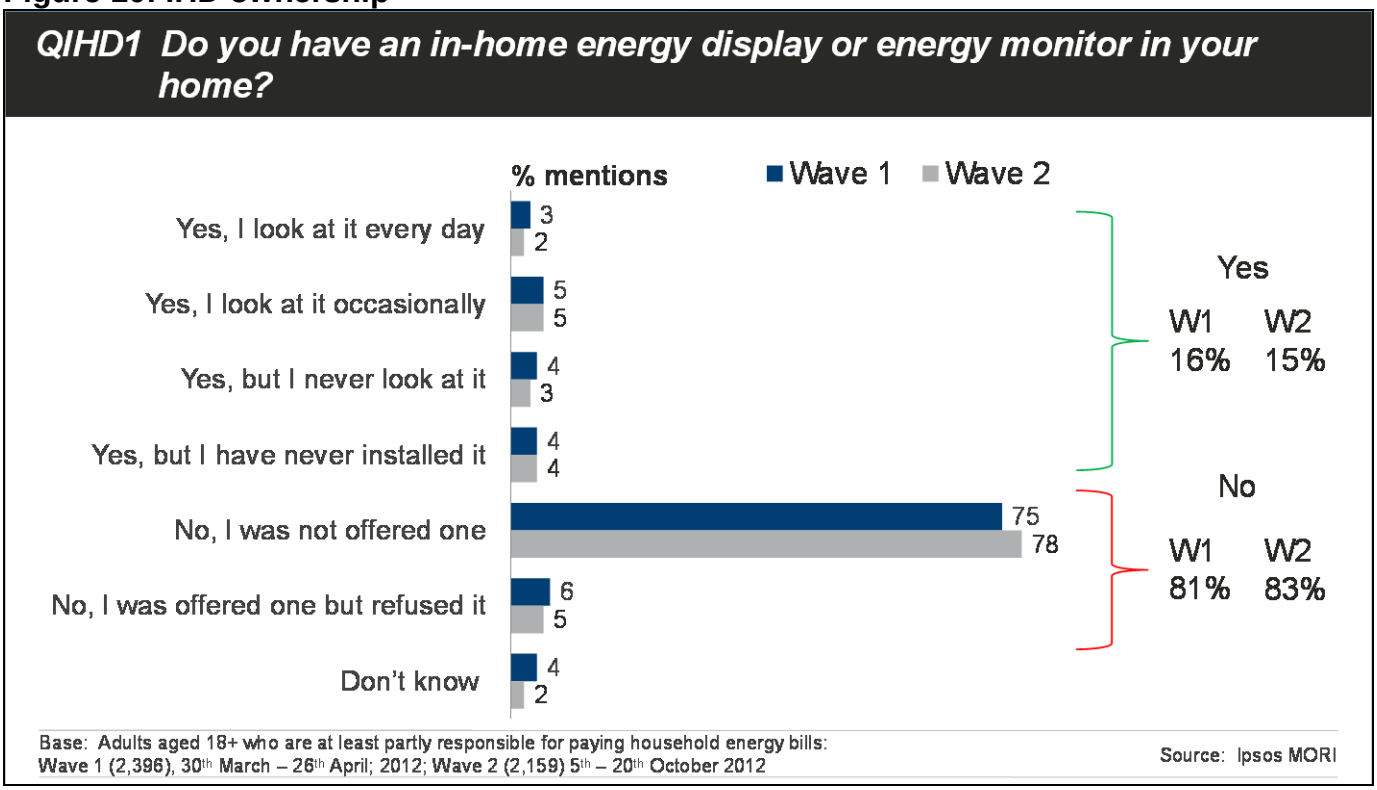
Again, as with Wave 1 it is clear that not everyone who has an IHD is using it.

Respondents were asked whether they had an in-home energy display or energy monitor in their home. This includes the type of in-home display installed by energy suppliers, which interacts with a smart meter and also other forms of energy display that are acquired separately as stand-alone devices. Stand-alone devices may have been provided by suppliers or purchased directly.

2.3.1 Ownership of IHDs

IHD ownership remained fairly steady between Waves 1 (16%) and 2 (15%). Around eight in ten did not have an IHD (83%); while a small proportion (2%) said they didn't know. However, only just over half of those (53%) who own an IHD claimed to look at it, while 22% had never looked at it, and a further 25% claimed not to have installed it. This is in line with findings from Wave 1.

Figure 10: IHD ownership



Similar to Wave 1, ownership varied between demographic groups in Wave 2. The middle-aged remained amongst the most engaged; 19% of bill-payers aged 55-64 own an IHD. Ownership of IHDs was lowest amongst those bill payers aged 75+ (11%).

Those in higher social grades were also more likely to have an IHD in their home; 16% of ABs and 19% of C1s, compared to 11% of C2s and 12% of DEs.

Those without formal qualifications remained far less likely than those with at least a degree to have an IHD (8% vs. 21%). Ownership also continued to be lower amongst those with low household incomes (less than £15,500); 11% compared to 15% of all respondents. Ownership peaked at 27% for those with a household income of at least £40,000 but less than £50,000.

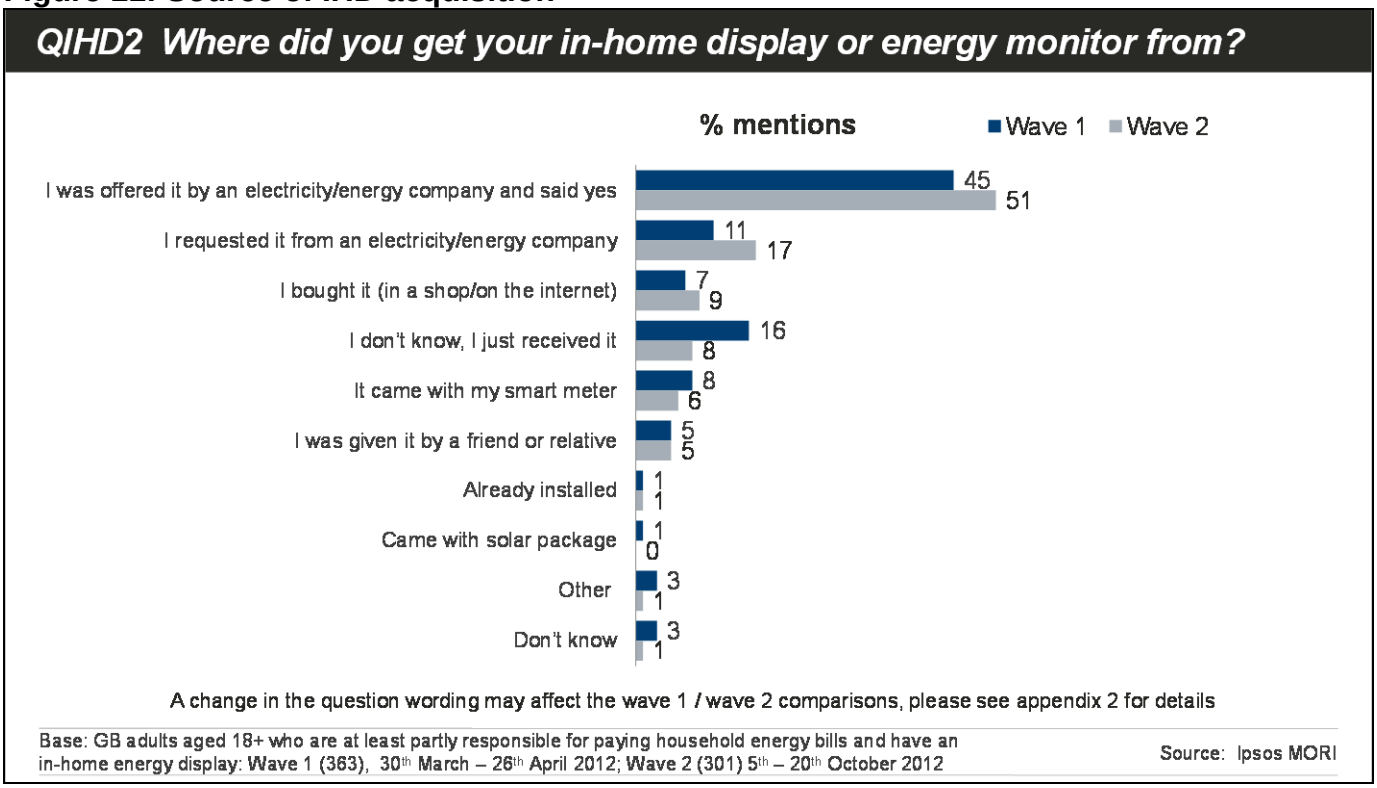
Ownership of an IHD was lower than for respondents overall (15%) among a number of key groups including single person households (9%); those with a disability (11%); those for whom English is not their first language (8%) and those without any form of internet access (7%). However, in contrast to Wave 1, ownership did not vary significantly depending on whether a household had children or not.

Owner-occupiers were more likely to have one than those living in rented accommodation (18% vs. 8%). Those who paid their electricity bills by Direct Debit were more likely to claim to have one in their home (17%), than those that paid by quarterly bill (12%) or using a Pre-Payment Meter (8%).

2.3.2 Source of IHDs

As with Wave 1, the results from Wave 2 indicate that most customers were passive recipients of IHDs rather than actively requesting or purchasing them. One in two said their energy company offered them their IHD, up slightly from Wave 1 (51% vs. 45% in Wave 1). However, a higher proportion claimed to have actively requested one from their energy company (17% vs. 11% in Wave 1) and fewer were unsure of its origin (8% vs. 16% in Wave 1). The shift in those requesting an IHD should be treated with some caution given that during Wave 1 customers were specifically asked if they had received it from an electricity company, as opposed to an energy company. It might be that a slightly higher proportion identified with the term "energy company", and it is therefore more difficult to say whether the difference is real or not.

Figure 11: Source of IHD acquisition



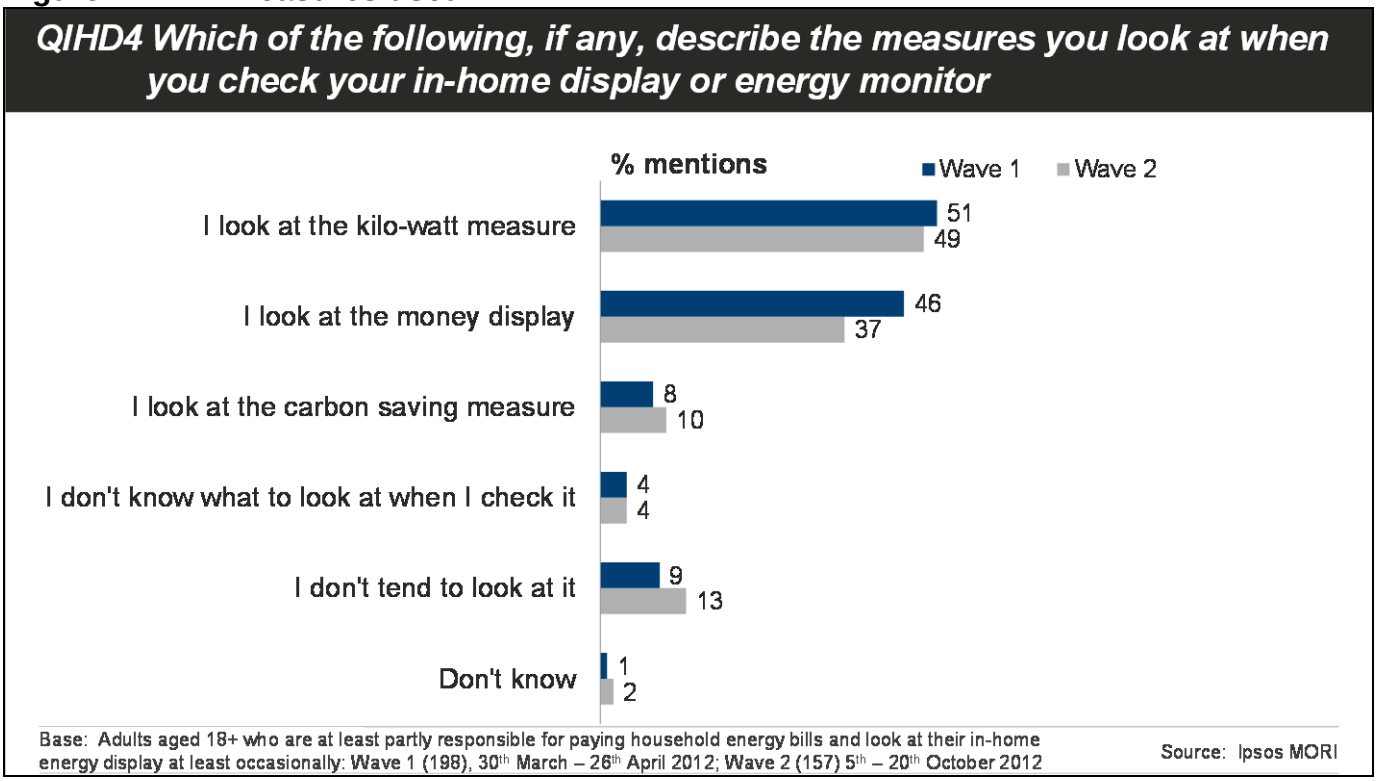
Like Wave 1, renters continued to be more likely to be uncertain of the origin of their IHD than owner-occupiers (27% vs. 5%); while owner-occupiers were more likely to state they were offered it by their energy company (54% compared to 36% for renters). In contrast to Wave 1, those with no formal qualifications or from lower social grades were no less certain than average (all respondents who claimed to have an IHD) in Wave 2.

Those in the higher social grades were more likely to be precise about the origin of their IHD; with 64% of ABs stating that their energy company had offered it to them, and only 2% stating they don't know where it came from, they just received it.

2.3.3 Usage of IHDs

Those IHD owners who claimed to look at their device occasionally were asked about the features they refer to. As in Wave 1 energy usage was an important feature of the IHD, just under half said they checked the kilowatt measure (49%). Again, only a minority said they checked carbon saving (10%) and fewer still were unsure what to look for (4%). The proportion of IHD owners that claim to check the money display was 37% compared to 46% during Wave 1; although due to the low sample size this difference was not statistically significant.

Figure 12: IHD measures used



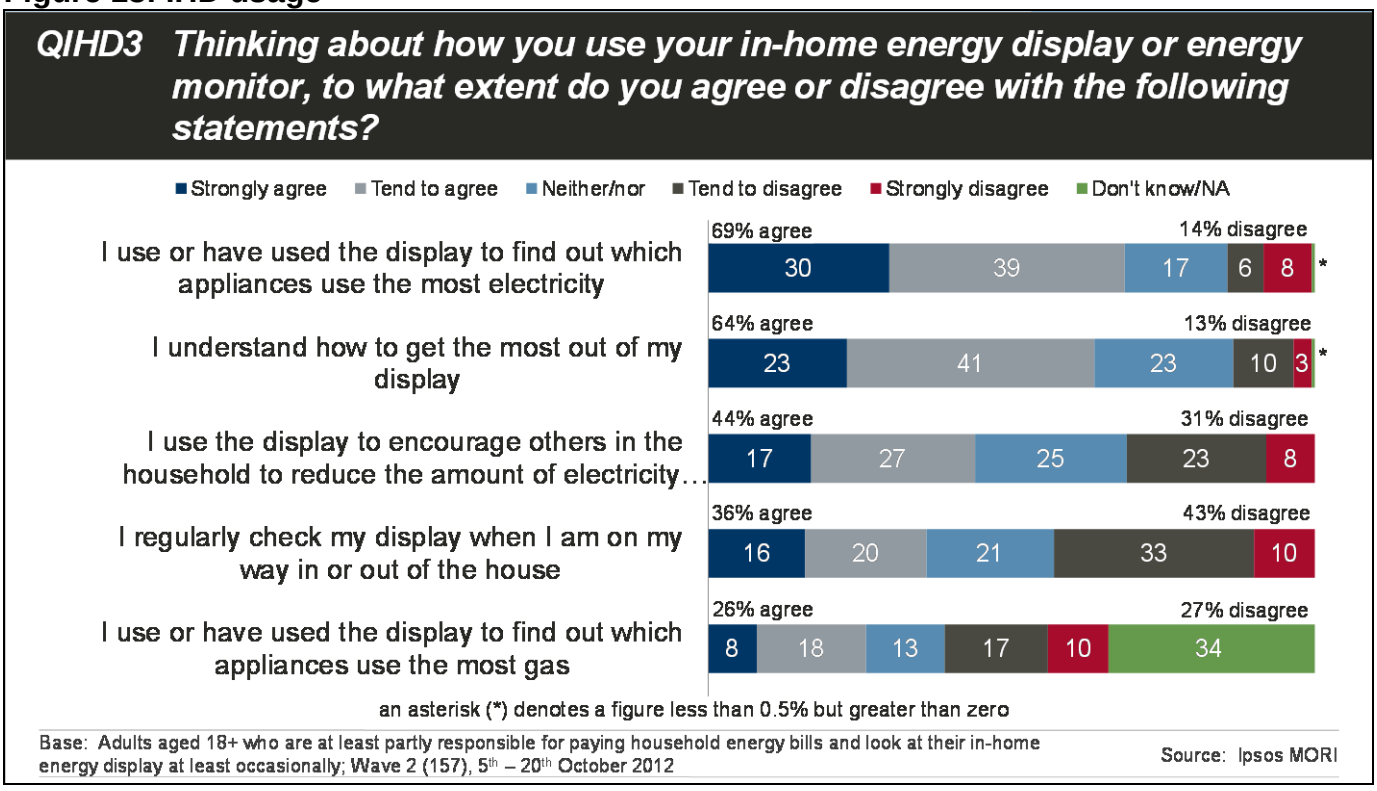
Due to the low sample size for this question, sub-group analysis has been conducted on both waves combined. This shows there are some overlapping groups who were less likely than IHD users overall across both waves to look at the kilo-watt measure (50%), including those from lower social grades (26%); those with no formal qualifications (33%); renters (33%) and Pre-Payment Meter customers (21%).

The results from Wave 1 indicated that IHD users generally felt they knew how to get the most out of their display, and that IHDs are used in a variety of different ways, with the most common being to check the amount of electricity different devices use. The Wave 2 results generally indicate the same pattern (see figure 13).

Around two-thirds (64%) of bill-payers who look at least occasionally at their IHD agreed that they knew how to get the most out of it. This is a similar proportion to Wave 1. There continues to be potential to increase knowledge, with 13% claiming they don't understand how to get the most out of their IHD, in addition to those respondents who claimed they had not set-up or did not ever look at their IHD (7% of all IHD users).

As found in Wave 1, the majority of respondents who own and look at their IHD have used them to measure the energy efficiency of appliances (69%) and over a third regularly checked their IHD on their way in or out of the house (36%). The proportion using IHDs to influence others in their household to reduce their energy usage is down to 44% from 55% in Wave 1, a significant difference.

Figure 13: IHD usage



As with Wave 1, the relatively small base size for those people who own an IHD and look at it, limits the potential for sub-group analysis within or between Waves. However, with a slightly larger base the combined Wave 1 and Wave 2 data helps to draw out a number of differences, as noted below.

Those in lower social grades (DE) were less likely to have used their IHDs to find out which appliances use the most electricity (48% compared to 69% of all those who looked at their IHD at least occasionally).

Women were more likely than men to check their IHD on their way in and out of the home (43% compared to 29%); and to use it to encourage others in the home to change their behaviours

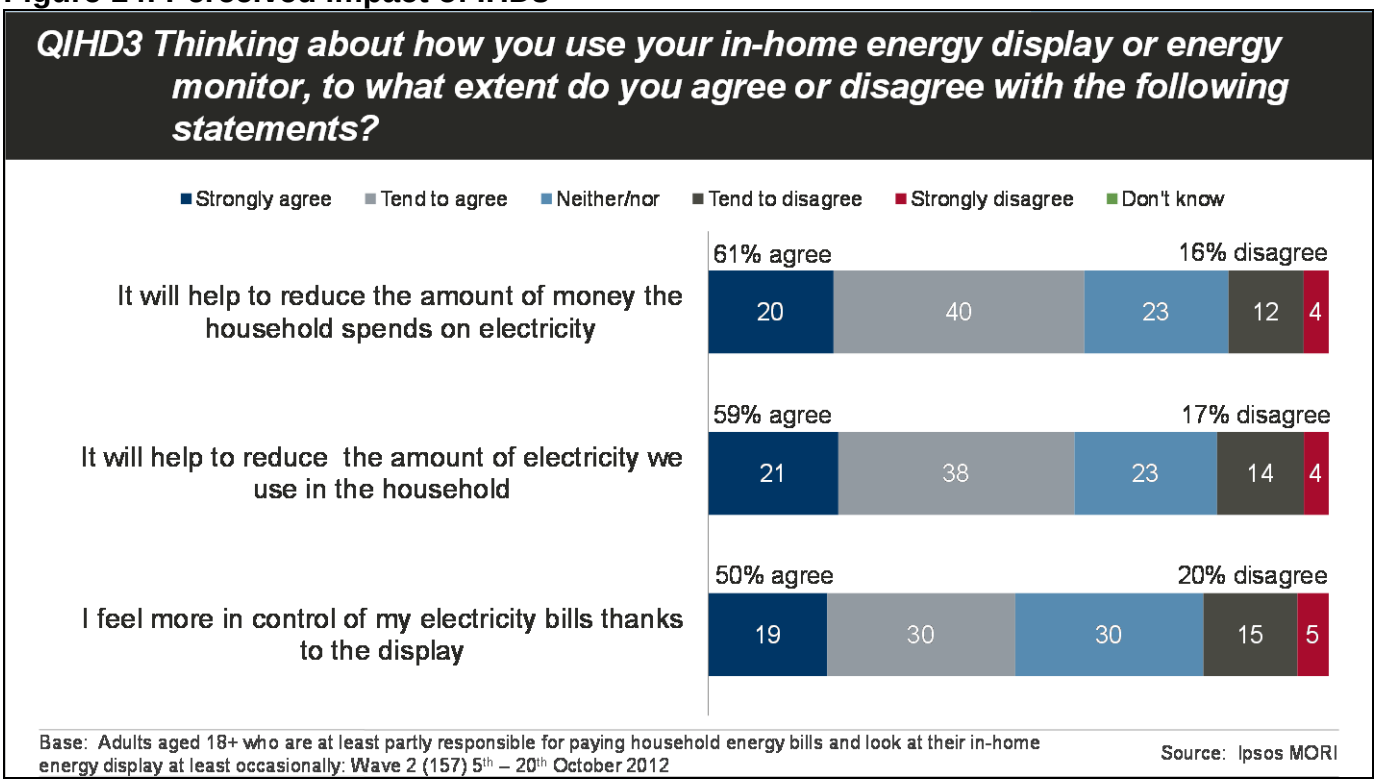
(58% compared to 44%). Bill-payers in larger households (with four people or more) were also more likely to try to use their IHD to influence others (64% compared to 50% of all those who looked at their IHD at least occasionally), including households with older children aged 10-15 (67% compared to 50%).

2.3.4 Perceived impact of IHDs

Wave 2 showed that IHD customers remained generally positive about the impact of the IHD on their electricity use and household finances. Levels of agreement with each of the statements on the impact of smart meters was lower in Wave 2 than Wave 1 but none of the differences were statistically significant.

Half of those who looked at their IHD felt more in control of their electricity bills, although one in five disagreed with this statement. Three in five felt that the IHD would help them to reduce the household spend on electricity and the amount of electricity used, although again a sizeable minority disagreed with both statements (16% and 17% respectively).

Figure 14: Perceived impact of IHDs



The Wave 1 and 2 bases are relatively small and so sub-group analysis has been completed on the combined data for the two waves.

Households without children (aged 15 or under) were more likely to feel in control of their electricity bills as a result of their IHD than those with (58% compared to 45%).

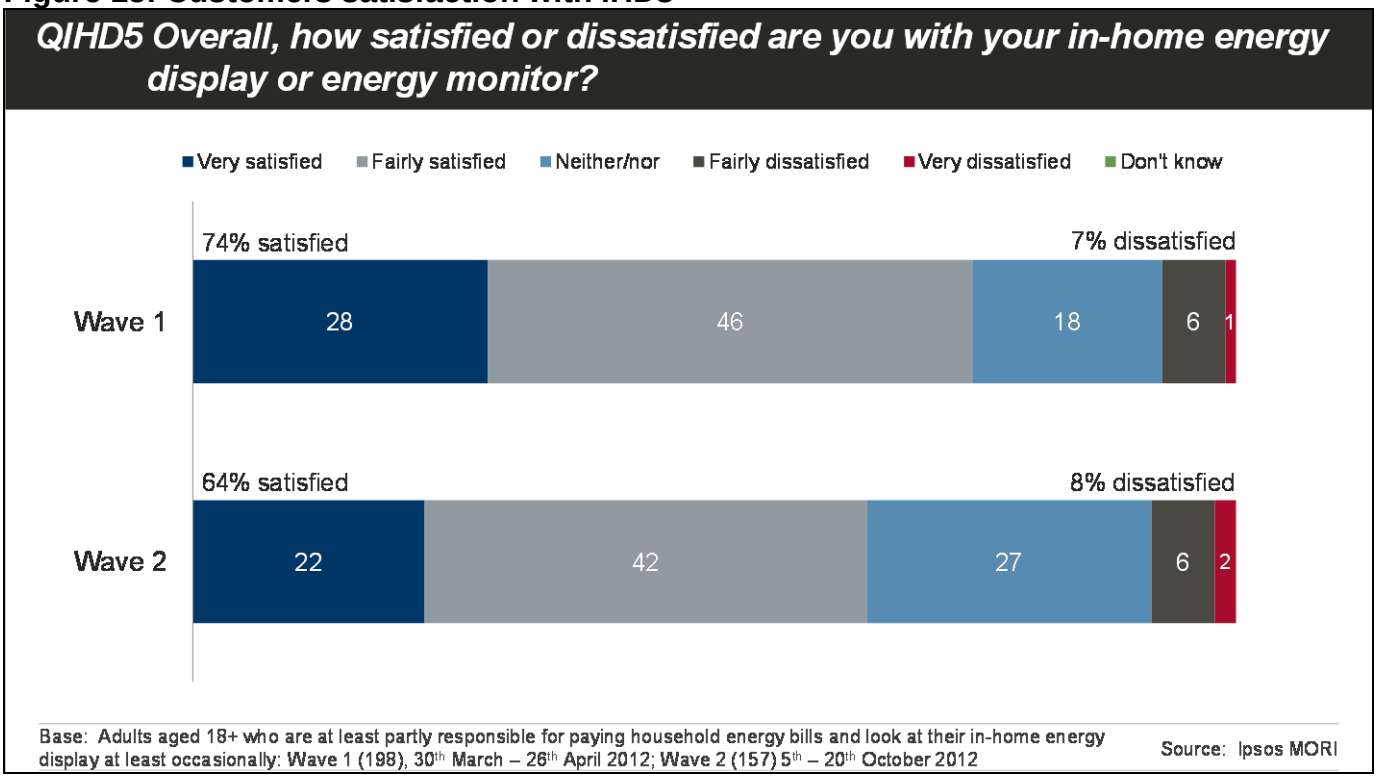
In contrast older respondents (aged 65-74) were less likely to feel that their IHD will help them reduce their electricity use (51% compared to 65% of respondents who looked at their IHD at least ocassionally) or their electricity spend (52% compared to 64%).

Finally, those on Pre-Payment Meters were more likely to feel that their display would allow them to reduce what they spend on electricity (81% compared to 64% of respondents who looked at their IHD at least occassionally).

2.3.5 Customer satisfaction with IHDs

Reflecting the positive perceptions of IHDs in terms of impact, customer satisfaction with IHDs remained relatively high during Wave 2. As with Wave 1, a majority were satisfied with their overall experience of using the IHD, with a fifth very satisfied (22%) and four in ten fairly satisfied (42%). The apprarent decline in the proportion of those satisfied from 74% to 64% between Waves 1 and 2 was not statistically significant due to the relatively low sample sizes. The proportion of respondents who expressed dissatisfaction with their IHD remained consistent at 8% compared to 7% during Wave 1.

Figure 15: Customers satisfaction with IHDs



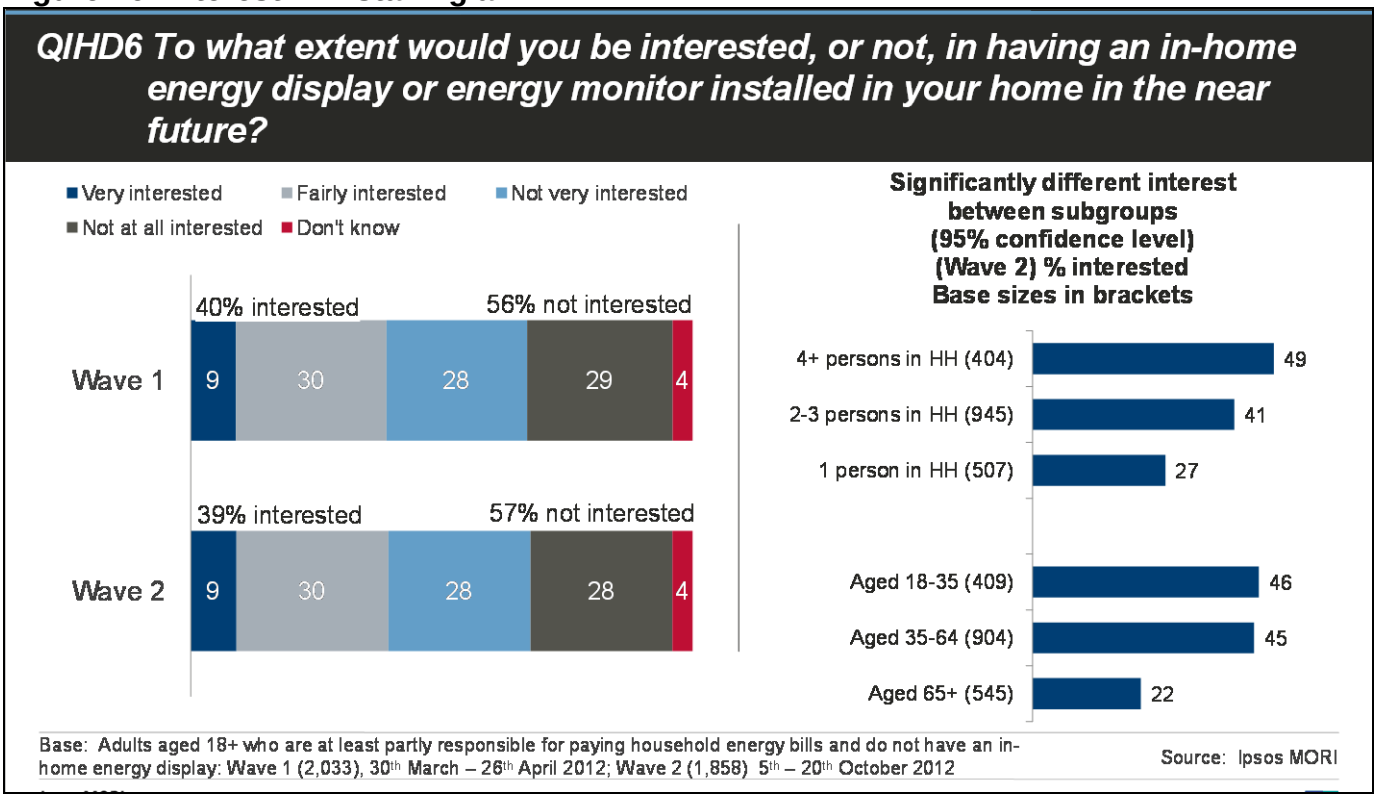
Once again, the Wave 1 and 2 bases are relatively small and so sub-group analysis has been completed on the combined findings for the two waves.

Those IHD owners from social grade AB were more likely to be satisfied compared to all respondents who looked at their IHD at least occasionally (77% compared to 70% for both waves combined). In contrast those with no formal qualifications were less satisfied (55%) compared to all respondents who looked at their IHD at least occasionally. Those who supported the roll out of smart meters were more likely to be satisfied than those who were opposed (81% compared to 65%).

2.3.6 Future interest in IHD ownership

Wave 1 results revealed bill-payers were split as to their relative interest in having an IHD installed (similarly to smart meters). This finding was repeated in Wave 2, with a similar split: nearly four in ten bill-payers without an IHD were interested in getting one in the near future (39%); while a majority of 57% said that they were not very interested or not interested at all.

Figure 16: Interest in installing an IHD



Wave 2 results reveal similar patterns to those noted during Wave 1 across different sub-groups. Interest remains correlated with knowledge about smart meters; those with either a great deal or fair amount of knowledge were more interested (46%) compared to all respondents who claimed not to have an IHD (39%).

Interest in IHDs also continued to be higher amongst high energy users such as multi-person households with four or more people (49%) and households with at least one child (53%), in contrast to low energy users such as single person households (27%) and those without children (34%). While 37% of lower income households (less than £15,500) were interested in a smart meter (in line with findings for all respondents who claimed not to have an IHD), there was a step change in interest amongst higher income households, with 60% of those with an income between £40,000 and £74,999 either very or fairly interested.

Those aged 35-44 years old remained most interested in installing an IHD (51%), in contrast to just 29% of those aged 65-74 and 12% of those aged 75+. Overall, those aged 18-54 were more interested than those aged 65 or over.

In terms of other specific groups of interest to DECC, those with a disability were also less interested in installing an IHD; 33% compared to 41% of those without. However there was no significant difference depending on whether English was the bill-payer's first language or not.

Respondents with no formal qualifications still tended to be less interested in Wave 2, with fewer than a quarter interested (24%) in comparison to half of those with at least a degree (51%). Similarly, and in line with Wave 1, those with access to the internet were more likely to be interested than those without (45% vs. 21%).

Those who showed some concern about climate change (46%), their household finances (45%) and their energy bills (42%) continued to be more interested in installing IHDs, as were bill-payers who supported the installation of smart meters in every home (70% vs. 21% who opposed it).

2.4 Further information needs

There was an increased interest in information, with half expressing an information need around smart meters and IHDs during Wave 2 compared to one in three in Wave 1.

Reflecting their relatively low engagement with smart meters, older bill-payers tended to have fewer information needs compared to respondents overall, although cost was also their key information need. Other groups which typically expressed fewer information needs, again reflecting a lower level of engagement, included those without children and those with a disability.

Internet search engines (36%), energy companies (27%), the government (10%) and word of mouth (7%) were the main sources of information about smart meters or IHDs for bill payers.

When prompted, the most trusted sources of information about smart meters or IHDs still include energy companies, Which?, the government and the Energy Saving Trust.

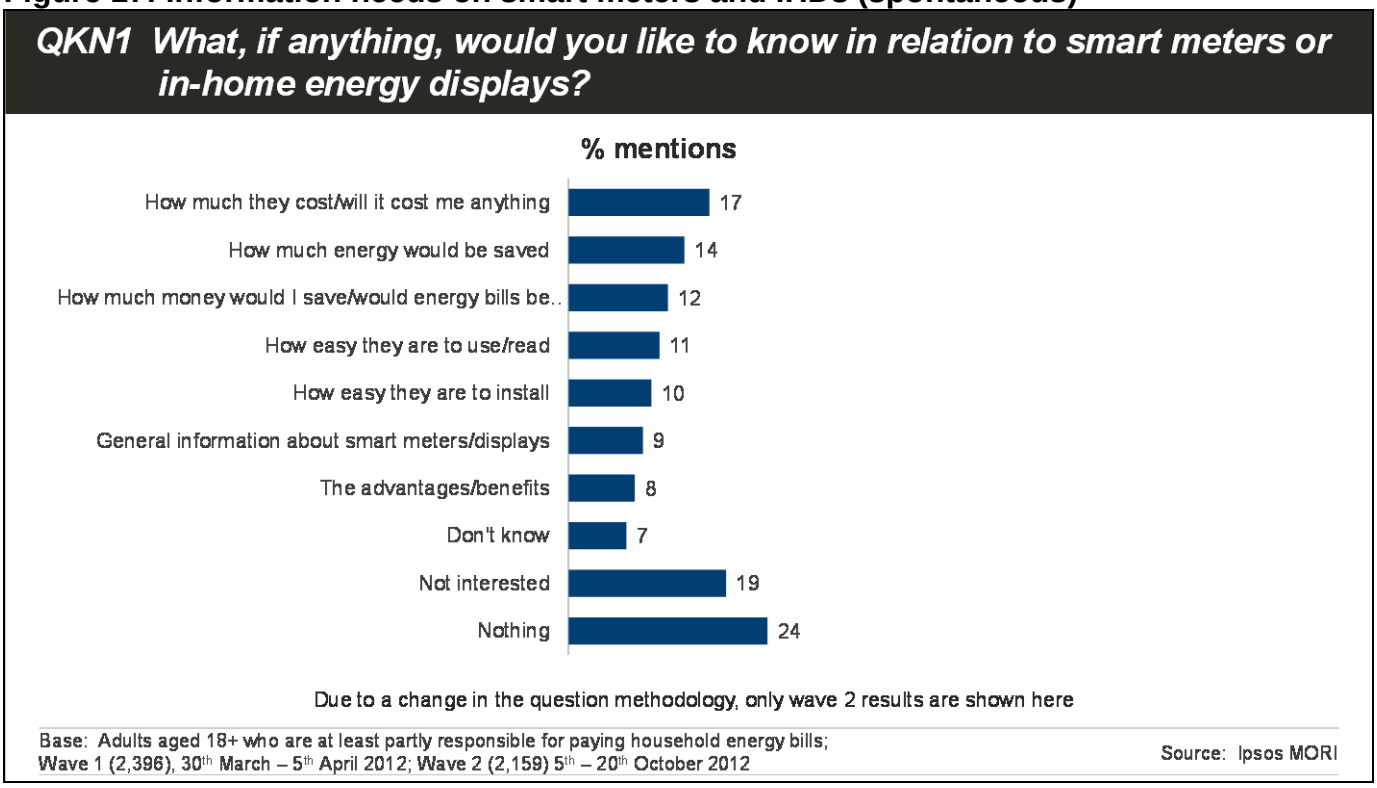
2.4.1 Further information needs

Bill-payers were asked what if anything they would like to know about smart meters and IHDs. In Wave 1 this was asked as an open question, with the interviewer typing in verbatim the response provided, but in Wave 2 it was asked as a spontaneous question with a set of pre-codes based on the responses collected in Wave 1. This change in approach means that comparisons cannot be readily made between the results for Waves 1 and 2, and as such only detailed results for Wave 2 are shown.

However, there appears to be an increased appetite for knowledge around smart meters with 50% mentioning an information need compared to 33% in Wave 1. The report authors would not expect the shift from an open question to a spontaneous pre-coded one to impact the proportion of those who said they had some form of information need to such an extent. Whether this is an emerging trend or not will be clearer in Wave 3.

In Wave 2, the most frequently mentioned information need, as in Wave 1, was around cost, and whether they would cost the bill-payer anything (17%) (see figure 17 below). Beyond this, bill-payers were interested to know how much energy they might expect to save (14%), how much money they might expect to save (12%) and how easy the smart meters are to use (11%) and install (10%).

Figure 17: Information needs on smart meters and IHDs (spontaneous)



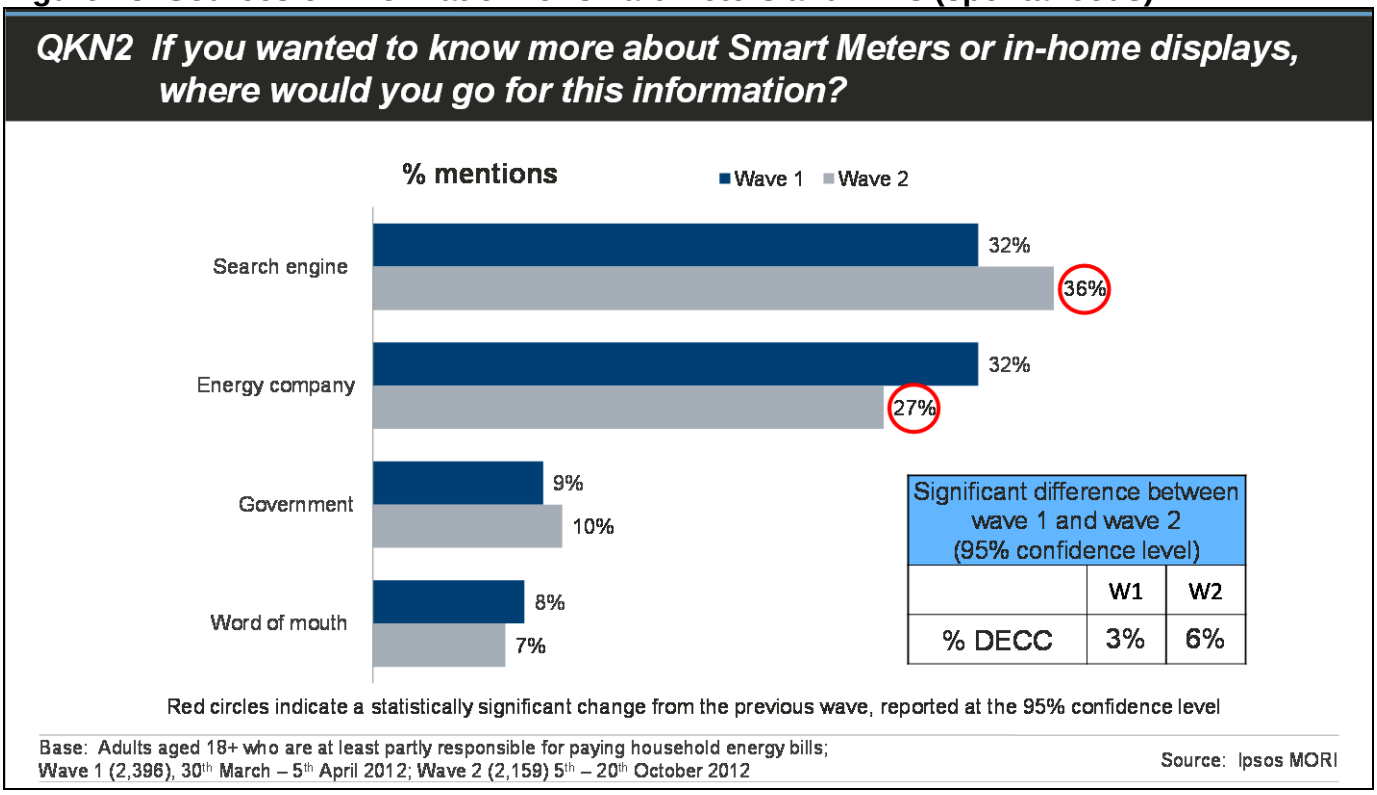
Reflecting their wider lack of engagement with smart meters, older bill-payers tended to have fewer information needs than respondents overall, although cost was also their key information need. Other groups which typically expressed fewer information needs, again reflecting a lower level of engagement, included those without children and those with a disability.

The pattern of priorities in terms of information needs was largely consistent across the various sub-groups.

2.4.2 Sources of information

The main sources of information about smart meters or IHDs for bill payers changed slightly between Waves 1 and 2 (see figure 18 below). During Wave 2 respondents were more likely to say search engines (36%) than energy companies (27%), in contrast to 32% of respondents naming search engines and 32% naming energy companies as sources of information during Wave 1. As with Wave 1, one in ten (10%) would currently look to a government source, with DECC the most likely destination (6% compared to 3% during Wave 1).

Figure 18: Sources of information for smart meters and IHDs (spontaneous)



In Wave 2 different demographic groups continued to prefer different sources of information. The differences highlighted are all statistically significant.

Younger age groups were more likely to mention using internet search engines than older groups; for example 56% of 18-24 year olds mentioned it compared to 21% of those aged 65-75 or 5% of those aged 75+. This reflects access to the Internet as measured on the same survey which is highest amongst those bill payers aged 18-24 (95%) and lowest amongst those bill payers aged 75+ (29%). Older groups were more likely to go to their energy company; for example 32% of those aged 55-74 mentioned this compared to just 17% of the 18-24 year old age group. Also as in Wave 1, those aged 75 or over were also far more likely to source advice from friends or relatives; 17% of this group mentioned this compared to less than 10% of those aged 18-64 (and just 4% of those aged 18-24). Similarly those on lower household incomes (less than £15,500) were less likely to use internet search engines or the government, but more likely to approach friends and family or even their local authority.

Bill-payers with a disability were less likely to be able to name an information source than all respondents, and also less likely to mention the internet as a potential source (27% compared to 36% of all respondents). Those bill-payers who do not speak English as their first language were also less likely to say they would use the internet, but more likely to use trusted organisations such as the Energy Saving Trust, their local authority or housing association than respondents overall.

Bill-payers with children tended to favour internet search engines and official government sources more than respondents overall.

Those with at least a degree were also more likely to use the internet; 49% mentioned it compared to just 12% of those with no formal qualifications. Overall those with no qualifications

were less likely to want further information; 11% said they would not look for it anywhere or did not need it compared to just 3% of those with at least a degree.

Those with no internet access were more likely to source information from a relative or friend; 17% of this group said this compared to only 5% of those who have any form of internet access. Those with no internet access were also more likely to source information via newspapers, their local authority, their housing association or from government. One in five (20%) without any internet access didn't know where they would source information from, compared to less than one in fourteen (7%) of those with some form of access. This indicates the importance of non-digital forms of information for those without internet access.

2.4.3 Trusted sources of information

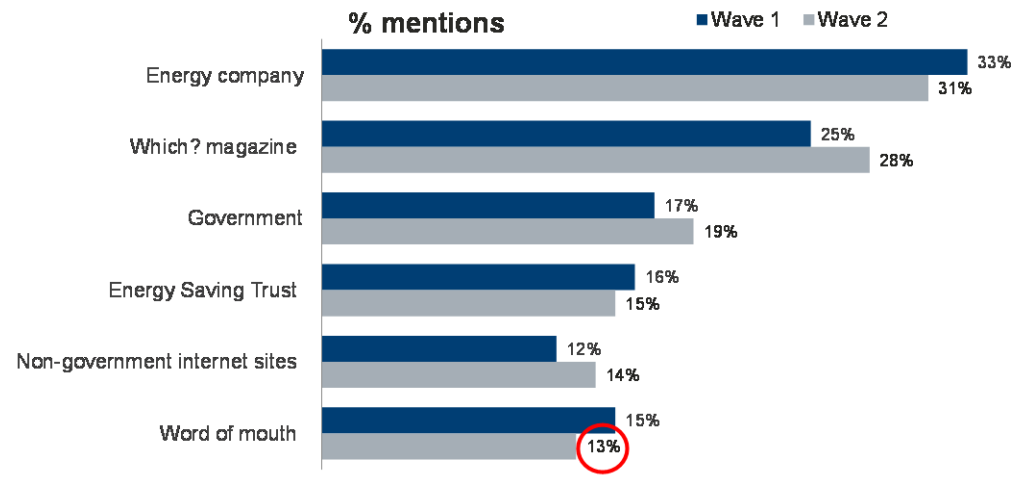
Consistent with Wave 1, respondents were prompted as to which sources of information they would be most likely to trust to provide them with accurate information on smart meters or IHDs if they had any concerns about either. Once again, the most trusted sources included energy companies; Which?; the government; and the EST (see figure 20 below).

As with Wave 1, around a third of people would trust information from an energy supplier (31%). This is perhaps surprising given the cynicism expressed about energy companies in the DECC qualitative study on smart meters. The difference in the proportion mentioning their energy company between Waves 1 and 2 is not significant.

As in Wave 1, whilst Which? Consumer magazine was only mentioned spontaneously as a source of information by a very small proportion of respondents (1%) it was once more the second most trusted source when prompted. The difference in Which? mentions between Wave 1 (25%) and Wave 2 (28%) is not significant. Other leading sources continued to be the Government (19%), the Energy Saving Trust (15%) and word of mouth (13%).

Figure 20: Trusted sources of information for smart meters and IHDS (prompted)

QKN3 Thinking about any concerns you may have about smart meters or in-home displays, which, if any, of these would you trust to give you accurate information about smart meters or in-home displays?



Red circles indicate a statistically significant change from the previous wave, reported at the 95% confidence level

Base: Adults aged 18+ who are at least partly responsible for paying household energy bills; Wave 1 (2,396), 30th March – 5th April 2012; Wave 2 (2,159) 5th – 20th October 2012

Source: Ipsos MORI

Older bill-payers remained less trustful overall. One in five of those aged 75+ would not trust any of the sources presented to give them accurate information (18% vs. 10% overall). They continued to be less likely to trust the government (9%) compared to almost a fifth overall who would trust this source (19%).

Whilst Which? magazine receives a high proportion of mentions across different groups, as with Wave 1 it was particularly high among those with a university degree (44%) and those in the higher social grades (44% of ABs compared to 15% of DEs). Trust for the Energy Saving Trust was also higher amongst the higher social grades (19% of ABs mentioned the Energy Saving Trust during Wave 2). Once again, trust in the energy companies showed no significant differences by social grade.

Those on lower household incomes (less than £15,500) were less likely than respondents overall to favour central government sources, but more likely to trust their local authority (14% compared to 11% of all respondents), their housing association (8% compared to 3% of all respondents) or their landlord (7% compared to 3% of all respondents).

Those who do not speak English as their first language were much less likely to select Which? as a trusted source of information (9% compared to 28% of all respondents), or indeed the Government (10% compared to 19%), but more so their landlord (9% compared to 3%). However, they are also more likely to feel they do not know who to trust (15% compared to 7%).

There were no particular differences of note for those bill-payers with a disability.

3. Conclusions

The second wave of this study has borne out many of the findings from the first when it comes to measuring public views on smart meters and IHDs. A high proportion of consumers remain undecided about the roll-out of smart meters, and although opposition has not risen there was a minor, yet statistically significant, decline in the strength of support. The key conclusions from these findings are presented below.

Results show no evidence of a change in smart meter awareness levels in the six months between Wave 1 and Wave 2. Around half of all British energy bill payers are aware of smart meters, and of these people, around one in four know a fair amount about them. These figures remained consistent in spite of an increase in advertising, and the launch of the recent Which? magazine campaign concerning smart meters. That said, amongst those who have heard of smart meters, there has been a slight increase in those who claim to know at least something about them, from 3 in 4 bill-payers to 4 in 5 bill payers.

There appears to be a relationship between knowledge and support, although the nature of this relationship is unclear. The findings show a clear relationship between those with greater knowledge of smart meters and support for the roll-out and interest in having a smart meter installed. It is not clear whether knowledge is driving support and it will be important to monitor how the two develop over time.

How communications around smart meters are framed is likely to be important in terms of building support. The data from the first and second waves shows that views are not yet entrenched about smart meters with over half undecided about the roll-out. DECC's qualitative research on smart meters has highlighted the way in which communications around smart meters can influence support. Given that bill payers are generally unclear and want more information on the costs and potential benefits of installing smart meters, clear and informative communications are likely to be very important.

IHDs are viewed positively by customers, but there is still the potential for consumers to use them more. The majority of customers who use IHDs felt they were useful in helping them reduce the amount of electricity they use and reducing their electricity bills. Over half also use them to make other members of their household aware of their electricity use.

However, just under half of all customers who own an IHD claiming that they have either never looked at it or have not even set it up. This means that less than one in ten people (9%) are actively using an IHD. Subsequently, there is potential to substantially increase ownership and use, and ensure that more people benefit from them.

Interest in smart meters and IHDs appears related to energy usage. Certain key demographics that would be linked to high energy use such as larger households, including families with children, as well as wealthier households are all more interested in IHDs and smart meters. However, single person households, those on lower incomes and older age groups are less positive overall.

Communications around smart meters will need to take account of the fact different demographic groups place different emphasis on the perceived benefits and concerns. Younger bill payers continued to be more pre-occupied with finance and were more likely to mention budgeting as a benefit, but also remained concerned about the potential cost of a smart meter. Those with children are also pre-occupied with cost, but also the potential energy savings and ongoing benefits in energy expenditure. Some groups, notably those in the DE social grade, and older bill-payers (aged 75 and over) were particularly concerned about smart meters being easy to understand.

Interest in knowing more about smart meters and IHDs appears to have increased, with one in two expressing an information need during this Wave compared to one in three during Wave 1. While a change in the question format from an open to a spontaneous pre-coded question may have affected this result, the report authors would not expect the change to have had such an impact. The Wave 3 findings should provide a clearer picture on any emerging trend.

The energy companies have an important role to play in communications on smart meters, but this can be supported by other organisations. The energy companies were perceived as a natural source for further information on smart meters and IHDs and were also the most trusted source. However, Which? and Energy Saving Trust, as well as the government were also seen as important trusted sources, in particular amongst the higher social grades.

In summary

Overall the findings from the second wave of this research have confirmed patterns noted during the first wave, and it is clear that the public's views on smart meters are still being formed. While half of British bill payers are undecided, the balance of opinion is in support rather than opposition to smart meters. The majority of householders continue to be able to recognise a potential benefit to them, but are less able to name a potential disadvantage. In order to build support for smart meter roll-out it will be important to consider how communications are framed, it will be important to reinforce messages around the benefits as well as overcome concerns such as cost and data security. The next wave will provide further insight into any trends in public opinion, and what might be affecting this.

4. Appendix 1 – Technical details

4.1 Conducting the fieldwork (Capibus)

Capibus was launched in 1992 and was the first omnibus of its kind to use 'computer assisted personal interviewing' (CAPI) to administer the questionnaire. This new approach instantly improved the quality and accuracy of the information collected and has become a quality standard in the omnibus industry worldwide.

How Are People Selected?

Capibus provides a high quality sample of adults aged 15+, representative of the population at a national and regional level. In this respect it is ideal for reporting what the population at large feels about current issues or certain products.

Capibus uses a two stage random location design to select respondents to take part in the weekly survey. The two stages are as follows:

i) Stage One - Selection of Primary Sampling Units

The first stage is to define primary sampling units which will be fixed for one year. A total of 154-180 Local Area Authorities are randomly selected from our stratified groupings with probability of selection proportional to size. This ensures that the most populated areas in Britain are always represented in the sample.

ii) Stage Two - Selection of Secondary Sampling Units (currently use Double OA's)

The second stage of sampling happens every week on Capibus. At this stage, two output areas (DOA) are randomly selected from each Local Area Authority; this then becomes the secondary sampling unit.

An Output Area (OA) is a very small area made up of between 60 to 100 addresses. Although we could just choose 154-180 Double Output Area's (DOA's) each week completely at random and set our interviewer quotas for sex, age, working status and social grade - a common approach for ensuring a sample is nationally representative - we use the CACI ACORN geo-demographic system in the selection process.

Adopting this approach helps to eliminate any possible bias in the sample caused by interviewing people all with the same background. Using CACI ACORN allows us to select OA's with differing profiles such that we can be sure we are interviewing a broad cross-section of the public; since clearly even people of the same age and working status may have a different viewpoint depending on their background.

Because the sampling process is repeated every week, the Capibus sample is matched wave on wave, making it ideal for taking successive measurements on the same issue.

The Interviewing Process

The Capibus questionnaire is collected by the interviewers via modem and is downloaded onto their laptop computer. The computer controls which questions are asked, depending on the respondent's particular circumstances, and will rephrase questions to respond to previous answers. This makes the questionnaire 'intelligent' allowing the interviewing process to be more interactive; in turn this allows for more complex questionnaire design and provides more accurate and insightful research findings.

Quality Control

Ipsos MORI employ the strictest quality control procedures. In all markets our interviewers are trained to a recognised standard and one in ten interviews is back-checked by telephone. Furthermore, we use the CAPI software to monitor both the overall length of each interview and the time taken over individual questions in the questionnaire.

In Great Britain, Ipsos UK is ISO9001, ISO 20252, BS7911 and ISO27001 accredited - a mark of our commitment to quality and integrity.

4.2 Accuracy of reported differences between sub-groups (statistical reliability)

The confidence intervals, or margins of error, that apply to the percentage results in this report are given in the table below. This table shows the possible variation that might be anticipated because a sample, rather than the entire population, was interviewed.

As indicated, confidence intervals vary with the size of the sample and the size of the percentage results. The confidence interval is widest at a finding of 50% and narrows the nearer we get to absolutes of 0 or 100%. This table shows the confidence interval at the 95% level, which means we can be 95% certain that the result lies somewhere within the margin of error indicated by the confidence interval.

Strictly speaking the margins of error shown here apply only to random samples; in practice good quality quota sampling has been found to be as accurate.

Table 1: 95% Confidence Intervals (individual results)

	10% or 90%	30% or 70%	50%
Approximate size of sample on which survey results are based	±	±	±
2,159 (bill-payers aged 18+)	1.3	1.9	2.1
1,089 (male bill-payers aged 18+)	1.8	2.7	3.0
333 (bill-payers aged 45-54)	3.2	4.9	5.4

Source: Ipsos MORI

Tolerances are also involved in the comparison of results from different parts of the sample, or of results from this survey and another survey. A difference, in other words, must be of at least a certain size to be considered statistically significant. The following table is a guide to the sampling tolerances applicable to comparisons.

Table 2: 95% Confidence Intervals (comparing sub-groups)

	10% or 90%	30% or 70%	50%
Approximate size of sample on which survey results are based	±	±	±
2,000 on 2,000	1.9	2.8	3.1
1,000 on 1,000	2.6	4.0	4.4
500 on 500	3.7	5.7	6.2
150 on 150	6.8	10.4	11.4

Source: Ipsos MORI

Sample composition

The table below details how the sample was comprised, in particular the size of subgroups that have been reported on.

Table 3: Composition

	Wave 1	Wave 2	Combined
GB adults aged 18+ who are at least partly responsible for paying household energy bills	*2,396*	*2,159*	*4,555*
Gender			
Male	1,208	1,089	2,297
Female	1,188	1,070	2,258
Age			
18-24	150	152	302
25-34	328	308	636
35-44	370	335	705
45-54	442	333	775
55-64	445	408	853
65-74	379	347	726
75=	282	276	558

	Wave 1	Wave 2	Combined
Social grade			
AB	556	394	950
C1	764	646	1,410
C2	502	502	1,004
DE	574	617	1,191
Education level			
GCSE / O-Level / CSE / NVQ12	656	595	1,251
A-Level or equivalent	351	362	713
Degree / masters / PhD	671	508	1,179
No formal qualifications	501	527	1,028
Number in household			
1	638	557	1,195
2	885	795	1,680
3	361	333	694
4	323	295	618
5+	181	176	357
Housing tenure			
Owner / mortgage	1,544	1,261	2,805
Renter	637	698	1,335
Household income			
Up to £7,499	219	223	442
£7,500 - £13,499	303	269	572
£13,500 - £17,499	179	185	364
£17,500 – £24,999	175	147	322
£25,000 - £29,999	109	127	236
£30,000 - £39,999	151	132	283
£40,000 - £49,999	128	111	239
£50,000 - £74,999	169	113	282
£75,000 - £99,999	61	42	103
£100,000+	36	34	70

	Wave 1	Wave 2	Combined
Heard of smart meters?			
Yes	1,175	1,018	2,193
No	1,221	1,141	2,362
Knowledge about smart meters?			
Great deal	49	37	86
Fair amount	237	201	438
Just a little	595	562	1,157
Only heard of, know nothing about	288	217	505
IHD at home?			
Yes	363	301	664
No	1,939	1,799	3,738

Source: Ipsos MORI

5. Appendix 2 – Questionnaire

5.1. Copy of the final questionnaire

Smart Meter Research for DECC
Questionnaire – Omnibus

Index

Changes for Wave 2 highlighted in yellow
ERA Smart Meter question
Departmental public attitude tracker question

Introduction

QDEM1
ASK ALL AGED 18+
SINGLE ANSWER
DO NOT READ OUT
Are you either jointly or solely responsible for paying your household gas and/or electricity bills?
IF YES ASK: **Is that jointly or solely?**

1) Yes, jointly
2) Yes, solely
3) No

QDEM2
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
SINGLE ANSWER
SHOWCARD (R)
How do you currently pay for the electricity you use in your home? Please read out the letter that applies.

1) A – Direct Debit/Standing Order
2) B – Quarterly bill (payment on demand)
3) C – Pre-payment meter (PPM, or card or key meter)
4) D – Other
5) Don't know (NOT ON SHOWCARD)

QDEM3

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
SINGLE ANSWER
SHOWCARD (R)
How concerned, if at all, are you about each of the following? Please read out the letter that applies.

DOWN SIDE OF GRID:

a) Climate change, sometimes referred to as 'global warming'
b) The price of your household energy bills
c) The state of your overall household finances

ACROSS TOP OF GRID:

1) A – Very concerned
2) B – Fairly concerned
3) C – Not very concerned
4) D – Not at all concerned
5) E – Don't know
6) F – No opinion

Awareness

1) Have consumers heard of smart meters?
2) If so from what source?

QAW1
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
SINGLE ANSWER
DO NOT READ OUT
The next question is about smart meters. Here is a picture of a smart meter:

Smart meters are able to communicate with energy suppliers by sending and receiving information about the amount of energy being used. Smart meters are installed by a professional engineer from your gas or electricity company, unlike an energy monitor which can be installed by householders themselves.

Before today, had you heard of smart meters?
IF YES ASK: **Do you have one?**

1) Yes, I have one
2) Yes, but I do not have one
3) No – I have never heard of them

QAW2
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS AND WHO HAVE HEARD OF SMART METERS (CODES 1-2 AT QAW1)
SINGLE ANSWER
SHOWCARD (R)
How much, if anything, would you say you know about smart meters?

1) A great deal
2) A fair amount
3) Just a little
4) Heard of, know nothing about
5) Don't know (NOT ON SHOWCARD)

QAW3

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS AND WHO HAVE HEARD OF SMART METERS (CODES 1-2 AT QAW1)

MUTLIPLE ANSWER

DO NOT READ OUT

Where did you hear about Smart Meters?

IF FROM THE INTERNET: **Which website did you go to?**

IF FROM ENERGY SUPPLIER: **Was it an advert or information sent directly to you?**

IF ON TV: **Was it an advert or a TV programme?**

IF ON RADIO: **Was it an advert or a radio programme?**

PROBE: **Anywhere else?**

1) DECC (Department of Energy and Climate Change) – including the website
2) Energy Saving Trust
3) From a friend or relative/Word of Mouth
4) From an organised charity
5) From central Government/the Government
6) From my housing association
7) From my Local Authority
8) From my landlord
9) From my energy supplier/another energy supplier (information – e.g. email, letter, leaflet)
10) From my energy supplier/another energy supplier (advert – e.g. TV or newspaper advertising)
11) Read about them in a newspaper article
12) Seen on TV (news/current affairs programme - Panorama, World in Action, Dispatches, etc.)
13) Seen on TV (advert)
14) Heard on radio (programme)
15) Heard on radio (advert)
16) Through the internet (search engine – Google, Bing, etc.)
17) Through the internet (chat rooms, Facebook, Twitter, etc.)
18) Through the internet (government site such as Directgov, etc.)
19) Through the internet (non-government site such as money-saving expert, Consumer Focus, etc.)
20) Which? consumer magazine
21) Workplace
22) It was already installed when I moved in
23) Other (please specify)
24) Don’t know

Understanding and attitudes

1) What do those aware of smart meters understand about them and what are their attitudes towards them?
2) Among those not aware, when presented with the concept, what is their reaction?
3) What are the perceived benefits? Are there any concerns?

QUN1

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
MULTIPLE ANSWER
DO NOT READ OUT

What, if anything, do you think you would benefit from if you had a smart meter installed in your home?
PROBE: **Anything else?**

1) Avoid wasting gas and electricity
2) Being offered tariffs which are more tailored to the times I use energy (i.e. the amount I use and the times of day I use it/'time of use' tariffs)
3) Do my bit for the environment
4) Encourage others in my home to think about how they use energy/save money
5) Getting accurate energy bills/stop overcharging
6) Help me to budget
7) Help me to reduce my energy bills
8) Help teach my children the importance of energy reduction/budgeting
9) Help the country to monitor/manage energy supplies
10) No longer receiving estimated bills
11) Not having to have my meter read
12) Secure energy supplies for our children/grandchildren
13) See what I'm spending on electricity and gas in real time/as I go
14) Other (please specify)
15) Nothing/no benefits
16) Don't know

QUN2

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
MULTIPLE ANSWER
SHOWCARD (R)

Looking at the list on this card, which, if any, do you think you would benefit from if you had a smart meter installed in your home? Please read out the letter or letters that apply.

1) A – No longer receiving estimated bills
2) B – Not having to be at home to have my meter read
3) C – Being offered tariffs which are more tailored to the times I use energy (i.e. the amount I use and the times of day I use it)
4) D – Helping me to monitor the amount of energy I use
5) E – Helping me to reduce the amount of energy I use
6) F – None of these
7) Don't know (NOT ON SHOWCARD)

QUN3

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
MULTIPLE ANSWER
DO NOT READ OUT

What, if anything, do you think are the disadvantages if you had a smart meter installed in your home?
PROBE: **Anything else?**

1) Difficult to use/understand
2) Having to be at home to have the meter changed
3) Health risks (general mention)
4) Installation will take a long time
5) Invasion of privacy/they will know exactly what I'm doing
6) It will be expensive for me
7) It will be expensive for the energy companies
8) It will be expensive for the government
9) Not being installed correctly (general mention)
10) Paying too much attention to the smart meter/checking it too much
11) Radiation from the meter
12) Someone might lose their job (meter checker)
13) The data could get into the wrong hands
14) The data could lead to greater chance of terrorist attacks
15) The installation will be expensive for taxpayers
16) The cost will be passed on to energy bills/energy prices will rise as a result
17) Too ugly for my home
18) Other (please specify)
19) Nothing/no disadvantages
20) Don't know

QUN4

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS AND WHO HAVE NOT HAD A SMART METER INSTALLED (CODES 2-3 AT QAW1)
SINGLE ANSWER
SHOWCARD (R)

Smart meters are installed by the energy suppliers. You can still switch energy supplier after the installation. To what extent would you be interested, or not, in having a smart meter installed in your home in the near future?

1) Very interested
2) Fairly interested
3) Not very interested
4) Not at all interested
5) Don't know (NOT ON SHOWCARD)

QUN5

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
SINGLE ANSWER
SHOWCARD (R)

To what extent do you support or oppose the installation of smart meters in every home? Please read out the letter that applies.

1) A – Strongly support
2) B – Tend to support
3) C – No feelings either way
4) D – Tend to oppose
5) E – Strongly oppose
6) Don't know (NOT ON SHOWCARD)

Experience of and attitude towards installation of a smart meter

1) Have respondents had a smart meter installed
2) If so, how was the experience for them?
3) What is the reaction to the idea of having their meter replaced with a smart meter?

Just to keep it fresh in your mind, a smart meter is a more sophisticated, electronic version of the gas and electricity meters. Smart meters are able to communicate with energy suppliers by sending and receiving information about the amount of energy being used.

QEX1A
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS AND WHO HAVE A SMART METER INSTALLED (CODE 1 AT QAW1)
SINGLE ANSWER
SHOWCARD (R)
Overall, to what extent have you been satisfied or dissatisfied with each of the following?

DOWN SIDE OF GRID:
a) Arranging the appointment for the engineer to fit your smart meter
b) The installation process on the day your smart meter was fitted
c) The overall experience of using your smart meter

ACROSS TOP OF GRID:
1) Very satisfied
2) Fairly satisfied
3) Neither satisfied nor dissatisfied
4) Fairly dissatisfied
5) Very dissatisfied
6) Don’t know (NOT ON SHOWCARD)

Awareness, understanding and experience of in-home energy display units (IHD)

1) Do respondents have one installed?
2) If yes, where did they get it (e.g. from supplier)
3) If yes, what has their experience been?

QIHD1
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
SINGLE ANSWER
SHOWCARD (R)
Do you have an in-home energy display or energy monitor in your home? An in-home energy display is a portable device that displays current and past energy usage and how much it is costing or will cost. You may also know these as a Real Time Display. If you have a smart meter installed, it should have come with one of these displays.

Here are a few pictures of what in-home energy displays may look like:


IF YES: **How often, if at all, do you look at the display or monitor?**
IF NO: **Have you been offered one in the past?**

1) Yes, I look at it every day
2) Yes, I look at it occasionally
3) Yes, but I never look at it
4) Yes, but I have never installed it
5) No, I was not offered one
6) No, I was offered one but refused it
7) Don't know (NOT ON SHOWCARD)

QIHD2

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS AND HAVE AN IN-HOME ENERGY DISPLAY (CODES 1-4 AT QIHD1)
SINGLE ANSWER
DO NOT READ OUT
Where did you get you in-home energy display or energy monitor from?
IF FROM ENERGY COMPANY: **Did you request it or was it offered to you?**

1) I was offered it by an energy company and said yes
2) I requested it from an energy company
3) It came with my smart meter
4) I bought (it in a shop/on the internet)
5) I was given it by a friend or relative
6) I don't know, I just received it
7) Other (please specify)
8) Don't know

QIHD3
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS, HAVE AN IN-HOME ENERGY DISPLAY IN THEIR HOME AND LOOK AT IT (CODES 1-2 AT QIHD1)
SINGLE ANSWER FOR EACH PART
RANDOMISE ORDER OF STATEMENTS
SHOWCARD (R)
Thinking about how you use your in-home energy display or energy monitor, to what extent do you agree or disagree with the following statements?

DOWN SIDE OF GRID:

a) I feel I understand how to get the most out of my display
b) I use or have used my display to find out which appliances use the most electricity
c) I regularly check my display when I am on my way in or out of the house
d) I use the display to encourage others in my household to reduce their electricity use
e) I feel more in control of my electricity bills thanks to the display
f) It will help to reduce the amount of electricity we use in the household
g) It will help to reduce the amount of money my household spends on electricity
h) I use or have used my display to find out how much gas we use in the household

ACROSS TOP OF GRID:

1) Strongly agree
2) Tend to agree
3) Neither agree nor disagree
4) Tend to disagree
5) Strongly disagree
6) Don't know (NOT ON SHOWCARD)
7) Not applicable (ONLY FOR STATEMENT h)

QIHD4

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS, HAVE AN IN-HOME ENERGY DISPLAY IN THEIR HOME AND LOOK AT IT (CODES 1-2 AT QIHD1)
MUTIPLE ANSWER
SHOWCARD (R)
Which of the following, if any, describe the measures you look at when you check your in-home energy display or energy monitor?

1) I look at the kilo-watts measure
2) I look at the money display
3) I look at the carbon saving measures
4) I don't know what to look at when I check it
5) I don't tend to look at it
6) Don't know (NOT ON SHOWCARD)

QIHD5
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS, HAVE AN IN-HOME ENERGY DISPLAY IN THEIR HOME AND LOOK AT IT (CODES 1-2 AT QIHD1)
SINGLE ANSWER
SHOWCARD (R)
Overall, how satisfied or dissatisfied are you with your in-home energy display or energy monitor?

1) Very satisfied
2) Fairly satisfied
3) Neither satisfied nor dissatisfied
4) Fairly dissatisfied
5) Very dissatisfied
6) Don't know (NOT ON SHOWCARD)

QIHD6
ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS AND WHO DO NOT HAVE AN IN-HOME ENERGY DISPLAY IN THEIR HOME (CODES 5-7 AT QIHD1)
SINGLE ANSWER
SHOWCARD (R)
To what extent would you be interested, or not, in having an in-home energy display or energy monitor installed in your home in the near future?

1) Very interested
2) Fairly interested
3) Not very interested
4) Not at all interested
5) Don't know (NOT ON SHOWCARD)

Knowledge

1) To explore where consumers would expect to find out about smart meters/IHD.
2) What are considered the most trusted sources of information?
3) What type of information consumers would be looking for?

QKN1

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)

OPEN-ENDED QUESTION

MUTLIPLE ANSWER

DO NOT READ OUT

What, if anything, would you like to know in relation to smart meters or in-home energy displays?

PROBE: **Anything else?**

WRITE IN FULL RESPONSE

1) Are there any health risks?
2) How easy they are to use/read
3) How easy they are to install
4) How much energy would be saved
5) How much money would I save/would energy bills be lower
6) How much they cost/will it cost me anything
7) How secure would the data/information collected be
8) How the smart meters/displays work
9) General information about smart meters/displays
10) More or clearer literature/leaflets
11) The advantages/benefits
12) The disadvantages
13) Where could I get one/see one?
14) Where smart meter funding is coming from/who is paying
15) Who would have access to the data/information collected
16) Other (please specify)
17) Don't know
18) Not interested
19) Nothing

QKN2

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
MUTLIPLE ANSWER
DO NOT READ OUT
If you wanted to know more about Smart Meters or In Home Displays, where would you go for this information?
IF FROM THE INTERNET: **Which website would you go to?**
PROBE: **Anywhere else?**

1) DECC (Department of Energy and Climate Change) – including the website
2) The Energy Saving Trust
3) To a friend or relative/Word of Mouth
4) To an organised charity
5) Central Government/the Government
6) My housing association
7) My Local Authority
8) My landlord
9) My electricity supplier/another electricity supplier
10) My gas supplier/another gas supplier
11) Newspaper articles
12) News/current affairs programme (Panorama, World in Action, Dispatches, etc.)
13) The internet (search engine – Google, Bing, etc.)
14) The internet (chat rooms, Facebook, Twitter, etc.)
15) The internet (government site such as Directgov, etc.)
16) The internet (non-government site such as money-saving expert, Consumer Focus, etc.)
17) Which? consumer magazine
18) Other consumer bodies (non-internet)
19) Other (please specify)
20) Don't know
21) Nowhere/I wouldn't need any information

QKN3

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
MUTLIPLE ANSWER
SHOWCARD (R)
Please take a look at this card. Thinking about any concerns you may have about smart meters or In Home Displays, which, if any, of these would you trust to give you accurate information about smart meters or in-home displays?
PROBE: **Any others?**

1) DECC (Department of Energy and Climate Change) – including the website
2) The Energy Saving Trust
3) A friend or relative/Word of Mouth
4) An organised charity
5) Central Government/the Government (including websites such as Directgov)
6) My housing association
7) My Local Authority
8) My landlord
9) My electricity supplier/another electricity supplier
10) My gas supplier/another gas supplier
11) Newspaper articles
12) News/current affairs programme (Panorama, World in Action, Dispatches, etc.)
13) Internet chat rooms (Facebook, Twitter, etc.)
14) Non-government Internet sites such as money-saving expert, Consumer Focus, etc.
15) Which? consumer magazine
16) Other consumer magazines
17) None of these
18) Don't know (NOT ON SHOWCARD)

List of demographics

QDIS

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
MULTICODE CODES 1-2, SINGLE CODE 'NO'
DO NOT READ OUT

Do you have any long-standing illness, disability or infirmity? By long-standing, I mean anything that has troubled you over a period of time or that is likely to affect you over a period of time.

1) Yes – long-standing illness
2) Yes – long-standing disability or infirmity
3) No

QLAN

ASK ALL AGED 18+ WHO ARE RESPONSIBLE FOR PAYING HOUSEHOLD ENERGY BILLS (CODES 1-2 AT QDEM1)
SINGLE ANSWER
SHOWCARD (R)

Which of the following best describes you?

1) I speak English as my first language
2) English is not my first language, but I speak it fluently
3) English is not my first language, and I'm still learning the language
4) I can't speak English

ACORN classification

1) Wealthy Achievers
2) Urban Prosperity
3) Comfortably Off
4) Moderate Means
5) Hard Pressed

Age

1) 18-24
2) 25-34
3) 35-44
4) 45-54
5) 55-64
6) 65+

Sex

1) Male
2) Female

Number in household

1) 1
2) 2
3) 3
4) 4
5) 5+

Number of children in household

1) 1
2) 2
3) 3
4) 4
5) 5+

Household income

1) Up to 4,499
2) 4,500 - 6,499
3) 6,500 - 7,499
4) 7,500 - 9,499
5) 9,500 - 11,499
6) 11,500 - 13,499
7) 13,500 - 15,499
8) 15,500 - 17,499
9) 17,500 - 24,999
10) 25,000 - 29,999
11) 30,000 - 39,999
12) 40,000 - 49,999
13) 50,000 - 74,999
14) 75,000 - 99,999
15) 100,000 or more

Social Grade

1) AB
2) C1
3) C2
4) DE

Marital status

1) Married / Living as married
2) Single
3) Widowed / Divorced / Separated

Working status

1) Working – full-time
2) Working – part-time
3) Self-employed
4) Not working – housewife
5) Still in education
6) Unemployed
7) Retired
8) Other

Daily newspaper readership

1) Broadsheet
2) Mid-markets
3) Tabloid

Sunday newspaper readership

1) Broadsheet
2) Mid-markets
3) Tabloid

Government Office Region

1) North
2) North West
3) Yorkshire
4) West Midlands
5) East Midlands
6) East Anglia
7) South West
8) South East
9) London
10) Wales
11) Scotland

Education

1) GCSE/O Level/NVQ12
2) A-Level or equivalent
3) Degree/Masters/PhD
4) No formal qualifications

Tenure

1) Own outright
2) Buying on mortgage
3) Rent – Local Authority
4) Rent – Private
5) Other

Access to internet

1) Access at home
2) Access at work
3) No access

Area

1) Rural
2) Suburban
3) Urban
4) Metropolitan

Department of Energy & Climate Change
3 Whitehall Place
London SW1A 2AW
www.decc.gov.uk

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