

RESEARCH REPORT

Smart Meters: research into public attitudes

Undertaken by Navigator

The views expressed in this report are those of the authors, not necessarily those of the Department of Energy and Climate Change (nor do they reflect Government policy).

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Terminology

For the sake of clarity the terms 'in-home display' (IHD) and smart meter will be used throughout the report to refer to and distinguish between the device which *displays* energy consumption information, and the meter which *measures* energy consumption. 'In-home display' will also be used to embrace the terms, 'energy display', and 'energy monitor', and the consumers' use and understanding of these terms will also be explained in the body of the report.

'Owner' is used to denote 'ownership' of smart meters / IHDs, unless specifically indicated, e.g. 'owner occupier'.

Summary

Background, Objectives, Method

Smart meters and in-home displays (IHDs) have been adopted by the Government to help give consumers more control over energy use and spending, and to help meet environmental and security of supply objectives. The programme aims to install smart meters in all British homes by 2019. Research was required to explore awareness, understanding, and attitudes towards smart meters and IHDs among owners and non-owners, and reactions to a range of messaging propositions around smart meters and IHDs.

The research sample comprised 120 respondents, arranged as follows:

- 14 group discussions, 10 with non (smart meter / IHD) owners¹, 4 with (smart meter / IHD) owners
- 12 in home interviews with owners
- 18 x individual interviews with non-owners

The sample was designed to embrace a spread of...

- Age / life-stage, socio-economic group, gender
- Private and social tenants, owner occupiers
- Region; England, Scotland, Wales.

The fieldwork was conducted between the 13th and 28th February 2012.

Research Findings

- Attitudes and behaviour towards IHDs and meters among (smart meter/IHD) owners

Owners (of smart meters / IHDs) had either set out to acquire a smart meter / IHD, had been offered them while discussing tariffs with energy suppliers, or had received IHDs as a free gift. Those who had been more active in acquiring their IHD / meter had been more systematic in using it to understand how they spent money on energy.

Owners felt that IHDs had vividly illustrated the impact of their various appliances on energy consumption. While some items, such as ovens and immersion heaters were expected to be 'high consumption', the impact of others, such as hair driers, ovens, microwaves was thought surprisingly high. While some felt that as they now knew the contribution of various appliances to energy costs they could put their IHDs away, none had done so.

¹ Owners had either a smart meter, or IHD, or both

The impetus to save money had been a key motive in acquiring the IHD / meter, and was thought to be a key component in bringing about behaviour change as it underpinned the development of lower use habits. This behaviour change seemed to extend beyond the consumption indicated by the IHD / meter. For example, those with an electricity IHD had also taken measures to limit their spending on the gas which fuelled their central heating.

Display in £s and pence was thought to be much more meaningful and effective as a prompt to behaviour change than display in kWh which was a largely meaningless concept to this audience.

IHDs were felt to have had a role in prompting one or more of:

- turning items off (at the plug) that did need to be on such as TVs, laptops, phone chargers
 - reducing heating; for example, lower temperature, turning it off in unused rooms or in areas such as halls, stairwells, having it on for less time
 - identifying and replacing ‘culprit’ or ‘high use’ appliances such as an ageing fridge freezer, or changing spotlights for LEDs
 - improving insulation, usually with the help of a grant.
- Awareness and attitudes towards IHDs and smart meters among non - owners

While there was awareness of smart meters and to a lesser extent of ‘energy displays’ or ‘energy monitors’ (IHDs) this often meant no more than the terms sounding familiar. A minority had a more informed understanding which had been driven by one or more of: direct communication by an energy supplier, word of mouth, news / current affairs editorial, advertising.

The terms, ‘energy display’ or ‘energy monitor’ conveyed an idea of what such devices might be and how they would give a visual display of information to a householder enabling them to keep track of energy consumption and reduce usage. ‘Smart meter’ could convey the same meaning, but was also understood by some to refer to the meter which would be in the same location as existing meters out of sight in a cupboard, garage, etc.

Respondents were positive about the idea of having an IHD / smart meter from the perspective of a home owner and bill payer following exposure to information either in the course of the research or through a pre-task. From this perspective they perceived no real or significant downsides to ownership. When viewed from a national or environmental perspective they felt the picture was less clear, as some sources argued for smart meters, while others argued against. Uncertainty over their worth at a national level did not diminish the appeal of an IHD / meter at a personal level.

- Sources of information

At an owner/bill payer level, trusted sources were those assumed to share a similar perspective. These included Money Saving Expert and consumer affairs programmes on national and local television and radio. Respondents would also turn to energy

companies, as while they were distrusted in some ways, they were expected to talk in consumer language, and it was assumed they would install the equipment.

At a national/environmental level respondents would trust current affairs media known for an objective and independent stance. This included documentary programming such as World in Action, Panorama and Dispatches, and comment in trusted news / current affairs media.

Government sources were not expected to talk in consumer friendly language. Respondents felt that their presentation of content would be shaped or 'spun' by a government agenda which might or might not be apparent. As a result government sources were not trusted.

- Role of the IHD the smart meter

Owners and non-owners saw more benefit in the IHD than the meter as they felt the former would be the agent of change, prompting development of energy saving habits and therefore saving money, while the benefits delivered by the meter were 'nice extras' in comparison.

Some benefits of the smart meter may not have been articulated clearly, that is, the potential to automatically feed the IHD with accurate tariff information, and to display gas as well as electricity usage. In a sense the role of the smart meter might be better understood if it was positioned as a device which makes the IHD more useful, rather than vice versa.

- 'All households converted by 2019'

The scale of the programme had a normalising effect which helped to offset any potential anxieties. However, the idea of mandatory installation was counter-productive either leading to resistance, or to a lack of engagement as it made the consumer a passive partner in the programme.

- Reactions to messages

The strongest message was the thought that a smart meter and IHD would show you what you were spending in real time as this suggested you could save money by better understanding your energy usage. The promise of 'reducing bills' was motivating but only once the mechanic of the IHD / meter and how they could improve householders awareness of their energy use was clear. Otherwise this was seen as an often used and tired promise, lacking in credibility.

Removing the need for meter reading and accurate billing was seen as offering some benefits in convenience but were much less motivating.

Big picture benefits to the environment and security of supply were largely dismissed as out of step with current pre-occupations around surviving financially in the short term.

In Conclusion

- Once IHDs / smart meters were understood very few felt they would turn one down as they seemed to offer potential benefits while potential downsides were felt to be largely theoretical, or matters for reassurance rather than barriers. Perhaps the most significant of these was an assurance that accepting an IHD / meter would not lock you in to an energy supplier.
- The scale of the programme led to an assumption that the consumer's role would be reactive rather than proactive, as an energy company would make contact in order to arrange installation. The energy company would be the first point of contact for anyone wishing to initiate the process.

Background and Research Design

BACKGROUND

The Government's vision is for every home and smaller businesses in Great Britain to have smart electricity and gas meters. Domestic consumers will also be offered an in-home display (IHD). The rollout of smart meters will play an important role in Britain's transition to a low-carbon economy and help us meet some of the long-term challenges we face in ensuring an affordable, secure and sustainable energy supply.

The programme aims to install smart meters in all homes in Britain by 2019. The rollout of smart meters will be a major national project. 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.

Consumers will have real time information on their energy consumption to help them control energy use, save money and reduce emissions. There will be an end to estimated billing and switching between suppliers will be smoother and faster.

Consumer research was required to better understand the public's awareness and attitudes towards IHDs and smart meters and reactions to various messaging propositions developed by DECC.

RESEARCH AIMS AND OBJECTIVES

The overall objective of the research was to understand consumer awareness and attitudes towards smart meters and reactions to messaging propositions.

The specific objectives, amongst both non owners and owners, were as follows:

- To assess awareness, understanding and attitudes towards smart meters and in-home displays (IHD) among current owners (i.e. already installed) and non-owners; as well as the key appeals and drivers of the overall smart meter proposition. And, to explore the most appropriate terminology for the IHDs .
- To explore attitudes to a range of propositions around smart meters and IHDs (principally based on 3 core propositions of saving money, saving energy/environmental, and gaining control over energy usage). Identify which proposition is likely to be the most compelling to consumers.
- To explore where consumers would expect to find out about smart meters/IHDs, what are considered the most trusted sources of information and what type of information consumers would be looking for to enable installation of the smart meter.
- To identify and explore any barriers to having a smart meter installed e.g. concerns around safety, data security, around the installation process etc.

RESEARCH METHOD AND SAMPLE

A summary of the research method and sample appears here. 120 respondents were interviewed in total. The rationale for the research design, and corresponding recruitment questionnaires are contained in the appendices to the report.

10 x group discussions – Non Owners (7 respondents per group)				
Single / Pre-family 18-30	1. Male 2. Female	C1C2 DE	Private tenants Owners	Scotland England (M)
Family, younger children, 25-40	3. Mixed 4. Mixed	DE C1C2	Mainly social tenants Owners	Wales England (S)
Family, 'independent' older children 35-50	5. Mixed 6. Mixed	DE (A)B	Mainly social tenants Owners	England (N) Scotland
Empty Nester, 50-65	7. Mixed 8. Mixed	C1C2 DE	Owners Mainly social tenants	England (N) England (M)
Retired 65+	9. Mixed 10. Mixed	(A)B C1C2	Owners Owners	Wales England (S)
4 x group discussions – Owners (5 respondents per group). To qualify as an owner respondents had to have either an IHD, or smart meter, or both.				
Single / Pre-family 18-30	11. Mixed	C2D	Mix Private tenants / Owners	Wales
Family, younger, older, 25-50	12. Mixed	BC1	Owners	England (M)
Empty Nester, 50-65	13. Mixed	BC1	Owners	England (S)
Retired 65+	14. Mixed	C2D	Mainly social tenants	Scotland
12 x in home interviews – Owners				
Single / Pre-family 18-30	1-3 m/f	BC1 C2D	Mix tenure	England S (M, N)
Family, younger, older, 25-50	4-6 m/f	BC1 C2D	Mix tenure	England S (M, N)
Empty Nester, 50-65	7-9 m/f	BC1 C2D	Mix tenure	England S (M, N)
Retired 65+	10-12 m/f	BC1 C2D	Mix tenure	England S (M, N)
18 x out of home individual Interviews 'quali-hall' (town centre recruitment of respondents for immediate interviews lasting 20-30 minutes), Non Owners				
Spread of age / life- stage	m / f	spread of SEG	Mix of tenure	South

FIELDWORK PERIOD

Fieldwork was carried out between the 13th and 28th February 2012

PROCEDURE

Non-owners' awareness, knowledge, and attitudes towards smart meters and IHD units was established at recruitment before they became informed by the research process.

Half of the non-owner groups completed a pre-task researching information about smart meters and IHDs prior to attending their discussion.

Copies of the awareness questions, instructions for the pre-task and discussion guides are contained in the appendices. In summary the order of topics discussed was as follows with flexibility to follow respondent led themes, as is appropriate for qualitative research.

Discussion topics:

- Awareness, sources of awareness, understanding, attitudes prior to becoming involved in the research
- Pre task experience where conducted
- Messages
- Sources
- Potential channels of communication.

In home interviews with owners focussed on IHD and meter location and use, and quali-hall interviews focussed on the messages.

Research Findings

CONTEXT - RECESSION AND RISING ENERGY PRICES

The research took place against a background of recession and rising energy prices which was reflected in respondents' feedback. These were key themes which influenced behaviour and attitudes towards energy use and reactions to the messaging propositions.

Reduced or static income and rising costs meant many had been juggling their finances and re-prioritising their spending to maintain the aspects of their lifestyle they considered most important. Others had been forced to cut expenditure from a lower level, and were having to go without. A prevailing sense of uncertainty meant even those not financially pressured were restricting expenditure where possible in order to pay down debt or build up savings. No one expected the wider economic situation to improve in the foreseeable future. As a result, the majority were focussed on getting by financially in the short term and had put longer term planning and considerations to one side.

"Wages aren't going up but everything else is, you're watching everything you're doing."

Owner, Empty Nester, 35-50, Male, North

"Everything is going up and you're not getting any pay rises."

Owner, Family, 25-50, Mixed, BC1, Midlands

Rising energy costs were felt to have contributed significantly to increased household expenditure. Obviously this was unpopular and was accompanied by cynical attitudes towards energy companies who were perceived to make huge profits while their customers struggled. Other criticisms of energy companies were:

- Deliberately complex and obscure tariff structures
- A tendency to put prices up very quickly in response to rising international oil and gas prices, but reduce them relatively slowly if those costs fell
- Very aggressive sales tactics used to persuade customers to switch energy supplier or buy additional products such as insurances.

"Their bills are so complicated, and I'm an electrician, did maths up to A level, certificates, the lot..."

Owner, Family, 25-50, C1, Male, South

"They talk about saving you money, and then they put the prices up, and they're making about £20 billion a year..."

Non Owner, Family, 35-50, Mixed, DE, North

“They’re always trying to get you to take on other things when they come to your house.”

Non Owner, Family, 35-50, Mixed AB, Scotland

“They’re very good at putting prices up, but when it comes to putting them down they’re not so dynamic.”

Non Owner, Family, 35-50, Mixed AB, Scotland

Not surprisingly many respondents had tried to reduce energy costs along with other outgoings. This had initially led some to switch suppliers for a cheaper tariff, but while this was felt to offer big savings a few years ago any reductions were now seen to be marginal and relatively short lived as other suppliers adjusted their tariffs to remain competitive.

“I’m not sure it’s worth it any more. You change it and then you end up changing back, and you get all the talk about what they can do for home insurance, car insurance.”

Non Owner, Family, 35-50, Mixed AB, Scotland

“I’ve thought about changing again but it’s so confusing, you get phone calls, ‘we could save you £27 a year’, but that’s not worth bothering with.”

Non Owner, Pre family, 18-30, Female, DE, Midlands

This had led to a change of tactics and a focus on using less energy rather than trying to reduce its cost, for example:

- Turning off lights, TVs, laptops, chargers when not needed
- Turning central heating down, using it less, or not at all
- Not using gas fires, or alternatively using them in key rooms instead of central heating
- Improving home insulation, replacing inefficient appliances, installing lower voltage lighting.

“Insulation, definitely pleased, double cavity, lofts, this wall was single skin, I insulated it, used foil backboards... 12V low voltage lighting, can dim it down and all the lights are low energy, and low wattage wherever they can be.”

Owner, Family, 25-50, C1, Male, South

“There are three floors and I’ve turned it off on the middle and the top one, I only have the lower one on.”

Non Owner, Empty Nester, 50-65, Mixed, DE, Midlands

“We don’t heat the hall or the landing, we have it on in the living room only, you go out of that room and it’s freezing, but it’s no big deal, we’re all adults.”

Non Owner, Empty Nester, 50-65, Mixed, C1C2, North

“I gave our tumble drier away, it was ridiculous.”

Non Owner, Empty Nester, 50-65, Mixed, C1C2, North

In some cases there was little effect on home comfort, as actions had focussed on unnecessary consumption, in others the effect was noticeable, for example, a colder and darker home.

A substantial minority described how economising efforts and habits had generalised. For example, they might have started by reducing unnecessary energy use in the home, but then found they became sensitive to unnecessary water use (whether metered or not), wasted food, car journeys that could be shared and so on.

“It makes you think of different things, it brought my attention to the fact that I was wasting water as well, long showers, I now turn the water off while I soap, you start to think of this sort of thing.”

Owner, Family, 25-50, Mixed, BC1, Midlands

Some felt they were now much clearer over what was important to them, and in turn how they spent their money. Also, that energy now had a ‘value’ to them as a resource that went beyond being able to meet the bills.

There were comments that paring down their own unnecessary consumption had made them much more likely to notice ‘others’ wasting resources, for example, lights left on in office blocks at night, and excessive heating in shopping malls.

“You go to a shopping mall and the heat is blasting out.”

Owner, Retired, 65+, Mixed, C2D, Scotland

“I notice things more. If I’m out at night I see the shop lights on, and offices, even though they’re shut.”

Owner, Family, 25-50, Mixed, BC1, Midlands

TERMINOLOGY (respondents' interpretation)

Use and interpretation of the terms 'smart meter' and 'energy display' or 'energy monitor' was inconsistent across the sample.

- **Owners of both smart meters and IHDs;** were most likely to use the terms correctly, using both and making a distinction between the two units and their functions.
- **Owners of IHDs only;** often referred to their *IHD* as a 'smart meter', while also understanding the terms 'energy display' or 'energy monitor' correctly. IHDs could also be referred to by brand name, for example, Ecometer, I-Meter, Owl.
- **Non owners;** could interpret the term 'smart meter' as either referring to the meter or the IHD. They understood the terms 'energy display' and 'energy monitor' correctly.

The picture was further complicated because as in the course of discussion it transpired that some 'display only' owners, and some non-owners actually had smart meters but were unaware of it. They had either moved into a property with the meter already installed or the meter had been changed without them understanding the capabilities of the new unit.

"I've got a smart meter, it's a white one, they booked and told us when they were going to come, they said it was a smart meter, but I had no idea what that meant, I didn't know it transmitted data till this gentleman said just now."

Owner, Retired, 65+, Mixed, C2D, Scotland

Both owners and non-owners felt that benefits came primarily from the IHD as a prompt to changing habits, reducing consumption and, in turn, costs. The terms 'energy display' or 'energy monitor' readily conveyed roughly what such a device was and how it could be used. Conversely, when the term was interpreted correctly a 'smart meter' was seen to have a limited role, as 'meter' suggested it would be installed in a cupboard out of sight. It became clear that there was a need to explain how a smart meter might benefit the consumer.

Consideration should be given to how to achieve clarity in external communication, and a first step would be to ensure consistency among staff and stakeholders while using terms most likely to be meaningful and motivating to consumers. Different terms had implications for the perceived role and usefulness of smart meters and IHDs for non-owners.

- 'Smart Meter'

When understood correctly as a replacement for an 'old' meter the term suggested an ugly looking box that would be hidden away in a cupboard. This created an expectation that the householder would only look at the 'smart meter' from time to time, if at all.

'Smart meter' could be misinterpreted to mean to mean a display / monitor which respondents expected would be kept in a visible location, and would look functional but not unattractive.

The word 'smart' was taken to mean 'smarter' than a normal meter; perhaps it would be more accurate, easier to read, or incorporate a graphic display?

- 'Display', 'Monitor'

These terms were *always* correctly understood to mean a *visible* device, functional but not unattractive that would be *kept in a visible location*. Some felt that 'monitor' suggested the householder would have a more active relationship with the device, but this was not a strong theme.

Respondents assumed that an '*energy monitor*', or '*energy display*' (and 'smart meter' when interpreted as IHD) would show what energy was being used, and what different appliances consumed, which in turn might help people to use less energy and save money. It is worth noting that expectations of functionality could be high, for example a room by room or appliance by appliance readout.

ATTITUDES AND BEHAVIOUR TOWARDS IHDs AND SMART METERS AMONG OWNERS

How Owners Came To Have Smart Meters / IHDs

Most had come to own their smart meters or IHDs in one of three ways:

- A. They had actively sought out an IHD to help identify whether they could save energy and how they could do this.
- B. They had been offered an IHD (and occasionally a meter) by their existing or prospective energy supplier in the course of exploring tariffs to reduce costs
- C. They had been offered an IHD (and occasionally a meter) as a 'free gift' by their energy supplier, sometimes in the course of an upgrade to a smart meter.

Of the above those in group A had the best understanding of how an IHD would work and how they would use it *prior* to taking ownership. The majority of those in group B and C had little or only vague awareness and understanding of what a meter or IHD was, and how they would use them.

Other than some in group A, all IHDs and meters had been free. Given they were 'something for nothing' no one had seen a reason not to take them, albeit there were some slight concerns over quality given that something free might not be of high quality.

The path to ownership had some correspondence to usage and outcome. Those who had sought out and paid for their IHDs (A) had been the most engaged with them, and the most likely to use them systematically. Those who were offered IHDs or meters in the course of exploring tariffs (B) had often become equally engaged as they were looking for ways to reduce energy bills and the IHD / meter offered them a tool for identifying potential savings.

"I'm with British Gas, they suggested it. I was talking to them about my account, he said, have you got a smart meter, said what does that entail, he said you can see how much you're using, how much it's costing you, said how much will that cost me, he said nothing, I said right ho."

Owner, Empty nester, 50-65, C1C2, North

"It was getting pregnant. I realised there was going to be a young baby in house, the heating was going to be on more, baths every night, cost of living going up, whereas before the heating was off in the day, the kids were at school, I was at work. I looked on comparison websites for a better deal, I was with Eon anyway, they suggested a lower tariff with an Ecometer, so could see where we were spending money, lights, computers, everything left on..."

Owner, Family, 25-40, BC1, Midlands

Those who had been offered an IHD as a ‘free gift’ (C) were least likely to be engaged, especially if they had been left to their own devices to install and set it up. Some admitted that they lacked the motivation to explore how they could reduce energy use as they felt they were already careful, and could not think how they could make further savings. Others were not comfortable with ‘technology’ or had simply not expected much from a free gift.

“I got mine and it just stayed in the box. I asked my daughter about it, but I’d lost the instructions. Of course smarty pants went on the computer and got it all sorted out in about five minutes.”

Owner, Retired, 65+, Mixed, C2D, Scotland

Installing And Living With The IHD

The majority had deliberately put their IHD in a lived-in area of their home where it would be in view most of the time. This was often a kitchen or kitchen-diner, with the added logic of it being an area containing many energy using appliances, while in some cases it was the main TV viewing room (living room or lounge).

“I put it in the kitchenette because that’s where all the big appliances are.”

Owner, Retired, 65+, Mixed, C2D, Scotland

“Kitchen top, it’s the busiest part of the house.”

Owner, Family, 25-50, Mixed, BC1, Midlands

“I have mine on a corner shelf in my lounge above the telly.”

Owners, Pre family, 18-30, C2D, Wales

IHDs were thought reasonably easy to install, or at least easier than some had expected.

“They put a leaflet in with the bill, I phoned up, it came in the post, I rigged it up in about 15 minutes.”

Owner, Family, 25-50, Mixed, BC1, Midlands

Having said this, not everyone had fully got to grips with the various display options, for example setting the display to £ and pence rather than kilowatt hours.

One or two older respondents who were less comfortable with technology had put their IHD in their meter cupboard as they assumed that it was best situated close to the meter.

“Next to the meter on a little shelf, I assumed it was meant to go next to the meter.”

Owner, Retired, 65+, Mixed, C2D, Scotland

Some had also found coping with other aspects of the installation difficult.

“As soon as I got to the bit where it said go to your electric box I thought no...”

Owner, Retired, 65+, Mixed, C2D, Scotland

The initial impact of seeing the IHD react to changes in household energy consumption was felt to have been vivid in making energy use seem real whether this was registered through a needle on a ‘dial’, a numerical read out or a traffic light.

“It’s a black unit, a bar that goes up and down according to how much energy is used, they just sent it out in a box, British Gas, plug and play, they said would you like this. I switched the kettle on and it went up – woosh.”

Owner, Family, 25-50, Mixed, BC1, Midlands

When you put the lights on it goes up to 42, if you put the cooker on it goes to 62, if there’s nothing much on its 32.”

Owner, Retired, 65+, Mixed, C2D, Scotland

Many recounted how they had gone through a ‘honeymoon period’ during which they had experimented in a more or less systematic manner to establish the impact of various household appliances.

“For me when you first get it you run round like a thing possessed unplugging things because you want to see it is actually working and registering different things. You are not going to not use them but it makes you realise how much these things do cost you.”

Owners, Empty nesters, 50-65, BC1, South

“We had a lot of fun turning things on and off. Last night I think we got it down to 7.”

Owners, Pre family, 18-30, C2D, Wales

“When I first got it I came down dead of night with a torch, that’s just stuff on standby and fridge freezers. It gives you a baseline.”

Owner, Family, 25-50, C1, Male, South

Some appliances including kettles, ovens and immersion heaters, were expected to use considerable amounts of energy, and the impact registered on the IHD was correspondingly dramatic. Respondents described how they were surprised at the effect of some other appliances including irons, microwaves, and down lighters.

“It was an eye opener, more for the unexpected things. You know the tumble dryer, the washing machine and the kettle are going to get it going, but the down-lighters in the bathroom, that was a shock.”

Owner, Pre family, 18-30, C1C2, South

In some households efforts to save energy had pre-dated the impact of recession and rising bills often with a division of roles where one person attempted to persuade others to turn lights and appliances off where it made sense to do so, to turn heating down, and so on. The request and response often met resistance, which may have been caught up in wider household relationships and dynamics as can be the case between husband and wife or parents and children.

“I’m aware of energy bills, my wife is terrible. The oven is left on, she used the tumble drier in middle of summer, trying to get that message across is a struggle... My pet hate is that kettle, I come down in morning and it’s full to the brim, it’s been boiled, or she’ll boil it twice, I say 1) you’ve boiled it twice, 2) it’s a full kettle you only need a mugful 3) the cost, watch that meter when you turn it on....”

Owner, Family, 25-50, C1, Male, South

In such situations the person who had previously championed energy saving in the household became the ‘IHD champion’ and used the IHD as an ally or ‘objective witness’ in their efforts to persuade other family members to change their habits. They felt that this met with more success because reference to the IHD helped depersonalise the request.

“No one has got annoyed or irritated. As a parent you do make yourself unpopular, but that’s like a little friendly thing, like a toy, I say we’re on red, turn the lights off, you don’t need to leave them on just because you might go back upstairs.”

Owner, Family, 25-40, C1C2, Midlands

In other households the desire to save energy had largely coincided with the impact of rising bills and static or declining income. This could result in a more united response to the IHD because the whole family had realised the need to change together.

Children of different ages responded differently to the IHD and parents involved them in different ways. Younger children often joined in as a game, and became self-appointed guardians of the IHD.

“My son runs in and tells me, mummy it’s red.”

Owner, Family, 25-50, Mixed, BC1, Midlands

Teenagers and older children often had to be persuaded by a financial argument that money saved on energy could be spent on things they enjoyed.

“The eldest has more of an insight into finances, it’s more of a thing where he thinks it’s expensive if we’re spending money on electric and there’s less for him, and there’s a thing where you can see how much you spent yesterday or last week, they’ve all become a bit more frugal.”

Owner, Family, 25-40, C1C2, Midlands

“I say if it stays on this level here we’ve got money to do other things, but if you want to leave all the lights on there’s no cinema at the weekend.”

Owner, Family, 25-50, BC1, South

“I say that if we want to have a nice holiday we need to keep it in the green every day.”

Owner, Family, 25-50, Mixed, BC1, Midlands

Those ‘in between’ were more or less prepared to go along with mum and dad’s requests. Parents hoped and believed that the habits the IHD helped to foster would be beneficial for their children in the long term, and stay with them into independent living.

The capability to display consumption in £s and pence rather than kWh was felt to make a crucial difference in shaping reactions to the information displayed. kWh was seen as an abstract concept which only had relative meaning whereas £s and pence related directly to the outcome they were looking for. It was also thought much easier to explain and demonstrate the impact of energy consumption to household members with reference to £s and pence.

“It’s always a reminder if it’s shown in £, if it’s kWh it means nothing.”

Owner, Retired, 65+, Mixed, C2D, Scotland

A minority questioned the need to keep their IHD in a visible location after the initial honeymoon period as they had learned the impact of their various household appliances. While this might have been true, the way respondents described their interaction with the IHD suggests that its presence had played a part in developing and reinforcing habits.

“You think the novelty will wear off, and it will be catching dust in corner, but it hasn’t, kids would come to see if it was red / amber, never got it to green, kids went round flicking lights off to see if could make it change colour.”

Owner, Family, 25-50, Mixed, BC1, Midlands

Despite expressing these sentiments none had moved their IHD to a drawer or cupboard, partly because the presence of children or ‘unconverted’ adults in a household was a reason for keeping it in a prominent location. In fact no-one had moved their IHDs at all, which suggests that initial choice of location is important.

Importance Of Motivation To Save Money In Behaviour Change

The motivation to save money seemed critical to prompting behaviour change as it provided the initial impetus for interacting with the IHD.

“You can flick things on and you see the money go up. You put the microwave on and up it goes, it is instant. You quickly change your habits. It made us think about the tariff we were on as well. We have become more aware altogether.”

Owners, Empty nesters, 50-65, BC1, South

Pressure on household budgets was thought unlikely to diminish in the foreseeable future and ongoing motivation to save seemed important in developing and cementing good habits given that the IHDs initial novelty wore off relatively quickly. Respondents felt that the changes in behaviour they had made would be permanent irrespective of improved financial circumstances partly as they had become habits, and also because they now saw energy as something to be valued and used over and above concerns around paying the bill.

“Habits in the house have changed, we don’t leave computer screens on now, we turn them off instead of leaving them on screen saver, turn them off at night, laptops they turn them off at the plug, don’t leave them on charge... and when kids took their clothes off at night, chuck them in washing machine, ½ load, but now when you see how much a washing machine can affect the level I wait till it’s a full load, that makes a big difference.”

Owner, Family, 25-50, BC1, South

“Yesterday even though it was winter it was a mild day, in the past I’d have thought, could have switched it off, but you think it’ll probably be cold tomorrow, leave it. When you see it tick, tick, ticking, you think differently, I’m waiting for spring when we can turn the heating off altogether.”

Owner, Family, 25-50, Mixed, BC1, Midlands

Effects Of The IHD On Energy Consumption Behaviours

The IHD was felt to have had a role in prompting some or all of the following:

- Turning off appliances when not in use (at the plug), including TVs, laptops, phone chargers
- Reducing heating, eg, turning off radiators in unused rooms or lowering settings, having heating on for less time

- Identifying and replacing ‘culprit’ appliances and fittings that used high amounts of energy, eg, an ageing fridge freezer, converting spotlights to LEDs
- Improving insulation, ceiling and cavity wall, which usually involved taking advantage of local authority grants
- ‘Efficient’ appliance usage, eg, only boiling the necessary amount of water in a kettle, running washing machines and dishwashers with full loads.

“The only thing we have really changed is stand by. We turn everything off at night. We have a routine now.”

Owner, Empty nesters, 50-65, BC1, South

“We don’t have heating on much, just the occasional time, like last week when it was chilly. We’re all at work, in the evening if we want it we’ll put it on, but not always.”

Owner, Empty nester, 50-65, C1, North

“We had an old fridge freezer, 30 years old, never realised it was using so much electricity, I worked out it was using 30-40p a day. We replaced it and it’s paid for itself in a year.”

Owner, Family, 25-50, Mixed, BC1, Midlands

“I had the loft insulated, cavity walls done, last 12 months or so, someone from council came round and said we could the do walls for £100.”

Owner, Family, 25-50, C1, Male, South

“If you fill the kettle up takes longer to boil, you see that go up, you only put in the water you need, or you fill the kettle and make everyone a cup of tea.”

Owner, Family, 25-40, C1C2, Midlands

In some cases respondents had reduced gas consumption (heating) despite their IHD only indicating electricity consumption. On exploring this point they felt that the behaviour prompted by the IHD had made them generally more conscious of where they could make savings.

Some felt that their savings steps had little impact on their lifestyle, they had simply cut out unnecessary consumption.

“It’s not been a case of cutting down, more of turning things off that are unnecessary.”

Owner, Retired, 65+, Mixed, C2D, Scotland

In others, there had been a noticeable effect and their homes were less comfortable (colder, darker) if only in parts. Those concerned accepted the change as a necessary sacrifice given their circumstances.

Results

Relatively few had attempted to measure the effect of their activities in a scientific way. This was sometimes because they were satisfied that they had at least taken steps to reduce their bills.

“We’ve definitely seen a difference, we’re in credit this year.”

Owner, Empty nester, 50-65, C1, North

They pointed out that energy prices had risen during the time they had had their IHD, so it would be difficult to make comparisons, or alternatively that they did not yet have two full years bills to compare, which they felt was necessary in order to compare similar periods.

A minority (4 owners out of 32) had measured the effects of their efforts, and reported savings of around 20% before taking increased costs into account. These respondents lived in larger houses and by their own admission some may have been more profligate before beginning their economy drive.

“Retirement, fixed income, I wanted to cut unnecessary expenditure, use the money to best effect. I reckon I’ve saved 20% on fuel bills let alone not paid any increases.”

Owner, Retired, 65+, B, South

The result was sometimes seen as reducing the impact of price rises, which provoked some cynicism, as it seemed that an energy company could maintain their income whatever householders did to reduce their consumption.

Some felt that the IHD and their efforts had made little difference. Further exploration suggested that this could have been at least partly because they lived in smaller homes and were already careful with their energy usage before they got their IHD.

Role of the IHD, Role of the Smart Meter

Those who had both smart meters and IHDs felt that their IHD had been the agent of change and that their meter had played little or no part. Those who only had IHDs agreed with this sentiment once they understood how a smart meter worked. These attitudes were partly a result of the perceived relative importance of the benefits delivered by the smart meter, that is, no need to read the meter, and an end to estimated bills. These were seen as ‘nice extras’ but no more than that. Active IHD users were usually ‘on top of’ their meter reading anyway, and often paid by monthly direct debit in order to smooth out seasonal peaks and troughs in their energy bills.

It is possible that the benefits of the smart meter to the bill payer have not been fully articulated? For example:

- the capability to automatically feed the IHD with accurate tariff information
- the capability to display gas as well as electric consumption.

One way of expressing the relationship between the two devices would be to emphasise the IHD as something that helps put the consumer in control, and the smart meter as a device which makes the IHD more accurate and more useful. The IHD is the primary unit, and the smart meter makes it more effective.

AWARENESS AND ATTITUDES TOWARDS IHDs AND SMART METERS AMONG NON-OWNERS

Awareness and Understanding

Roughly 2/3 of non-owners (total 88 respondents) felt they had heard of smart meters, and a lesser proportion had heard of energy displays or energy monitors. Awareness seemed higher among the more budget pressured, usually those at or beyond family life stage, and lowest among relatively comfortably off pre-family males.

However, there was often little understanding of the terms beyond a sense of familiarity. The word 'smart' has been used quite widely in different product sectors, for example, 'smart phone', 'smart car', 'smart television', sometimes with associated advertising and promotion. It is possible that in some cases this meant awareness was assumed, and reflected familiarity with the word 'smart' as an adjective describing a product, rather than a reflection of real exposure to the term in the context of 'smart meters'.

"Yes it's like the next generation of things – like we had mobile phones and now we have smart phones."

Non Owners, Family, 25-40, Mixed, DE, Wales

Some did have a degree of understanding of the functions of IHDs and smart meters which had been created in a number of ways including the following:

- Direct communication from an energy supplier, either electronic or paper, usually linked to changing tariff or changing supplier
- Word of mouth, as part of a conversation about environmental issues
- References in news, current affairs editorial
- Broadcast advertising (radio, television) from an energy company (NB, consumers often attribute awareness to television advertising particularly if they cannot remember any other source).

"I saw something about it on the news."

Non Owner, Family, 25-40, Mixed, C1C2, South

"I got an e mail from British Gas with my usage and expenditure statement, and it said take a look at the smart meter, I went to look at it, and there was loads of stuff about changing tariff and I wasn't ready to do that."

Non Owner, Family, 25-40, Mixed, C1C2, South

Key Points From The 'Pre Task'

Respondents in half the non-owner groups were asked to investigate smart meters prior to attending the groups, firstly using whatever method and sources they wished to, and then by using one or more of a list of sources proposed. Full details are contained in the appendices. In practice the two stages overlapped as most found the suggested sources through their own internet search.

Respondents' lines of interest followed two themes:

- Personal / practical – what smart meters might mean for me as a householder
- Big picture – what smart meters might mean for the UK, and the environment.

'Personal / practical'

The 'personal / practical' theme was of interest to a far greater proportion of respondents than the 'big picture' theme.

However, energy company websites were often used as a source for personal / practical information which is perhaps surprising given the cynical attitudes described earlier. While respondents did not trust energy companies they did expect them to approach the subject from a consumer standpoint, and to use language and terms which they would understand. Equally, they imagined that if they were interested in having a smart meter they would have to go through an energy company, probably the one they currently used.

Energy switching sites, such as U Switch were also expected to deal with the subject from a consumer perspective, and to offer the best deal should anyone be looking to get an IHD or smart meter. Some were familiar with these sites as a result of changing energy supplier in the past. A small proportion of the sample was aware that switching sites might not always cover all potential suppliers, and that the site often received some form of remuneration from sales made through it.

"They don't search all the companies, they all take a cut, they've got to make money somewhere."

Non Owner, Family, 35-50, Mixed, DE, North

Money Saving Expert was a highly regarded destination, as it was felt to fully reflect the consumer's perspective, talk in consumer language, and be completely independent while also free to use.

"Money Saving Expert, he's pretty clued up, I trust that site, it's run for the people."

Non Owner, Family, 35-50, Mixed, DE, North

Some used Wikipedia, but more as an initial source in order to get a basic understanding and overview of what smart meters / IHDs were and what they did.

In a personal/practical context respondents were largely positive towards IHDs and smart meters as they could see no real downside to having them, only potential upsides. The reaction was more muted if their search had only led to information about smart meters, and more positive where it had taken them to information about IHDs as well. They concluded that while the smart meter offered some benefits of convenience, the IHD offered the potential to save money.

‘Big Picture’

There was much less interest in ‘the big picture’, and what there was may have been partly as a result of the research context.

Sources used included Wikipedia, DECC and one or more trusted news and information sources such as BBC, Daily Telegraph, and The Guardian. There was no universally trusted news and information source, rather each respondent had one or more which they believed to be independent and objective, for example, one might see the BBC and Guardian as biased, and the Telegraph as objective, and another might have the reverse view.

These sources focussed on smart meters with much less comment on IHDs. In a ‘big picture’ context there was much less clarity as to whether smart meters were a good idea or not and more questions were raised than answered. For example, did they really save individuals money or nations’ energy? Could the scale and cost of the programme be justified? Who would pay for the upgrade? Privacy and health issues were noted but were not a major concern.

“It is quite a good idea really but they want every home in the UK to have one and it makes you think who is going to pay for it? The costs will be passed onto us one way or another, they always are.”

Non Owners, Retired, 65+, Mixed, B, Wales

A lack of clarity on the benefit of smart meters at the big picture level did not necessarily diminish their appeal at a personal level. They might still benefit an individual even if that individual was unsure as to whether they would benefit the country as a whole or the environment.

There were comments that the DECC site seemed to only discuss the potential positives of smart meters and not mention any of the negatives. This eroded the credibility of DECC as a source of information. Those who are interested in the ‘bigger picture’ will find this information, and the DECC site should at least make reference to it.

“All the official sources and the energy companies were full of spin and the three independent sources were totally negative. DECC Defra, Directgov only mentioned the good points.”

Non Owner, Empty Nester, 50-65, Mixed, C1C2, South

'Free' To Owners

Some discovered that smart meters and energy IHDs might be free, and this sparked mixed reactions. On the one hand, it was well received as it meant something for nothing, and something that might turn out to be useful. On the other hand the idea that they would be free from energy companies raised doubts as to why those companies would give away something that might lead to people using less energy and reducing their bills? In turn this made some wonder what 'the catch' might be.

"I find it hard to see why an energy supplier should give you a device that means you use less of their product."

Non Owner, Family, 35-50, Mixed AB, Scotland

"That would make me wonder what's in it for them."

Non Owner, Pre family, 18-30, Male, C1C2, Scotland

In practice this is less likely to be an issue in the context of a national roll-out.

'All Households Converted By 2019

The sheer scale of the programme normalised the idea of having a smart meter, and in itself neutralised concerns.

Prior to the research there had been confusion in some sections of the media who had believed that installation of smart meters was to be compulsory. The fieldwork period straddled the timing of a definitive announcement that this was not the case and that consumers would not be compelled to have a smart meter installed. This statement was interpreted by some media sources as a policy *change* rather than a policy *restatement*. As a result, some respondents had in the course of their pre-task formed the impression that they would have no option but to have a smart meter. The belief that smart meters would be mandatory had the effect of creating resistance, even among some who thought they were a good idea. This seemed to be primarily a 'knee jerk' reaction against being 'told' to have one. In addition the idea of compulsion raised doubts as if smart meters were a good thing with no downside why should it be necessary to force everyone to have them, and over such a short time scale?

"Why have we all got to have them? I can see the good side, but why should we have to have them?"

Non Owner, Empty Nester, 50-65, Mixed, DE, Midlands

Compulsion could also lead respondents to disengage from the topic. If there was to be no choice then the matter would be out of their hands, and there was nothing more to think about, they would be told when their smart meter would arrive, and what they might need to do in connection with that.

REACTIONS TO MESSAGES

A Smart Meter And Energy Display Shows You What You Are Spending In Real Time

This message was the most motivating of those presented and had the broadest appeal. It led towards a correct interpretation of the function of a meter and IHD and how it would be used, and in turn towards the idea of saving money through an improved understanding of the significance of energy use.

“If you could see what an appliance uses you’d manage things a bit differently, like putting your washing on the line on a nice day.”

Non Owner, Family, 35-50, Mixed, DE, North

“You know what to do, like to only half fill a kettle if that’s all you need, you might be more keen to do it if you could see how much difference it makes.”

Non Owner, Family, 35-50, Mixed AB, Scotland

The straightforward nature of the message also had the effect of making the smart meter and IHD seem simple, as if it should be possible for most people to use them. The consumer would be responsible for taking action and saving money in response to the IHD, so the meter and IHD would only be a means to an end. This means that the credibility of messages will be less affected by its source than some others that were explored.

“I like the fact it’s not a company saying come to us and save, save, save, it’s about what you use.”

Non Owner, Family, 25-40, Mixed, C1C2, South

The message was most motivating when it was assumed that ‘spending’ meant that consumption would be displayed in £s and pence.

“Straight and simple, that’s how we can tally it up in our heads, we can’t do that with kWh.”

Non Owner, Family, 25-40, Mixed, C1C2, South

“You haven’t got a clue what kilowatts are and stuff like that.”

Non Owner, Pre family, 18-30, Female, DE, Midlands

Some owners pointed out this was not their experience, as their IHDs were either not capable of doing this, or they had not discovered how to re-program them to do so from a default setting of kWh. This highlights the need for appropriate default settings or clear instructions if owners are to get the most from their IHDs and meters. Respondents also pointed out that as far as

electricity consumption went it was the IHD that delivered the information, the meter was not necessary.

The phrase 'real time' was generally seen as a succinct encapsulation of how the IHD and meter would work. Perhaps not surprisingly it was less immediately grasped by some older respondents who volunteered that they were not that comfortable with technology. No equally succinct alternatives emerged from the research, the closest suggestions were 'as you use it', or 'as you go'.

A Smart Meter And Energy Display Can Help You Reduce Your Energy Bills

This message only engaged respondents if they understood *how* a meter and IHD would work. In isolation it could be immediately rejected as 'reduce your energy bills' was felt to be a tired and over used promise from energy companies which was either not credible at all, or stretching the truth as savings would be short lived and marginal.

"They always say that, I wouldn't take any notice of it. I've switched in the past and it made no difference."

Non Owner, Empty Nester, Female, 45-60, C2, South

"They always promise you something but then once they do it they backtrack and say it was only valid for 30 days or something. There is always a catch."

Non Owner, Family, 25-40, Female, Mixed, Wales

Respondents felt that a meter and IHD could not reduce energy bills, only the consumer could do that by using less energy, and anyway any financial benefits in using less energy could well be negated by rising costs.

Reducing energy bills is the end benefit of the IHD and meter, but for the above reasons it is necessary to lead with the mechanic of how this is achieved, that is, via the display of energy consumption. The message would only be credible in isolation if it came from a trusted consumer centric source such as Money Saving Expert, or from trusted personal contacts with no axe to grind.

A Smart Meter And Energy Display Helps You Avoid Wasting Gas And Electricity

This thought could engage, as for many the idea of waste was anathema. However, it could also alienate some who believed they have already pared energy consumption back to the bone, so they were using it and not wasting it. Also there was no immediate indication of how the meter and IHD might help you avoid wasting gas and electricity, which made it an empty promise in a similar way to 'reduce your energy bills'.

Respondents could also feel that use of the word ‘waste’ suggested an environmental focus rather than personal financial focus.

A Smart Meter Means...

...You’ll Never Have To Have Your Meter Read, Or Provide Your Own Readings

...You’ll Only Pay For What You Use, No More Estimated Bills

Both messages failed to engage a significant proportion of the sample for similar reasons. These respondents were likely to be more on top of their energy billing administration and such people are perhaps more likely to be those interested in finding ways to use less energy and more likely to respond to corresponding messages. The benefits were seen to be non-existent or marginal, a nice extra compared to ‘shows you what you are spending in real time’.

A Smart Meter Means You’ll Never Have To Have Your Meter Read, Or Provide Your Own Readings

The majority did not see meter reading as particularly inconvenient for one or more of reasons:

- They did not find it a problem to admit a meter reader
- Their meter was in relatively accessible position
- They could take a reading and text it or e-mail it when it was convenient for them to do so
- It was simply ‘admin’, something to get on with and do and not fuss about.

“Ours is behind a locked gate, so somebody needs to be in before they can read it, as it’s once a year it’s no hardship.”

Non Owner, Family, 35-50, Mixed AB, Scotland

“It’s not such a big deal, they put a note through the door, you write it on the note and leave it in the letter box for the next day.”

Non Owner, Family, 35-50, Mixed, DE, North

“They text me and I text it back in minutes.”

Non Owner, Empty Nester, 50-65, Mixed, DE, Midlands

The message could also prompt remarks that smart meters would reduce energy company costs by taking away the need to read meters, and this would mean someone would lose their job. Their sympathy was with the soon to be redundant meter reader if only due to a belief that reduced costs would serve to increase energy company profits rather than reduce their bills.

“You’re just putting someone out of a job, where are they going to go?”

Non Owner, Family, 35-50, Mixed, DE, North

“I suppose they’re saving money from not reading the meter, I don’t think that saving will come back to the consumer.”

Non Owner, Retired, 65+, Mixed, C1C2, North

Some older respondents had concerns over the complete removal of the human element from meter reading.

The thought was motivating to some who were perhaps more likely to have young families, and felt that the meter reader always seemed to call at an inconvenient time.

“I find it a pain in the arse, I might be in the middle of cooking dinner or bathing Bethany... have to let him in, stop what you’re doing.”

Owner, Family, 25-40, Male, C1, South

“It appeals to me, I have to look in a cupboard with a torch.”

Non Owner, Retired, 65+, Mixed, C1C2, North

Also to a few who had experienced problems in the past due to inaccuracies of their or their meter reader’s reading which had been difficult or tedious to resolve.

“I read it once and I was thousands out, I put the numbers in the wrong column, didn’t have my reading glasses on.”

Non Owner, Empty Nester, 50-65, Mixed, C1C2, South

The potency of this message could be increased by targeting groups who are more likely to see a meter reader’s call as inconvenient such as ‘young families’, and timing, by delivering it close to the date the meter has been read when any inconvenience is uppermost in the mind.

A Smart Meter Means You’ll Only Pay For What You Use, No More Estimated Bills

This message prompted remarks that you did not need to accept an estimated bill, you simply threw it away and provided a correct reading. This was habitual for some who used the arrival of their bill as a prompt to take a reading which they then passed on to their energy company by telephone, text or e mail.

“You phone it in when you get the estimate, it’s no problem.”

Non Owner, Retired, 65+, Mixed, C1C2, North

The thought had no relevance for those on 'pre-pay' or energy keys, nor for many who paid by monthly direct debit. The latter group were happy to pay a fixed amount as this fitted with their monthly budgeting, and was preferable to paying a correct but fluctuating amount.

"I pay £10 a week on each, and nine times out of ten when I get the statement it's in credit, and they say we'll take it off the next bill."

Non Owner, Empty Nester, 50-65, Mixed, DE, Midlands

They realised that some months they overpaid and some months they underpaid but were happy providing the sums balanced out over the year.

The idea of building up credit over the summer months to deal with the more expensive winter quarter could also have appeal, and if the credit became excessive their experience was that the energy company was happy to return a proportion to them.

"You build up credit over the spring and summer and it pays for the winter, they're quite happy for you to build up a big credit, but they'll give it back if you ask."

Non Owner, Retired, 65+, Mixed, C1C2, North

While not a major point, the thought was motivating for a small minority simply because they saw an estimated bill as archaic and idiosyncratic, and disliked the idea of either building up credit or accumulating debt.

"I'm going to get a smart meter, I like the idea that I only pay for what I use, you don't do that (estimated bill) with petrol, or in a restaurant."

Owner (IHD), Family, 25-40, Male, South

A few had been caught out by estimated bills either when relatively new to running a household, or on moving home where the previous occupant had a completely different level of energy consumption.

"From my experience it is a dangerous thing to have your bills estimated – you are either way in front or behind. I had a bad experience with N Power. They contacted me to say I should reduce my direct debit and then months later it turns out I was well behind. They caused the problem."

Owners, Empty nesters, 50-65, Mixed, BC1, South

"We had an old lady living in the house before and she was using nothing, we had a huge bill, had to pay a bit off at a time."

Non Owner, Pre family, 18-30, Female, DE, Midlands

A Smart Meter And Energy Display Can Help You Do Your Bit For The Environment

A Smart Meter In Your Home Is Part Of The Upgrade This Country Needs To Secure Our Energy Supplies For Our Children And Grandchildren

Smart Meters Will Help This Country Manage Its Energy Supplies, Making Us Less Dependent On Foreign Oil And Gas In The Future

All three messages were rejected or discounted for similar reasons. The issues they referred to were complex without clear answers, and many were simply not interested.

"I get very confused and they talk about wave power and I like that but then I'm told that it is not economical. I was told that wind power was the way to go but then I was told that it was not the way to go and now I'm being told that with the French it is nuclear power that is the best. There is a lot of confusion and everything changes all the time."

Non Owners, Family, 25-40, Mixed, DE, Wales

They were also long term issues, and the focus seemed completely out of step with the need most had to get by financially in the short term.

"Sounds like it's from someone who doesn't have any trouble paying their bills."

Non Owner, Family, 25-40, Mixed, C1C2, South

This provoked cynicism and suspicion. Was this someone trying to gild the lily, and what was their real motive? Financial? Political?

"They do these things to sway you, it's just a ploy to make you think you're doing something good."

Non Owner, Retired, 65+, Mixed, C1C2, North

The scale of these issues also made a personal response seem insignificant.

It may be very hard to engage a broad section of the population on these messages; some are simply not interested or their focus is now on the personal and the immediate. Those that might take an interest know that these are complex and multifaceted issues. They might accept the messages as a conclusion from a source whose point of view they respected, for example, their daily newspaper, or they would need to see a balanced presentation of the issues, from a source they trusted to deliver it, perhaps in a documentary format such as Panorama, World in Action, or Dispatches.

Smart Meters Will Help This Country Manage Its Energy Supplies, Making Us Less Dependent On Foreign Oil And Gas In The Future

This had appeal to a substantial minority, either due to a knee jerk reaction against the idea of being dependent on ‘foreigners’, or, a more informed perspective on the fragility of our oil and gas supply chain.

“Because of all the news about foreign oil and gas and how much we pay and how they can hold things over us I think people would look at it differently if we could be less dependent on the foreign companies.”

Non owners, Family, 25-40, Mixed, DE, Wales

“Most people don’t know we don’t generate enough to meet our needs. We are sucking in gas from Siberia, taking stuff from France. We are dependent on a lot of other countries.”

Owners, Empty nesters, 50-65, Mixed, BC1, South

But, doubts could follow quickly; was this an attempt to manipulate us by using these sentiments? And, some pointed out that becoming less dependent on foreign oil and gas didn’t necessarily mean that energy would be cheaper.

“If it was a news thing you might take notice of it, but it’s like a threat. You’ve ruined the country. It’s a bit too much.”

Non Owner, Pre family, 18-30, Female, DE, Midlands

“If it hits you in the pocket then if you can buy it cheaper from abroad then do it.”

Non Owner, Family, 35-50, Mixed AB, Scotland

“It doesn’t matter to me where it comes from, it’s what I’m paying for it.”

Non Owner, Family, 35-50, Mixed, DE, North

A Smart Meter In Your Home Is Part Of The Upgrade This Country Needs To Secure Our Energy Supplies For Our Children And Grandchildren

A substantial proportion of parents found this message very irritating as it felt like emotional blackmail, and was taken to be suggesting that if you didn’t want a smart meter you did not care about your children or grandchildren.

“It’s meant to make you feel a bit guilty, it’s political scaremongering, like we’re going to run out of petrol. You take offence at anyone implying you’d do anything to harm your children.”

Non Owner, Family, 25-40, Mixed, C1C2, South

It was interesting to note that some do take this thought into account if they arrive at it independently.

However the idea of 'doing it for the kids', has also been used in similar ways by others, for example, the Waste Awareness Wales recycling campaign, 'It's Our Future, Please Don't throw it away'.

A Smart Meter And Energy Display Can Help You Do Your Bit For The Environment

Many thought the environment had become unimportant to them in the context of short term financial pressures even if they might have thought about it more when times were easier. They themselves pointed out that this might be wrong, but as far as they were concerned it was their current reality.

"Environment, no, not at the moment, it should, and if everything in garden was rosy and times not so hard you would pay attention to that, and it would be a factor, but that's not the way things are at the moment."

Owner, Family, 25-40, BC1, Midlands

"You'd really want to find out how much money to save, and they'll be wanting to talk about the environment."

Non Owner, Pre family, 18-30, Male, C1C2, Scotland

The message also could also prompt remarks that other people were not doing their bit, which then shifted the emphasis away from personal responsibility and action.

"I could do more but the eco thing irritates me slightly, don't do this, do that, but one Jumbo for Spain uses more energy in one take off than my whole street does in a year."

Non Owner, Family, 25-40, Mixed, C1C2, South

"You can always look at someone like an energy company and see them pushing out all this waste into the atmosphere, and you think, who are you to tell me to be green."

Owner, Family, 25-50, Mixed, BC1, Midlands

Appeals on behalf of the environment were also thought commonplace and often cynically motivated.

"They're not doing it for the good of the environment."

Non Owner, Family, 35-50, Mixed, DE, North

COMMUNICATIONS CHANNELS

Outbound Communication

The scale of the programme led to expectations of outbound communication in broadcast media as the subject would be relevant to everyone. This was expected to include editorial coverage in news, current affairs, and other consumer media and advertising from energy companies, and possibly the government.

Direct outbound communication was also expected, from energy companies in particular, which led to concerns that energy companies would link the programme to 'switch' selling, or the selling of ancillary products and services. Electronic and physical mail was thought acceptable while the prospect of telephone and face to face selling provoked deeply felt antipathy.

Consumer Initiated Enquiry

The current energy company was thought likely to be the first port of call for consumer initiated enquiry, if only because it was assumed they would be responsible for installation.

Energy companies were expected to offer a range of direct contact options, via their website, e-mail, call centre, etc. The idea of making contact with their energy company was less off putting than the idea of their energy company making contact with them, as they would be in control. Having said that, a 'heavy sell' was still expected.

CONCLUSIONS

Once smart meters and IHDs were understood, very few felt they would turn one down (assuming they would be free). Resistance would be much more likely as a reaction to compulsion.

There were some slight reservations, as follows:

- Not wanting to be confronted with consumption. Some felt they perhaps should change their habits, or needed to, but did not want to have to.
- Wariness about being able to cope with the technology
- What if there was a technical error, would it be picked up?
- Will accepting a display/ meter lock me in to whoever provided it?

However, these were largely matters for reassurance rather than barriers, even the last point which was seen to be the most significant. And the scale of the programme normalised the idea of having a meter and IHD.

Concerns over privacy, data protection, security, and health, were largely dismissed as 'theoretical' objections, again because of the scale of the programme which suggested that 'safeguards' and 'guarantees' would be given, such as not passing data on to third parties. While energy companies were regarded with cynicism they were expected to observe reasonable standards. Respondents pointed out that if anyone was worried about these issues there were many other sources of concern as we are surrounded by wireless, mobile, and other signals, personal data is collected from many sources and collated, and a burglar is more likely to notice physical signs of an empty home than hack an energy company's customer data.

There were some concerns that elderly people on a tight budget might over react to the IHD and turn their heating down to dangerous levels, or simply make their homes uncomfortable. These concerns were expressed spontaneously and when the question was raised in relation to elderly relatives. It is worth noting that retired respondents dismissed the concern on their own behalf.

Once the scale of the programme is understood people are likely to be reactive rather than proactive with the expectation that their energy company will make contact when it is ready to install the smart meter. Respondents anticipated a systematic rather than a piecemeal approach, for example, an energy company would try to convert all its customers in a given area at the same time. Anyone who did want to initiate the process would contact their energy company in the first instance.

Installation itself did not raise any concerns. Energy companies were assumed to be competent to carry out these tasks in an efficient and safe manner. While respondents had a highly negative view of energy companies these feelings were directed at the corporate entity (the brand) and towards sales personnel. Experience of non-sales personnel such as service technicians was generally positive, and they had usually been found to be helpful and efficient.

Appendices

Research Method

Recruitment Questionnaires

Pre research awareness screening questions

Pre-task brief

Discussion Guides

Stimulus

RESEARCH METHOD

A combination of group discussions, in home interviews and 'quali-hall' interviews was used.

- **Group discussions**
 - group discussions are a proven method for exploring understanding, attitudes, opinions and early stage communications propositions
 - they are ideal not only for obtaining reactions but also for 'brainstorming' potential evolutions and helping to ensure no opportunity is missed; for example in relation to propositions and language to describe smart meters / IHDs
- **In home interviews**
 - in home interviews allowed us to see the smart meter / IHD 'in situ' and explore directly with the householder how it was used, and how it impacted on energy consumption
 - individual interviews offered a complementary perspective to group discussions due to the reduced level of social influence
- **Quali-hall**, interviews (participants recruited on the street for immediate interviews of C20 minutes by moderators)
 - this method offered insight into how messages might cut through the routine of daily life; participants are interviewed at a time and in a place which is less distinct from their day to day routine than is the case with a group discussion or an in home interview which of necessity take place in a 'window' in their routine

RECRUITMENT QUESTIONNAIRE: Group Discussions / In Home Interviews

Q1 I am conducting a market research survey. Can you tell me if you or any of your friends or relations work, or have ever worked in any of these occupations? **READ OUT:**

ADVERTISING	1
MARKET RESEARCH	2
PUBLIC RELATIONS	3
MARKETING	4
PUBLISHING	5
JOURNALISM	6
BROADCASTING	7
ENERGY, ENERGY COMPANIES	8
ENERGY / ENVIRONMENTAL CONSULTANCY	9

IF ANY OF THE ABOVE MENTIONED, CLOSE

Q2 a) Have you ever attended a market research group or interview?
 Yes 1 – **GO TO Q2b**
 No 2 – **GO TO Q3**

b) when did you last attend a group or interview?
 In the last year 1 – **CLOSE**
 Over a year ago 2 – **GO TO Q2c**

c) how many groups/interviews have you ever attended? _____

d) what was the subject of the groups/interviews you attended?
 WRITE IN _____

RESPONDENTS SHOULD NOT HAVE ATTENDED MORE THAN 3 GROUPS EVER, AND NEVER ON THE SAME SUBJECT AS THE CURRENT ONE

Q3 Do you have permanent right of residence in the UK?
 Yes 1 – **GO TO Q4**
 No 2 - **CLOSE**

Q4 Can you tell me whether you own your property or rent?
 Owner of a house 1
 Owner of a flat 2
 Tenant in privately owned house 3
 Tenant in privately owned flat 4
 Tenant in social housing (house) 5
 Tenant in social housing (flat) 6

PRIVATE TENANTS GROUPS 1, 11*

SOCIAL TENANTS GROUPS 3, 5, 8, 14

OWNERS GROUPS 2, 4, 6, 7, 9, 10, 11*, 12, 13

*** Mix of Private tenants and owners**

- Q5 a) Who in your household is responsible for your household energy bills?
- | | |
|------------------------|----------------------|
| Self only | 1 – GO TO Q5b |
| Self and other jointly | 2 – GO TO Q5b |
| Other | 3 – CLOSE |

- b) Who is responsible for related decisions such as switching energy suppliers?
- | | |
|------------------------|---------------------|
| Self only | 1 – GO TO Q6 |
| Self and other jointly | 2 – GO TO Q6 |
| Other | 3 – CLOSE |

Q6 Can you tell me whether you have an In Home Energy Display (Monitor) that allows you to see how much energy your home is using as it happens and or / Smart Meter? (NB, there may be some confusion as to what the units are, what they are called and so on so **show visuals** and refer to briefing notes to clarify if necessary)

- | | |
|---------------------------------------|---|
| Have Display/Monitor and Meter | 1 |
| Have Meter but not display | 2 |
| Have Display / Monitor but not Meter | 3 |
| Don't have Display / Monitor or Meter | 2 |

GROUPS 1-10: NONE TO HAVE A SMARTMETER AT HOME.

GROUPS 11-14 AND INTERVIEWS 1-12:

ALL TO HAVE EITHER SMARTMETER, MONITOR OR BOTH AT HOME.

- Q7 a) Have you switched your energy supplier in the last year or two?
- | | |
|-----|---|
| Yes | 1 |
| No | 2 |

RECRUIT AT LEAST 2 PER GROUP – NON USERS

b) Do you have a “contract” service and maintenance relationship with your energy supplier? (where you pay a fixed amount per month or per year and this covers you for annual service and breakdown for boilers, and / or central heating, and ./ or electrical, eg, British Gas Homecare)

- | | |
|-----|---|
| Yes | 1 |
| No | 2 |

RECRUIT AT LEAST 1 PER GROUP – NON USERS

**Q8 ALL NON USER GROUPS, EXPLAIN SCREENING INTERVIEW
GROUPS 1, 3, 6, 8, 10 – EXPLAIN PRE TASK**

Q9 USER GROUPS 11-14 – EXPLAIN PRE TASK

CLASSIFICATION

NAME _____

ADDRESS _____

TELEPHONE NUMBER _____

OCCUPATION OF HOUSEHOLD'S MAIN INCOME EARNER
_____**PROBE FOR FULL DETAILS. GROUP 3 ALL RETIRED**

SOCIAL GRADE:	A	1
	B	2
	C1	3
	C2	4
	D	5
	E	6

RECRUIT ACCORDING TO QUOTA

OWN OCCUPATION _____

AGE:	18-24	1
	25-30	2
	31-34	3
	35-40	4
	41-50	5
	51-60	6
	61-65	7
	65-75	8

RECRUIT ACCORDING TO QUOTA

SEX:	Male	1
	Female	2

RECRUIT ACCORDING TO QUOTA

MARITAL STATUS:	Married/cohabiting	1
	Divorced/separated	2
	Widowed	3
	Single	4

RECRUIT ACCORDING TO QUOTA

PRESENCE & AGES OF CHILDREN AT HOME:	None	1
	WRITE IN AGES _____	
	Independent older children only	2
	Empty nesters	3

RECRUIT ACCORDING TO QUOTA

ETHNIC STATUS:	<i>White:</i>	
	British	1
	Irish	2
	Other	
	WRITE IN _____	3
	<i>Mixed:</i>	
	White & black Caribbean	4
	White & black Asian	5
	White & Asian	6
	Any other mix	
	WRITE IN _____	7
	<i>Asian or Asian British:</i>	
	Indian	8
	Pakistani	9
	Bangladeshi	10
	Other	
	WRITE IN _____	11
	<i>Black or black British:</i>	
	Caribbean	12
	African	13
	Other black backgrounds	14
	<i>Chinese or other ethnic background:</i>	
	Chinese	15
	Other	
	WRITE IN _____	16

RECRUIT SOME ETHNIC REPRESENTATION THROUGHOUT THE SAMPLE.

DATE OF GROUP/INTERVIEW _____ TIME _____

I AM NOT A FRIEND OR RELATION OF THE RESPONDENT, AND TO THE BEST OF MY KNOWLEDGE HE/SHE IS NOT KNOWN TO ANY OTHER RESPONDENT IN THE GROUP

RECRUITER'S SIGNATURE _____ DATE _____

RECRUITMENT QUESTIONNAIRE: 'Quali-hall' Interviews

Q1 I am conducting a market research survey. Can you tell me if you or any of your friends or relations work, or have ever worked in any of these occupations? **READ OUT:**

ADVERTISING	1
MARKET RESEARCH	2
PUBLIC RELATIONS	3
MARKETING	4
PUBLISHING	5
JOURNALISM	6
BROADCASTING	7
ENERGY, ENERGY COMPANIES	8
ENERGY / ENVIRONMENTAL CONSULTANCY	9

IF ANY OF THE ABOVE MENTIONED, CLOSE

Q2 Do you have permanent right of residence in the UK?
 Yes 1 – **GO TO Q3**
 No 2 - **CLOSE**

Q3 Can you tell me whether you own your property or rent?
 Owner of a house 1
 Owner of a flat 2
 Tenant in privately owned house 3
 Tenant in privately owned flat 4
 Tenant in social housing (house) 5
 Tenant in social housing (flat) 6

TENANTS IN SOCIAL HOUSING: RECRUIT 5

TENANTS IN PRIVATELY OWNED HOUSING: RECRUIT 3

HOME OWNERS: RECRUIT 10

Q4 a) Who in your household is responsible for your household energy bills?
 Self only 1 – **GO TO Q4b**
 Self and other jointly 2 – **GO TO Q4b**
 Other 3 – **CLOSE**

b) Who is responsible for related decisions such as switching energy suppliers?

Self only 1 – **GO TO Q5**
 Self and other jointly 2 – **GO TO Q5**
 Other 3 – **CLOSE**

Q5 Can you tell me whether you have an In Home Energy Display (Monitor) that allows you to see how much energy your home is using as it happens and or / Smart Meter? (NB, there may be some confusion as to what the units are, what they are called and so on so **show visuals** and refer to briefing notes to clarify if necessary)

- Have Display/Monitor and Meter 1
- Have Meter but not display 2
- Have Display / Monitor but not Meter 3
- Don't have Display / Monitor or Meter 2

NONE TO HAVE A SMARTMETER AT HOME

Q6 a) Have you switched your energy supplier in the last year or two?
Yes 1
No 2

RECRUIT AT LEAST 6

CLASSIFICATION

NAME _____

ADDRESS _____

TELEPHONE NUMBER _____

OCCUPATION OF HOUSEHOLD'S MAIN INCOME EARNER
_____**PROBE FOR FULL DETAILS.**

SOCIAL GRADE:	A	1
	B	2
	C1	3
	C2	4
	D	5
	E	6

RECRUIT 8 ABC1s AND 8 C2DEs. THE REMAINING 2 AS THEY COME.

OWN OCCUPATION _____

AGE:	18-24	1
	25-30	2
	31-34	3
	35-40	4
	41-50	5
	51-60	6
	61-65	7
	65-75	8

RECRUIT 6 RESPONDENTS AGED 18-30.**RECRUIT 12 RESPONDENTS AGED 31+, WITH 8 AGED 31-65 AND 4 AGED 65+**

SEX:	Male	1
	Female	2

RECRUIT 6 MEN AND 6 WOMEN, THE REMAINING 2 AS THEY COME.

MARITAL STATUS:	Married/cohabiting	1
	Divorced/separated	2
	Widowed	3
	Single	4

PRESENCE & AGES OF CHILDREN AT HOME:	None	1
	WRITE IN AGES _____	
	Independent older children only	2
	Empty nesters	3

ETHNIC STATUS:	<i>White:</i>	
	British	1
	Irish	2
	Other	
	WRITE IN _____	3
	<i>Mixed:</i>	
	White & black Caribbean	4
	White & black Asian	5
	White & Asian	6
	Any other mix	
	WRITE IN _____	7
	<i>Asian or Asian British:</i>	
	Indian	8
	Pakistani	9
	Bangladeshi	10
	Other	
	WRITE IN _____	11
	<i>Black or black British:</i>	
	Caribbean	12
	African	13
	Other black backgrounds	14
	<i>Chinese or other ethnic background:</i>	
	Chinese	15
	Other	
	WRITE IN _____	16

RECRUIT SOME ETHNIC REPRESENTATION

INTERVIEWER'S SIGNATURE _____ DATE _____

PRE RESEARCH AWARENESS SCREENING QUESTIONS

PRE RESEARCH NON USER: GROUPS

Name

Group No

1. What comes to mind when you hear or see the words

'in home energy display'

'in home energy monitor'

'smart meter'?

2. If you think of your household energy supply and these words at the same time, does anything new or different come to mind?

3. What do you think these things are for, what do you think they do (if not already answered at 1 or 2)?

4. Would you be interested in having one? (if not already answered)?

5. Who would you get one from? (if not already answered)?

PRE TASK INSTRUCTIONS FOR ½ OF NON USER GROUPS

PRE TASK: NON USER GROUPS 1, 3, 7, 8, 10

Name **Group No**

PART ONE

Part one (complete part one before looking at part 2)

Please find out as much as you can about smart energy meters and monitors (displays)

- make some brief notes on what you find
- note where you looked for information, and where you got it
- tell anyone else in your house what you've found, and see what they think about it

PART TWO

See what you can find out if you look using these sources (if you haven't already found them yourself)

Wikipedia

DECC

Your energy supply company

British Gas

USwitch.com or similar

BBC

Money saving websites, eg, moneysavingexpert or similar

- make some brief notes on what you find
- note where you got the information
- tell anyone else in your house what you've found, and see what they think about it

DECC SMART METERS: NON USERS, GROUP DISCUSSIONS GUIDE

- Moderator introduction
 - explanation of purpose and nature of discussion, reassurance of confidentiality, legitimisation of different points of view, we don't expect everyone to have done the same things in their pre-task, we don't expect everyone to feel the same way about the various things we are going to talk about, that's why we run these sessions with a group of people
- Thinking right back to the beginning when they were recruited, and what they knew about Smart Meters / IHDs then... (refer to initial 'benchmark' interview – all groups)
 - where had these impressions come from
 - had they thought that Smart Meters would be something for them?
 - how interested had they been
 - why did Smart Meters seem more or less relevant
- Moving on to the pre task, and starting with their solo efforts... (pre task groups only)
 - did they have any idea where to start, what did they do?
 - if they 'searched' what terms did they use? what did they look at first
 - did they think of contacting anyone, if so who?
 - what was their initial reaction to the sources we suggested?
 - explore sources they used, what they found out, what they thought of this
 - did it make them interested, why, why not? or put them off, why?
 - did they find the terminology clear, ie, what it was referring to, eg, 'Smart Meter, IHD, 'Display', 'Energy Display' – what are the various components? how do they work together? and which terms do they think are clearest
- Participant generated propositions; If someone asked them why it would be worth their considering a Smart Meter what would they say? (pre task groups and non pre-task depending on level of knowledge)
 - what ideas could we come up with as a group
 - would these be for everyone or for different kinds of people
 - which ideas would go with what type of person / household
 - write down thoughts on cards and map to people / household types
- Where would they suggest they went to find out about Smart Meters, why? (pre task groups and non pre-task depending on level of knowledge)
- Introduce propositions (all groups), these are some ideas the team had before we started the project (start with ones close to any the group have generated, leave each visible as we move on to the next)
 - initial response and appeal
 - does the proposition have immediate relevance and resonance, does it require thought, explanation
 - can they 'pick the idea up' and relay / explain it to others
 - can the proposition be improved, if so how?

- if putting it in their words would they say it differently?
- is it 'for them', or for someone else, if so who, and why?
- who do they imagine this thought would come from

- Compare and contrast propositions, map and group
 - which are most engaging
 - would they be relevant at different times

- Sources; put identities out in front of group
 - are propositions more or less engaging depending on who they come from
 - who would they hear about Smart Meters from it really was in their interests to get one
 - map optimum proposition / source combinations

- Channels; how should they get these thoughts to people; supplier websites, 'search', direct marketing, social media, 'broadcast' media, 'editorial'
 - do all channels have a role, or do they feel differently about this kind of information depending on how it comes to them, eg, 'editorial' vs DM, vs social

- Map optimum combinations of propositions, sources and channels

- Round up by introducing Smart Meter / IHD information
 - does anything make them think again about propositions, sources, channels
 - do they have any additional thoughts or ideas as to how to get people interested, what would they say
 - check for comprehension of alternative terminology (Eg, IHD)

- Focus on potential areas of concern, data security and installation. Raise these conversationally, eg, 'some other people I spoke to said....'
 - are these concerns for anyone, if so, why?
 - what would reassure them? eg, source of Smart Meter or communication, independent endorsement, accreditation
 - how would anyone feel about an elderly relative installing a meter? if they have any concerns how should these be addressed

- Explain that smart meters will not be compulsory (if the question is raised earlier in the discussion then answer at that point), but that meters have to be changed every 20 years or so anyway although smart functions can be disabled
 - how do they feel about this, is it reasonable to expect to have the choice
 - does anyone feel they should be compulsory

- Thank and close

DECC SMART METERS: OWNERS GROUP DISCUSSION GUIDE

- Moderator introduction
 - explanation of purpose and nature of discussion, reassurance of confidentiality, legitimisation of different points of view, we don't expect everyone to have done the same things in their pre-task, we don't expect everyone to feel the same way about the various things we are going to talk about, that's why we run these sessions with a group of people
- Revisit pre task, introduce pictures if available.... have a look at notes
 - clarify who thinks they have what, Smart Meter only, Meter + Display, Display only
 - ask group members to explain to each other, or alternatively explain using information from description (don't show description at this point)
 - has the display always been in this position?
 - if not trace path back over time, establish what has influenced its journey, why it has moved, etc
 - why is it where it is now
 - when does it crop up in conversation, if at all
 - has this always been the case
 - did it attract more attention when they first had it
 - do some HH members tend to notice it or draw attention to it more than others
 - explore any examples of display / meter influencing behaviour
 - how do people refer to the meter / display and any action that is indicated or taken, what words / phrases do they use
 - is the terminology that is used for meters / displays clear, ie, what 'unit' it is referring to, eg, 'Smart Meter, IHD, 'Display', 'Energy Display' – what are the various components? (use pictures to clarify if necessary) how do they work together? and which terms do they think are clearest
- We'd like you to think back when they first heard of Smart Meters / Energy displays and talk us through how you came to have on
 - did they instigate getting one, or did they respond to an offer
 - what made them feel they should have it
 - did they have any doubts at all
 - who did they deal with, did they make them feel more or less convinced, did they have any concerns
 - if they were back at the start would they still have it, why, why not
 - has it worked or benefited them in the way they expected or have some benefits become apparent subsequently
- Participant generated propositions; If someone asked them why it would be worth their considering a Smart Meter what would they say?
 - what ideas could we come up with as a group
 - would these be for everyone or for different kinds of people

- which ideas would go with what type of person / household
- write down thoughts on cards and map to people / household types
- Where would they suggest people went to find out about Smart Meters, why?
- Would they tell them to watch out for any drawbacks?
- Introduce propositions, these are some ideas the team had before we started the project (start with ones close to any the group's experience or that they have generated, leave each visible as we move on to the next)
 - initial response and appeal
 - does the proposition reflect their experience
 - have they ever mentioned the thought to people who don't have them, what response did they get
 - can the proposition be improved, if so how?
 - if putting it in their words would they say it differently?
 - is it 'for them', or for someone else, if so who, and why?
 - who do they imagine this thought would come from
- Compare and contrast propositions, map and group
 - which are most engaging, which best reflect their experience and what they feel the unit does for them
 - would they be relevant at different times, thinking back to how they came to have one, have it installed, and live with it
- Sources; put identities out in front of group
 - if one of these organisations talked about meters / displays which do they think would be most likely to reflect their own experiences
 - who would they have listened to at the time and who would they try and talk to now
- Channels; how should they get these thoughts to people; supplier websites, 'search', direct marketing, social media, 'broadcast' media, 'editorial'
 - do all channels have a role, or do they feel differently about this kind of information depending on how it comes to them, eg, 'editorial' vs DM, vs social
- Map optimum combinations of propositions, sources and channels
- Round up by introducing Smart Meter / IHD information
 - which do they think the main points are based on their experience
 - does anything make them think again about propositions, sources, channels
- Focus on potential areas of concern, data security and installation Raise these conversationally, eg, 'some other people I spoke to said....'
 - are these concerns you have had at any stage?

- do any seem more or less real concerns given their experiences
- is there anything they feel they need reassurance on now?
- how would anyone feel about an elderly relative installing a meter? if they have any concerns how should these be addressed

- Explain that smart meters will not be compulsory (if the question is raised earlier in the discussion then answer at that point), but that meters have to be changed every 20 years or so anyway although smart functions can be disabled

- how do they feel about this, is it reasonable to expect to have the choice
- does anyone feel they should be compulsory

- Thank and close

DECC SMART METERS: USERS, IN HOME USER INTERVIEWS DISCUSSION GUIDE

- Moderator introduction
 - explanation of purpose and nature of interview, reassurance of confidentiality
- Move to meter / display in current location, take photos video as appropriate
 - discuss visibility of unit, extent to which it is noticed or referred to, and by who
 - any linkage to what they do as a household, heating, hot water, use of appliances
 - has it always been this way, eg, may get more attention in 'early days' while household arrives at an efficient energy consumption pattern

 - why has it ended up where it has? eg, visibility, aesthetic shortcomings, got bored with it, etc
 - where should it be in order to make it most useful
 - prompt with alternative locations, how these might correspond with family lifestyle
 - do they think it is in the best possible place at the moment
 - if not would they move it, why? why not?

 - how is it or was it referred to in household conversation
 - what words do they / the family use to describe it (display / meter / both), what it is indicating, what if anything should be done about that
 - how do different household members feel about it
 - also, the actions it indicates
 - do some HH members tend to look at it or draw attention to it more than others, if so how do they dynamics play out between family members

 - clarify what they think they have (if necessary), Smart Meter only, Meter + Display, Display only (use information from description as appropriate)
 - if they have only one of the elements did they consider the other part, why? why not?
- Has it helped save energy at all, if so how
 - eg, about doing new things, or remembering to do the things they knew they should
- Participant generated propositions; If someone asked them why it would be worth their considering a Smart Meter what would they say?
 - what ideas could we come up with
 - would these be for everyone or for different kinds of people
 - which ideas would go with what type of person / household
- Would they have any advice to offer people as to how to go about getting one, where to put it, how to use it, drawbacks to look out for, etc

- Introduce propositions, these are some ideas the team had before we started the project (start with ones close to any the group's experience or that they have generated, leave each visible as we move on to the next)
 - initial response and appeal
 - does the proposition reflect their experience
 - have they ever mentioned the thought to people who don't have them, what response did they get
 - can the proposition be improved, if so how?
 - if putting it in their words would they say it differently?
 - is it 'for them', or for someone else, if so who, and why?
 - who do they imagine this thought would come from
- Compare and contrast propositions, map and group
 - which are most engaging, which best reflect their experience and what they feel the unit does for them
 - would they be relevant at different times, thinking back to how they came to have one, have it installed, and live with it
- Round up by introducing Smart Meter / IHD information
 - which do they think the main points are based on their experience
- Focus on potential areas of concern, data security and installation Raise these conversationally, eg, 'some other people I spoke to said....'
 - are these concerns you have had at any stage?
 - do any seem more or less real concerns given their experiences
 - is there anything they feel they need reassurance on now?
 - how would anyone feel about an elderly relative installing a meter? if they have any concerns how should these be addressed
- Explain that smart meters will not be compulsory (if the question is raised earlier in the discussion then answer at that point), but that meters have to be changed every 20 years or so anyway although smart functions can be disabled
 - how do they feel about this, is it reasonable to expect to have the choice
 - does anyone feel they should be compulsory
- Thank and close

DECC SMART METERS: NON USERS, QUALI-HALL DISCUSSION GUIDE

- Moderator introduction
 - explanation of purpose and nature of interview, reassurance of confidentiality
 - here to look at some messages about an item of household equipment, and see whether they are likely to get people interested or not
- Introduce propositions in rotated order (use description only if necessary)
 - initial response and appeal
 - communication, comprehension, do they have an idea what this might be talking about
 - does the proposition have immediate relevance and resonance, does it require thought, explanation
 - can they 'pick the idea up' and relay / explain it to others
 - can the proposition be improved, if so how?
 - if putting it in their words would they say it differently?
 - is it 'for them', or for someone else, if so who, and why?
 - who do they imagine this thought would come from
 - when they get home later do they think they would want to know more or not
- Had they heard, read or seen anything about smart meters / displays before today
 - what did they understand them to be for
 - did they think it might be in their interests to have one
 - had they thought about getting one at all
- Compare and contrast propositions, map and group
 - which are most engaging
 - would they be relevant at different times
- Sources; put identities out in front of group
 - are propositions more or less engaging depending on who they come from
 - who would they pay more attention to
- Round up by introducing Smart Meter / IHD information
 - does this prompt any thoughts which are not contained in the propositions
 - does it prompt any concerns
- Recap
 - which thoughts can they recall as most likely to get their attention
 - do they think they will be inclined to find out more
 - will they be more inclined to listen to anyone offering them a meter / display
- Thank and close

STIMULUS

Smart Meter / IHD Description

Smart meters are the next generation of gas and electricity meters which in conjunction with an in-home display allow you to see how much energy you're using.

The energy monitor or display (a small device about the size of a smart phone) shows you how much energy you are using at different times of the day, week, month, year etc, and how much this costs, which could help you to cut your energy usage and your bills by highlighting ways you can be more energy efficient.

Smart meters can send electronic meter readings to your energy supplier automatically so the company always has an accurate meter reading and there's no need for you to take a meter reading yourself ever again. Smart meters could also lead to the creation of innovative new energy tariffs, or personalised plans to fit your lifestyle and energy usage.

Smart meters could also lower bills and CO2 emissions by helping energy companies to run more efficiently. If energy companies have a more accurate picture of how much energy the country uses and when they use it, they will be able to make sure they have the right amount of energy at the right time.

You will have the option to replace your current gas and electricity meters with a smart meter. Existing meters have to be replaced at intervals anyway, roughly every 20 years.

Smart meters and energy monitors can be supplied and installed by energy companies, or by approved independent suppliers and contractors.

IHD Visuals



Sources Prompt Board



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