Ofgem Consumer First Panel Year 3 – 2010/2011

Findings from first workshops (held in November 2010)

January 2011

Contents

Background and introduction

The Office of Gas and Electricity Markets (Ofgem) is the economic regulator for the electricity and downstream natural gas markets in Great Britain. It has the key objective of protecting the interests of all current and future consumers. Ofgem's 'Consumer First' initiative is a programme that includes a range of primary market and social research to help the organisation ensure that policy development is consumer focused and that consultations are aligned with the abilities of consumers to respond effectively. As part of this programme, Ofgem has set up the 'Consumer First Panel', a diverse group of approximately 100 domestic energy consumers recruited to take part in a series of research events and surveys, and to be 'the voice of the consumer' and a unique resource for Ofgem. 2010/11 is the third consecutive year in which such a Panel has been run.

The Panel was designed to enable members to discuss issues from a consumer perspective with the advantage of a rounded view of how the industry works and knowledge of the business models involved. Participants will be called upon regularly to feed back their views and opinions on key energy topics and regulatory issues.

As with the previous 2 years of the Consumer First Panel, the first workshop was set up as a three hour deliberative evening event in each of the locations. The full agenda and all content used at this year's first workshop can be found in the appendices.

This agenda was devised to both provide Panellists with enough background information on the topics under discussion to have an informed view, and also to give them space to consider their views in the context of the wider energy customer base. The topics under discussion were firstly, a general discussion about recent events in the energy industry from a customer perspective, and secondly, a discussion about the perceived benefits and drawbacks of smart meters and what types of communications they may wish to see before, during and after the rollout programme. An overview of the agenda can be seen below, including, in *italics*, details of the information used to brief Panellists at various points in the discussion.

- Spontaneous discussion of energy habits and experience of switching
    - Understanding of and attitudes to energy habits and recent changes to these
    - Experience of switching suppliers
- *Quiz to impart various facts about the UK energy market, including consumption trends, use of renewables, extent of fuel poverty and consumer representation*
- *Presentation on the structure of the energy market and the roles of key players in consumer representation and protection (including Ofgem)*
    - Understanding of the structure of, and recent events in, the energy market

- - Smart metering
  - Sustainability
  - Price changes
  - Changes in availability of energy goods
  - Changes to newly built homes
  - Changes in energy consumer behaviour
  - Future risks to energy supply and the action of different bodies to address this
- Smart Meters
- ***Presentation*** *on the function of Smart Meter, how they work, their potential benefits and a brief overview of the intended rollout plan*
  - Reactions to the concept of a Smart Meter
  - Gauging initial reactions and understanding of what consumers think are the main benefit and drawbacks of Smart Meters
  - Impact on various groups
  - Challenges for rollout
- Important considerations for implementing rollout of Smart Meters
  - Understanding the type and timing of information and support consumers will want and expect with regards to the roll out of Smart Meters

There was also an extensive discussion about the potential issues that may arise before, during and after the installation of smart meters.

Panellists were also asked to complete a pre-task prior to attending the workshop. This involved drawing a diagram of their home and annotating with how energy use has changed over the years in each part of their home. The pre-task also asked Panellists to carry out 'citizen research' by asking their neighbours, friends and family about changes in energy use over the past few years.

Executive Summary

Consumers' views and experiences in the home energy sector

- Consciousness of domestic energy and an understanding of how to cut back on usage continue to rise on Panellists' agenda. Many Panellists reported actively trying to reduce their energy use in recent years. This was particularly true for the last three years and Panellists referred to rises in energy prices and the recession as reasons for making energy savings.

- As found in previous Panels, cutting back energy use was still predominately cost driven, with Panellists adapting their behaviour and how they use energy to reduce the size of their bill.

- Whilst a few Panellists regarded the environmental impact of reducing energy use as highly motivating, many saw it as a positive additional outcome rather than a primary driver.

- Overall, Panellists had a good understanding of how to cut back on usage, building upon the knowledge levels in the previous year's Panel. Panellists pointed out that messages about reducing energy use were continually being reinforced by the media and by energy companies and some thought that these had, as a result, now become ingrained into the public consciousness.

- Some of this year's Panel also appeared to be more 'savvy' about energy suppliers compared to the last two Panels, by following prices in the market and monitoring their bill over the period of a year.

- The reasons for switching were mainly due to rival suppliers offering better deals and lower energy tariffs as well as a perception of better customer service. A few Panellists also mentioned switching supplier when moving home.

- In terms of the process of switching itself, the majority reported that it ran smoothly with no problems experienced and little input or action required. Once Panellists had switched, there was often a perception that suppliers were 'all the same' and that savings from switching are not significant; they are often only sustained for short periods after the switch before prices go up again.

Changes happening in the energy industry

- There was some spontaneous awareness of changes happening in the industry, particularly in terms of price increases and changes to consumer behaviour with regard to energy and appliances.

- More Panellists this year mentioned increases in energy prices in the past 12 months than in previous years. There remained a feeling of distrust towards energy suppliers amongst some Panellists. There was also a continued lack of understanding as to the drivers behind differences in energy bills, what causes prices to rise and how the various tariffs work.

- In terms of changes to consumer behaviour, a few Panellists spoke of consciously avoiding using or even getting rid of appliances with high energy consumption. Others noted that they had actively chosen to buy a particular appliance because of its eco-rating. More of this year's Panellists mentioned using wood burners, log burning stoves and open fires to heat the home.

- More of this year's Panellists had heard of Smart Meters in some form or another but only a few had a detailed understanding of what they are. Spontaneously, a number of Panellists said that they thought that Smart Meters are a good idea and would like to see them used more widely.

- The most widely mentioned change to consumer goods available were energy saving light bulbs, which are seen to have become commonplace. Other Panellists also spoke of a greater variety of affordable energy efficient appliances and white goods. A few Panellists also noted that some appliances no longer had standby functions.

- The need to develop renewable sources of energy for the future was more strongly vocalised this year, with wind, solar and tidal sources frequently mentioned.

- Awareness of regulations about the energy efficiency requirements for new homes is on the increase.

Potential energy risks to consumers and subsequent solutions

- Generally, Panellists found it more difficult to think of potential risks to consumers and the potential solutions. For many, having a secure energy supply was taken for granted.

- Panellists mostly spoke of the danger of non-renewable energy sources running out as well as the potential for other countries, especially Russia, to withhold gas supplies to Great Britain. These views reflected media stories that Panellists had seen, and as a result of this media coverage, the issue remained a consistently perceived risk across all panels.

- Although, Panellists were generally supportive of nuclear energy as a cheaper and more energy efficient source of energy, some hesitation was noted with regards to the risk from nuclear waste and potential accidents.

- When noting the potential solutions to energy risks, Panellists continued to mention the need to explore the use of renewable and alternative sources of energy. This included solar, wind and tidal power as well as bio-fuels. With regards to alternative sources of energy, Panellists spoke of nuclear power and the need to discover new sources of gas.

- However, other solutions included; the need to regulate the industry better so that prices don't get out of hand; changes in personal and commercial behaviour; and educating consumers on energy use.

- There was also negativity expressed in relation to the liberalisation of the energy industry in the 1980s, which some felt should not have taken place. There was a feeling from some that the energy sector should have remained in the hands of the Government and not private companies.

- It was felt that it is the responsibility of the government and Ofgem to regulate the market on prices and ensure that there is a secure and reliable supply of energy in Great Britain. However, some also saw a role for suppliers in passing on energy savings to customers more promptly.

Smart Meters

- Overall, reactions to Smart Meters were neither overwhelmingly positive nor negative: Panellists across all locations recognised certain benefits, but the idea of Smart Meters and the roll out raised a number of concerns and unanswered questions. Many of the potential negatives identified were areas of uncertainty that would require reassurance or further information rather than outright drawbacks.

- In general, the majority of people did not understand what the physical constituent parts of the Smart Meter are and what the difference is between a Smart Meter and an In-Home Display (IHD).

- The key benefit identified was being able to monitor the amount and cost of energy usage in the household. Spontaneous examples and suggestions given by Panellists were monitoring energy by time of use, or possibly even at a room or appliance level. This would subsequently allow customers to implement changes in behaviour that would reduce and regulate energy usage and save money on energy bills. It was also felt to enable more transparent and fairer billing

Further potential benefits mentioned included removing the requirement for meter readers and estimated billing; being able to budget for the cost of using energy; being able to understand the impact of new energy-efficient appliances; and encouraging children to be more energy conscious by showing them how much energy they use. Panellists also felt that it would be helpful if Smart Meters enabled them to detect faulty, older and energy inefficient appliances.

Panellists perceived the main drawback to be the potential of causing certain consumers undue anxiety, especially the elderly. They felt that this could result in them feeling uncomfortable about being given feedback on how much they are spending, to the extent that they stop using their heating when they really need to. Some also thought that certain types of consumers would be put at a disadvantage because they would find the Smart Meters and IHD difficult to understand or use.

There were also a few Panellists who questioned the value of Smart Meters given that they wouldn't in themselves reduce energy usage or make bills cheaper but rather require consumers to change their energy use behaviour in order to achieve this.

Smart Meter roll-out

- The most commonly raised question with regards to the roll out was the issue of cost and who would pay for the Smart Meters. Panellists were concerned and somewhat indignant that they might have to bear some or all of the costs involved. The cost of the rollout was mentioned as being potentially very high, and some questioned whether Great Britain can genuinely afford to run such a project, particularly given the existing economic climate.

- Data privacy was also a key area of concern; Panellists were wary of their data being shared with third parties and wanted to know who these third parties were and how their data might be used. Some were also concerned about the security of their data and whether it could be 'hacked' into.

- One of the most important principles that Panellists thought should be followed as part of the roll out was the early provision of far-reaching, simple, consistent and universally accessible (especially for vulnerable customers) information on what Smart Meters were, why they were being rolled out and, critically, what the benefits would be for consumers.

- Prior to installation, consumers would also need to know details of when the installation would take place, what the process would involve and how long it would take. This could be provided approximately one month in advance of the installation visit with a reminder a few days before.

- Panellists identified various additional areas for reassurance in the period leading up to installation of their Smart Meter, which included clarification of: who has responsibility for the roll out, who is funding it, how will it be undertaken and how will data be shared and used.

- There was a feeling that the dissemination of the information should begin straight away to embed it in people's minds and subsequently provided regularly over the next few years leading up to the roll out so that the public is informed and primed.

- Television adverts were seen to be the best way to get the appropriate messages across to the greatest number of people, but there was also perceived to be a need for a free Helpline, insertions in energy bills and an online presence.

- At the point of installation, Panellists would want clear and easy to understand information on how to use their Smart Meter and in-home display (IHD). Other important information

requirements centred on maintenance and safety of the meter and IHD, data privacy and implications for moving house or switching suppliers.

- Panellists felt that a follow-up should be carried out soon after installation to ensure consumers, especially the vulnerable, aren't experiencing problems and are confident using their meter and IHD. Panellists mostly thought this should be a telephone call but a few did suggest follow-up visits. It was also felt that there should also be a source of information that can be accessed on an 'as and when' basis by consumers who may have after-care queries, may be experiencing problems or faults or who may want further information or updates on new developments or technologies.

- The provider of information was an important consideration for Panellists but there wasn't a clear consensus of who would be most appropriate. Overall, it was thought that suppliers should give the more practical information as they are responsible for providing Smart Meters, are seen as the experts in the energy market and are the current contact for consumers in relation to energy utility. There was, however, a perceived role for the government or a central independent body to oversee the whole programme, set expectations for energy suppliers and give over-arching messages regarding the roll out.

Methodology

The illustration below shows the overall structure of the third year of the Consumer First Panel:
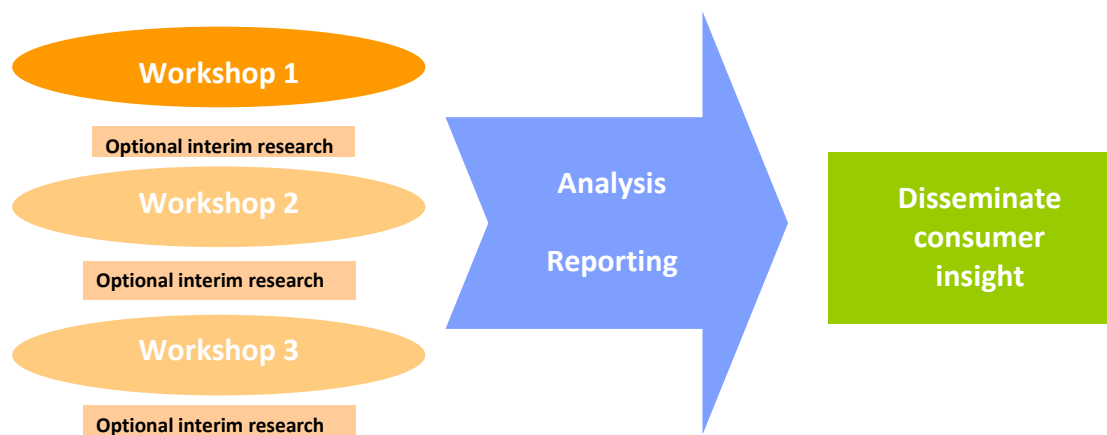

Workshop events can be used to explore topics in depth, and optional interim surveys are able to quickly and cost effectively get feedback on specific issues.

Sample and recruitment

In order to ensure a representative sample of consumers in Great Britain, and also to avoid many of the frequently researched population centres, Panellists are drawn from six locations to ensure everyday consumer views are captured.

The members of the Panel change each year and this year involved new consumers from different locations. This year the Panel was held in six different locations in Great Britain. This was to give a fresh perspective and reflect the views of both rural and urban consumers.

This report details the findings from the first meeting of the third year of the Ofgem Consumer First Panel which consisted of a representative sample of 98 consumers across 6 locations in Great Britain.
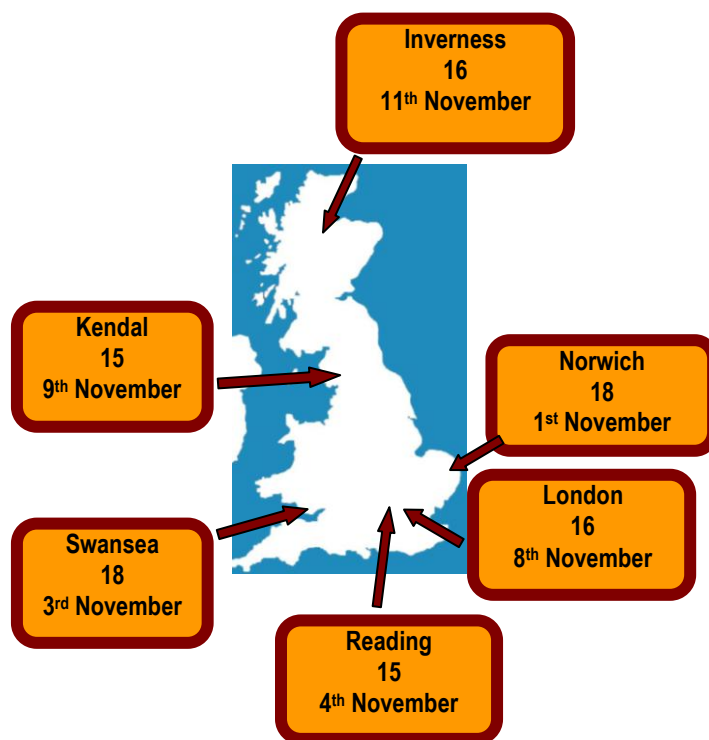
Participants were recruited purposively. This meant using approaches of door-to-door, on-street and 'snowballing' (i.e. developing contacts from those already recruited). They were all given information about the purpose of the Panel and of the commitment required at this stage – i.e. they would be taking part in up to 3 workshops over the year, with the potential of being asked to take part in other research in between. They were also told that an Opinion Leader member of staff would contact them for a short discussion prior to the first event (this was to ensure that they were committed to attending and is outlined in the next section). The groups were recruited using a specification based on National Statistic census data for Great Britain (2001) including the following criteria:

- Gender
- Age
- Ethnicity
- Socio-Economic Group (SEG)
- Tenure
- Fuel poverty

- Rural vs. Urban
- Supplier
- Electricity only vs. Gas and electricity
- Payment type
- Employment status
- Family status

While the Panel was represented to be as nationally representative as possible, in each location certain demographics were raised or lowered according to the surrounding region. Demographics were up-weighted to ensure certain groups were represented:

- **Black and Minority Ethnic (BME)** – overall, these areas are not wholly reflective of the ethnic mix of Great Britain. To compensate for this we up-weighted the representation of BMEs in London and Reading to ensure that the overall sample broadly reflects the ethnic profile of Great Britain.

- **Age** – due to higher levels of drop out in this demographic, we up-weighted the proportion of younger Panellists.

- **Rural** – we up-weighted those living in rural areas, including those living off the gas networks, predominantly from locations around Kendal and Inverness, but also from in and around Norwich.

The Panel was over recruited to cover a potential drop out rate of 10%, which is common in research. The table below shows the overall target sample for recruitment along with those who were recruited and those that actually attended the first workshop:

Sample	Target	Achieved	Attended
Gender *			
Male	52	52	45
Female	56	56	53
Total	**108**	**108**	**98**
Age *			
18-24	20	15	13
25-44	37	42	37
45-64	30	34	33
65+	21	17	15
Total	**108**	**108**	**98**
Ethnicity *			
White British	80	87	80
White Other	3	9	9
Black or Minority Ethnic	25	12	9
Total	**108**	**108**	**98**
SEG			
AB	23	22	19
C1	34	40	34
C2	24	24	23
DE	27	22	22
Total	**108**	**108**	**98**
Rural vs Urban *			
Urban	93	90	82
Rural	15	18	16
Total	**108**	**108**	**98**
Electricity Only			
Electricity Only	17	17	16

Electricity and gas	91	91	82
Total	**108**	**108**	**98**
Tenure *			
Owner Occupied	63	63	58
Social Rented	27	24	23
Private Rented	18	21	17
Total	**108**	**108**	**98**
Fuel Poverty			
Yes	19	15	14
No	89	93	84
Total	**108**	**108**	**98**
Employment status			
Employed	61	74	65
Unemployed	6	9	9
Student	8	7	6
Retired	26	14	14
Looking after home / family	7	4	4
Total	**108**	**108**	**98**
Long term condition or disability			
Yes	22	16	15
No	86	92	83
Total	**108**	**108**	**98**

Ensuring attendance and engagement

When first recruited all participants received a letter welcoming them to the Panel, as well as a 'participant contract'. The contract along with an introduction letter from Ofgem was also given to participants at the beginning of the first workshop. The contract is a non-legally enforceable contract that outlines:

- What the aims of the Panel are.
- Who their contacts should be if they have any queries between events.
- What they can expect from the Panel.
- What the Panel expects of them.
- How they would be incentivised for their time.

We also included an additional stage for recruitment for this year's Panel. After potential Panellists have passed a screening questionnaire (which was agreed with Ofgem to meet their sampling requirement), to ensure they meet the relevant criteria to take part, each completed a short, informal telephone interview with Opinion Leader staff. During this interview:

1. They were asked how much and what they knew about Ofgem and the Consumer Panel.
2. They were asked for their reasons for joining the Panel and their expectations of it.

3. The process of the Panel was reiterated to them, described as a 3 stage event with the same Panel members attending each time.
4. The importance of Panel members making a commitment to serve a year on the Panel and attend **all** events (illness and holidays obviously allowing) was emphasised.
5. The cumulative structure of the incentives was reiterated – it was explained that this structure has been put in place to reflect the importance of consistent attendance.
6. They were asked whether they feel able to commit for a year – and if not were excluded.

The aim of this process was to leave Panellists with the impression that their input is important and valued, and to encourage buy in to the need to attend all events for the year.

Context to workshops

This report details the findings from the first workshop in the third year of the Consumer First Panel across all locations, which took place between 1st and 11th November 2010. This section looks at the subject of media leading up to and during the workshops, in order to give the context and identify any potential influential stories. The timeline of the main media context is shown in Figure 1.

*Figure 1 – Timeline of contextual events*
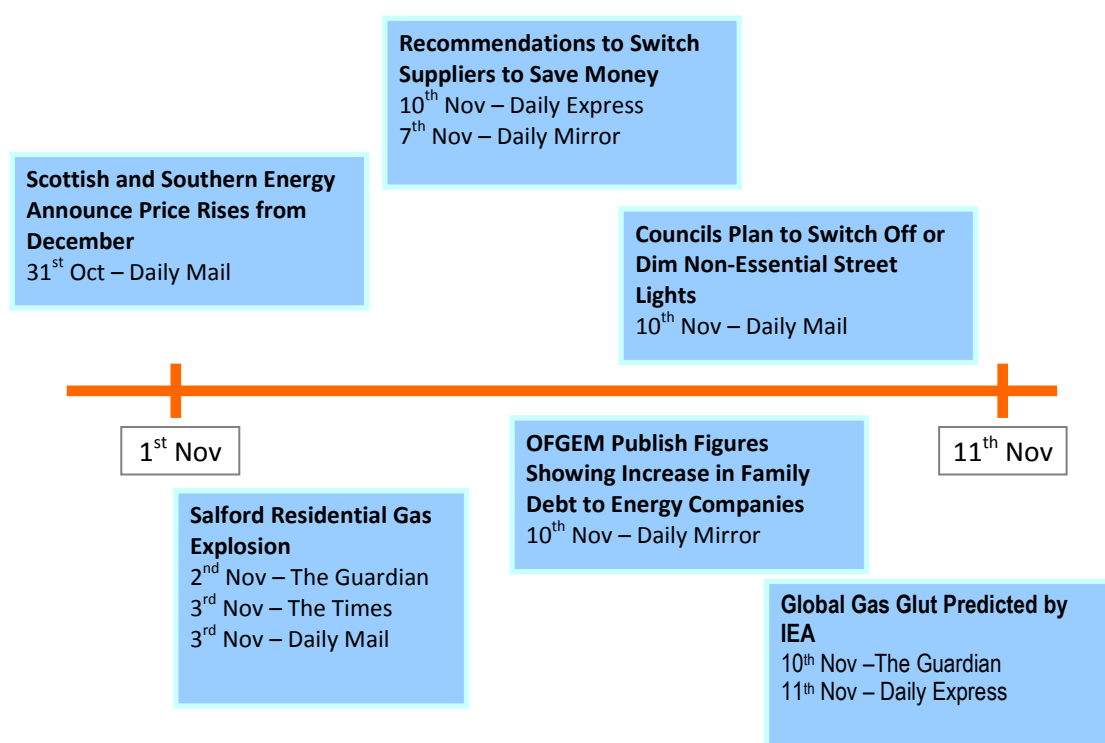
Relevant articles which are likely to have been visible to Panellists include:

- **Scottish and Southern Energy (SSE) Announce Price Rises from December** – at least two articles drew attention to the announcement that SSE will rise prices from December and that this is related to the companies financial performance:
    - The Daily Mail (10th Nov) reported that an *"increase in prices to the company's 3.6 million gas customers should boost margins in the second half of the year and is expected to keep SSE on course to meet analysts' forecasts for full-year profits of around £1.3 billion."*

- **Recommendations to Switch Suppliers to Save Money** – as SSE announced price rises, EDF had announced price freezes. This may have prompted articles that recommended that consumers switch suppliers to find the best deal. They mention not only unit prices but also tariffs that help to reduce bills through reducing usage:

- The Daily Express, YourMoney Feature (10th Nov) recommended that "*While there are big savings to be made by switching to the cheapest tariff, you can also reduce costs significantly by managing your energy usage*." They suggest the benefits of certain tariffs that "*typically provide devices, tips and advice but also allow customers to upload meter readings and track their energy usage, meaning an end to estimated billing which can cause people to fall into debt with their supplier.*"

- The Daily Express (7th Nov) highlights that "*Moving can take up to two months, so if you want to save during the coldest months, you'll need to take action as soon as possible.*" The article also mentions that "*one way of avoiding any increases is to switch to an online fixed tariff so you know what your bills will be for a set time.*"

- **Councils Plan to Switch Off or Dim Non-Essential Street Lamps** – one article drew attention to the plans of many councils across the country:
    - The Daily Mail (10th Nov) revealed that "*up to three-quarters of councils are planning to turn off street lamps or dim the lights in an attempt to save money and meet climate change targets, a poll has found.*" The article also refers to the fears people have about effects on crime and safety.

- **OFGEM Publish Figures Showing Increase in Family Debt to Energy Companies** – one article drew attention to the plans of many councils across the country:
    - The Daily Mail (10th Nov) revealed that "*up to three-quarters of councils are planning to turn off street lamps or dim the lights in an attempt to save money and meet climate change targets, a poll has found.*" The article also refers to the fears people have about effects on crime and safety.

- **Global gas glut predicted by IEA (International Energy Agency)** – advances in technology meant the supply of global gas would increase:
    - The Guardian (10th Nov) wrote that "*The world faces a long term gas glut because of recent technical advances which have made possible the exploitation of previously untapped shale gas, coal bed methane and tight gas deposits, mostly in the US, China and Australia.*" The article highlights concerns that the glut will hold back investment in renewable energy
    - The Daily Express (11th) highlighted the more domestic point that "energy companies were yesterday urged to scrap plans for winter price rises after experts revealed the world has a "gas glut" that will last a decade." It questions the recent increases in fuel prices when supply has clearly increased.

Energy Habits

In the initial workshop discussions, participants were asked to talk about how their personal energy use and habits in the home had changed in the last five years, which they had recorded on a paper-based pre-task. They had also been asked to act as 'citizen researchers' by gathering and recording the views and energy habits of their friends, neighbours and family (see Appendix 1). An example of the form used to do this can be seen below:
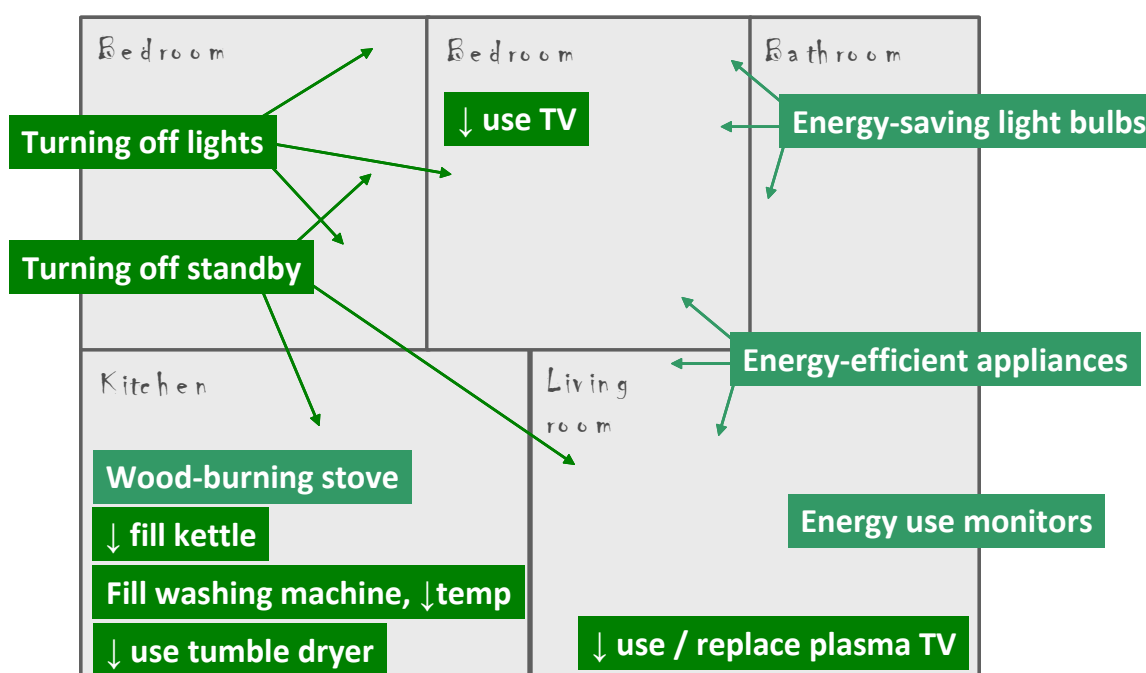
Drawing on these aides, the Panellists confirmed the findings from the first and second years of the Ofgem Consumer First Panel, suggesting that the issue of domestic energy continues to rise in the public consciousness.

The new Panellists referred to becoming increasingly conscious of their energy consumption and many were actively trying to reduce the amount of energy they used. They reported becoming increasingly more active over the last three years and considered that this was driven by a combination of rises in energy prices and the recession. As found in previous Panels, cutting back energy use was primarily motivated by cost, with Panellists adapting their behaviour and energy use to reduce the size of their bill.

For a few Panellists, the environment and sustainability were important considerations in reducing the amount of energy that they use. Most, however, regarded the positive impact on the environment to be a benefit additional to cost, rather than a determining factor in their attempts to reduce energy consumption. This is consistent with the previous Panels.

Overall, Panellists had a good understanding of how to cut back on usage, building upon the knowledge levels in the previous year's Panel. The focus of mainstream media was said to be influential in determining increased knowledge in the area, including adverts showing ways to reduce energy use and programmes, and articles on the damage being caused to the environment playing an important role. Panellists pointed out that messages about reducing energy use were continually being reinforced by the media and by energy companies and some thought that these were, as a result, becoming ingrained into the public consciousness.

> *"TV adverts, newspapers, suppliers and consumer programmes like Watchdog all give advice on energy saving."*

Nearly all Panellists reported changing both the way they used energy and the types of appliances and energy goods they bought. In terms of the way Panellists used energy, some of the most common changes included turning off lights in rooms that are not occupied, avoiding the use of standby functions on appliances, filling kettles only as much as needed and using only full loads in washing machines and dishwashers. A few had actively changed their behaviour in relation to specific energy uses and had seen savings taking place through reducing the use of more expensive-to-run appliances and gadgets such as tumble driers and under floor heating.

In terms of the change in the types of appliances and energy goods being used, the most commonly mentioned products were energy saving light bulbs. However, there was some resentment that this had been forced upon them and that they had been left with no choice. A few Panellists specifically chose to buy appliances that were rated as more energy efficient and others generally acknowledged that any new appliances they had bought in the last five years would be more energy efficient than older goods.

> *"Have bought an energy saving washing machine and we specifically looked for a more energy efficient one."*

> *"We were originally sent free bulbs and then went around and switched all of them. Now we are just used to them being dimmer than the old ones."*

Despite appliances being more energy efficient, many Panellists recognised that the number of appliances per home such as TVs, laptops and computers had increased over the past five years contributing to higher energy consumption. More generally, there was an increased level of knowledge of the home inventory and the comparable energy usage of different appliances. For some of those who thought their energy consumption had increased during the last five years, children were identified as a key cause. Those with young children say that this is because the need for heating and washing is high and unavoidable. Those with teenagers talk about it being difficult to get them to take energy efficiency seriously in the home, as well as the fact that they are high users of appliances such as televisions and games consoles (and the fact that they do not pay the bills).

> *"Always think about my partner using his Playstation and TV – I keep trying to tell him to cut back."*

> *"I've found increased energy use because I have more children. They have lots of electrical things in their bedroom like the side light, main light, Nintendo DS. As the children get older they're staying up later so TV stays on later"*

Some of this year's Panel also appeared to be more 'savvy' about energy suppliers compared to the previous two years, by following prices in the market (for example, through web comparisons) and monitoring their bill over the period of a year to see if whether they should switch supplier or if a switch they'd made had saved them money. A couple of Panellists noted that it was cheaper having one supplier for both gas and electricity.

> *"Switched a few times – go on to comparison websites every 6-9 months. You need to be savvy."*

> *"It's cheaper to begin with but then more expensive, so I changed again."*

A few Panellists in each of this year's workshops noted that they were happy with their current supplier and saw no need to switch. However, the majority reported having switched suppliers at some point. Amongst these only a few had made a recent switch in the last year or so. Some Panellists in Inverness felt that they did not have a choice of electricity supplier; they felt that the incumbent supplier was the only one realistically available to them.

The reasons for switching were mainly due to rival suppliers offering better deals and lower energy tariffs as well as a perception of better customer service. A few Panellists also mentioned

switching supplier when moving home, with one or two experiencing problems when doing so, especially being charged simultaneously by both suppliers.

In terms of the process of switching itself, the majority reported that it ran smoothly with no problems experienced and little input or action required. Once Panellists had switched, however, there was often a perception that no real difference had been noticed or that price reductions are often only sustained for a period of about three months after the switch.

> *"From my experience, it's easy to switch, you ring them up and then you get some paper work through the post."*

The perception that suppliers were 'all the same' was a reason why other Panellists had not switched. Personal inertia also played an important role, with some Panellists seemingly resistant to change and not wishing to take the time to seek out better deals or tariffs or initiate and engage with the presumed personal effort involved in switching.

> *"Have never switched because I'm happy with the company I'm with. If you switch they just increase their prices so you might as well go with who you know."*

Awareness of changes in the industry

This session started with a presentation about the roles of different bodies in the energy industry. Having discussed their reaction to the presentation, we asked Panellists for their spontaneous awareness of changes happening in the energy industry. Overall, their awareness levels were relatively top line and non-specific, resulting in workshop facilitators having to prompt discussions around the given topic areas. Spontaneously, Panellists were most able to note changes in energy price alongside some changes in consumer goods and behaviour and environmental issues. The main areas of awareness are discussed in detail below.

Smart Meters

When compared to previous years' Panels, more of this year's Panellists had heard of Smart Meters in some form or another but only a few had a detailed understanding of what they are. Some of the Panellists remembered seeing advertising for what they thought to be Smart Meters on television, with a couple mentioning seeing specific suppliers' adverts.

> *"I saw this thing [the Smart Meter] on the Gadget Show. They showed how it would work and what it would do."*

"You can get those machines that tell you how much gas and electricity you are using. I've seen ads on TV."

A small minority mentioned that they had received what they thought to be a Smart Meter. Further discussion about the devices they had received, as well as the adverts that they had seen, revealed a level of confusion as to whether what was being sent out and advertised was a Smart Meter or a supplier specific energy monitor. Most of the Panellists were unaware of the distinction between the two.

"I have one of those already…you can look at what you are doing in certain rooms at certain times and see what [energy] you are using."

Spontaneously, a number of Panellists said that they thought that Smart Meters are a good idea and would like to see them used more widely. When mentioning Smart Meters in these initial discussions, several spoke of wanting to have greater control of their energy usage without the surprise of receiving high energy bills after a few months. Some also spoke of wanting to know which appliances used the most energy in their homes.

"You can look at how you use energy in different rooms – know that you need to turn your disco ball off! Find out how much you are spending."

"I guess for me it would be about being able to take control over how much energy I use."

Sustainability / environmental issues

In this session, Panellists spontaneously mentioned issues relating to the environment and most were aware of this as an important and topical issue. Some also felt that people are trying to be more environmentally conscious nowadays, both by speaking more about it and in practical terms. A few Panellists with children mentioned that they had noticed environmental education happening at schools, with their children then coming home and speaking about it to the parents.

"People just take the environment more seriously now. They are always talking about it."

"When I speak to people often they mention something about trying to help the environment or save energy in some way or another."

"Children learn it at school to be more energy efficient."

However, it was also noted that price was a more important consideration than the environment, with the latter more of an implicit 'side-effect' to saving energy. Some Panellists noted that the recession had led some people to rethink their priorities, with the environment taking more of a back seat than it had done in earlier years.

> *"I feel like cost is definitely the primary reason for saving energy and not the environment – I think the next generation will be much more aware of this."*

Changes in retail price

Panellists continue to mention the increasing price of energy, with many noting that these increases have been passed onto consumers in the form of higher bills. This seemed to generate a feeling of distrust towards energy suppliers amongst some Panellists. A few Panellists also spoke of not having the information to understand what average household electricity or gas bills look like and what size of bill they should expect, given their household type. There was a continued lack of understanding as to the drivers behind differences in energy bills, what causes prices to rise and how different tariffs work.

> *"They have gone up a lot more in the last 12 months than in previous years."*

The feeling of distrust was most noticeably displayed by those who had recently switched. The majority of those who had switched felt that, having been promised lower bills when being sold (at times aggressively) a new energy package, their energy bills had now risen to their previous levels. There was also a perception amongst some Panellists that energy companies were quick in passing on price increases to consumers, but much slower to pass on any savings. It was mentioned that where Panellists had changed their payment method to Direct Debit, their bills had gone down as a result .

> *"It was cheaper to begin with but then became more expensive, so I changed supplier again."*

> *"They start off cheaper but after a while they're all the same."*

> *"We had people knocking on the door, they promised it would be cheaper – so at first it was cheaper but it then crept up."*

A few Panellists in Inverness noted that the savings that were promised with the creation of hydroelectric power stations and wind turbines had not been passed onto consumers. A couple of these Panellists thought that this was due to energy being shipped to the 'southerners'.

Changes to consumer energy goods available

Spontaneously, many Panellists mentioned noticing some changes taking place to the nature of consumer goods available. As noted earlier, the most widely mentioned change to consumer goods available were energy saving light bulbs, which were said to have become commonplace. However, many also noted that they no longer had a choice whether or not to buy an energy saving light bulb, with shops only stocking the new types.

> *"Those energy saving light bulbs are everywhere, it's all you can buy in shops…they don't stock the old type."*

Other Panellists also spoke of a greater variety of affordable energy efficient appliances and white goods, including kettles, washing machines and televisions. A few Panellists also noted that some appliances no longer allowed them to put things on standby.

> *"It's good to see that some appliances switch off automatically…like my Sky box."*

> *"There are lots of new products coming out. I saw a new kettle that boils in 30 seconds."*

Changes to consumer energy behaviour

Overall, more Panellists this year felt that people are thinking a lot more about their energy use and habits. Some felt that this was partly due to the higher visibility of the issue in the media (especially TV adverts), with more emphasis on prices going up and ways to cut energy use for financial and / or environmental benefits. Others felt that the recession has had an impact on how they and other people view energy, with cost-saving becoming the primary driver for energy conservation.

> *"We've got energy saving light bulbs but I want to go back to be able to go back to the old ones."*

A small number of participants also spoke of receiving free advice about how to save energy from suppliers. Others had searched for, or come across energy saving tips on the internet. Some Panellists felt that the supplier should have greater responsibility in telling customers how and

when to save energy. Information attached to bills was seen as a possible medium to communicate this.

> *"I have once or twice looked online to search for things that drain less electricity. Our heating wasn't working once and so I looked on a website to see which one was less draining."*

> *"I reckon some information on bills would be good, there's definitely more chance of me reading it."*

A number of examples were mentioned by Panellists indicating changes to energy behaviour, including: turning off lights when leaving rooms; turning appliances off standby; filling kettles only as much as needed; and fully loading the washing machine.

> *"If things are on standby they still drain the energy. I have started to turn things off at the socket."*

A few Panellists also spoke of consciously avoiding using or even getting rid of appliances with high energy consumption such as tumble dryers or televisions. Panellists tended to speak about 'plasma TVs' (a catch all term for flat screen televisions, plasma and otherwise) when discussing higher energy use appliances, potentially using it as a short hand for new flat screen televisions. Often, these Panellists had noticed the impact of using such appliances on their energy bills and wanted to save the money. Others noted that they had actively chosen to buy a particular appliance because of its eco-rating. A few others noted that they had invested in smaller appliances that used up less electricity.

> *"Have sought an energy saving washing machine and we specifically looked for a more energy efficient one."*

> *"I had an immersion boiler before but the bills were frightening so I got rid of it."*

Some Panellists also spoke of Councils switching off street lights during certain parts of the day. It was felt that, although better for the environment, it was also detrimental to safety.

> *"I heard Councils are switching lights off on our streets, it's crazy!"*

The need for new / alternative sources of energy

As further discussed in the next section of the report, there was spontaneous mention by some Panellists of the risk of the energy supply running out and many Panellists spoke of the need to invest in alternative sources of energy to combat this threat, with some noting increasing population levels as a reason for this. Other Panellists felt that Great Britain was now significantly more dependent on importing gas from other countries.

> *"It may run out because the population is growing and there are too many people using it."*

Most discussions focussed on the increase in renewable energy use, especially large-scale wind turbines/farms that many had seen erected in their local area alongside micro-generation in the form of solar panels. However, even though most agreed that solar energy was a good alternative source of energy, it was also felt that most people, including themselves, could not afford it. Some others also mentioned tidal power and new technological advances, such as a more environmentally friendly fuel that was under development for use in transportation. A few Panellists mentioned hearing about the building of the Severn barrage being cancelled.

> *"I heard that BP have a new kind of efficient fuel."*

> *"I've noticed a lot of wind farms popping up recently."*

> *"I don't think anybody would say no to solar panels, but we can't afford it."*

Panellists were generally in favour of renewable sources of energy. In Inverness and Norwich, Panellists were particular positive about renewable energy, especially tidal and wind power, having seen visible examples in the local area.

A few Panellists also mentioned there being more support out there from government and private companies for people to benefit at a domestic level from alternative energy, such as the availability of solar panels. With regards to solar panels, some had heard about the potential to sell back electricity generated at the domestic level, back into the National Grid.

> *"With solar power people are getting good discounts and also getting money back. You can sell energy in the summer and buy it in the winter."*

There was also some mention of more energy being supplied from the nuclear sources in the future, with the prospect of more nuclear power stations being built. Panellists were generally

supportive of this as a cheaper and more energy efficient source of energy, although, as noted further in the next section, some hesitation was noted with regards to the risk from nuclear waste and potential accidents.

> "It seems like nuclear power has become more acceptable and the natural option."

> "I'm still uneasy about nuclear power – why not concentrate more on renewable power?"

As in previous Panels, a few Panellists also mentioned using wood burners, log burning stoves and open fires to heat the home and to cook food, which some thought was a great way to save money; this seems to be on the increase.

> "I've got a wood burning stove in the lounge so I don't have to put the heating on."

> "Everyone should have the log burners, but a lot of heat comes out – it saves our cost but puts pollution in to the air."

It was however noted that it was not possible to install these in all homes.

Changes to new homes being built

This was an area that few Panellists mentioned spontaneously, but when probed, Panellists mainly spoke about greener homes being built. More specifically, they mentioned new homes having to abide to new building regulations such as the use of more energy efficient materials and light fittings, particular window sizes and types, loft and wall insulation and double glazing. Also noted was the use of solar panels in some new homes.

Some have seen new ideas for greener homes on television, though many acknowledged the fact that such features were expensive and financially out of reach for them.

> "Grand Designs – the building had solar panels and water capture, but who of us can afford this."

> "Ground-source heating costs a lot to install but then your heating is free."

Potential future risks and solutions

Potential risks

Generally, Panellists found it more difficult to think of potential risks to consumers. For many, having a secure energy supply was taken for granted.

As mentioned previously, the issue of energy security proved to be most prominent in people's minds. More specifically, Panellists spoke of the danger of non-renewable energy sources running out as well as other countries, especially Russia, withholding gas supply to Great Britain, which reflected media stories that Panellists had seen – a few spoke of Great Britain being 'held to ransom'. The issue of Russia withholding gas supply has remained a consistently perceived risk across all Panels.

> *"Political shifts may influence energy supply if we are not self-sufficient."*

A number of the older Panellists spoke of the need to ensure that the future generation's needs are taken into consideration so that that the shortages that they remembered happening in the 1970s did not happen again. Some of these Panellists felt that the current generation could not cope with such energy shortages and power cuts.

> *"We wouldn't be able to cope if this happened; the country is not geared up for this. Even if you get a power cut for a couple of hours you panic, you get worried about freezer food. What do you do with kids with no telly!?"*

Other Panellists felt that increasing prices were a future risk, especially for vulnerable customers who would not be able to afford the increases. There was some comparison of energy to other products in order to illustrate its necessity to everyday life and the implication that people cannot stop using it if financial circumstances changed.

> *"I can stop watching my TV as much, but you can't just switch off your heating, especially when its -5 outside like it has been recently."*

As noted earlier, some panellists felt there to be risks involved with nuclear energy, especially around the disposal of nuclear waste and the potential of nuclear accidents. However, this was tempered by the positivity of many other Panellists around the use of and need for nuclear power.

"Nuclear is probably the way forward. There is of course a chance of an accident, but we must take the rough with the smooth."

Potential solutions

When noting the potential solutions to these risks, Panellists most commonly mentioned the need to explore the use of renewable and alternative sources of energy, this included solar, wind and tidal power as well as bio-fuels. As outlined above, nuclear power was also mentioned by participants as a useful and inevitable form of fuel. A further suggestion was to increase spend on research into alternative sources and energy more generally – there was mention of carbon capture and hydrogen fusion. There was a lack of recognition as to where the money for this would come from or that costs would need to be passed on to the consumer. There was a general acceptance that it was the Government's responsibility to invest in such initiatives.

"Renewable energy is something that we have more of now and we should have more of it still, like wind and sun."

However, other solutions included the need to regulate the industry better so that prices don't get out of hand, which a few felt was especially important in relation to supporting vulnerable customers. A number of other Panellists also felt that changes in personal and commercial behaviour, amongst household and business customers, to minimise energy use were important going forward. Educating consumers on energy use was felt by some Panellists to be an added way to tackle the risk of energy running out.

There was also negativity expressed in relation to the liberalisation of the energy industry in the 1980s, which some felt should not have taken place. There was a notable feeling that the energy sector should have remained in the hands of the Government and not private companies. This sentiment was noted alongside comments surrounding the profit-generating nature of the industry.

"I am surprised that water, gas and electricity were sold – they belong to the public – they are ours and are necessities, why should they be profitable?"

It was felt that it was the responsibility of the government and Ofgem to regulate the market on prices and ensure that there is a secure and reliable supply of energy in Great Britain. However, some also saw a role for suppliers in passing on energy savings to customers more promptly. A small minority also felt that it was up to consumers to change supplier if prices became too high.

Smart Meters

Panellists were given a short presentation introducing the concept and roll out of Smart Meters. This outlined what they are, how they work, what the benefits will be for consumers, suppliers and Great Britain and details of the proposed roll out. Following the presentation, Panellists were given the opportunity to feed back their initial reactions and what they considered to be the main benefits and drawbacks and raise any concerns or questions they held.

Initial reactions

In general, the majority of people did not understand what the physical constituent parts of the Smart Meter are and what the difference is between a Smart Meter and an In-Home Display (IHD). Overall, reactions to Smart Meters were neither significantly positive nor negative. Panellists across all locations recognised certain benefits but the idea of Smart Meters and their roll out raised a number of concerns and unanswered questions. Many of the potential concerns identified were, rather than outright drawbacks, areas of uncertainty that would require reassurance or further information.

> *"What are the benefits of the meter to the consumer? I'm not sure."*

> *"We need reassurance that we won't need to change the meter every 5 years because newer ones are developed."*

Benefits

The primary benefit identified by Panellists was that having a Smart Meter and IHD would allow them to see how much energy they were using, which would confer several interrelated advantages in terms of people's habits and behaviour. The over-arching perceived advantages were an increased level of control for customers in terms of their energy habits and behaviour and the streamlining and simplifying of the current energy infrastructure.

> *"Maybe better off if people know how much electric they are using, so they can cut down."*

Most widely mentioned were benefits in relation to people's habits and behaviour. More specifically, Panellists mentioned the following:
- Being able to monitor energy usage over time or potentially at a room or appliance level.
- Facilitation of better informed behaviour change. e.g. off-peak energy usage, different use of appliances.

- Being able to budget for the cost of using energy or adapt usage according to budget.
- Being able to detect faulty, older and energy inefficient appliances (and in turn pay more attention to energy efficient ratings when looking for new appliances).
- Being able to understand the impact of new energy-efficient appliances.
- Encouraging children to be more energy conscious by showing them how much energy they use.

Panellists also suggested that it would be helpful if Smart Meters were able to help with the identification of faulty, older and energy inefficient appliances.

The outcome of these advantages was that Panellists believed they would be able to save money and for this reason it was important that the IHD displayed usage in terms of pounds and pence rather than just kWh. Only a few Panellists mentioned the positive impact of changing energy usage on reducing wastage and the environment.

> *"It's difficult to work out how much it is per kWh. If it shows you in pence and pounds then that would be more helpful."*

Removing the requirement for meter reading was perceived to be of some benefit but not paramount to the majority of Panellists. The inconvenience of having meter readers come to the home was a concern for a few Panellists, as were security issues to readers visiting and entering people's homes, especially for the elderly. Therefore not needing to have their meter read was perceived to be a positive development. However, as discussed in more detail below, some mentioned concern about the loss of jobs for workers currently filling these roles.

> *"It would be great not to have people coming round your house to read the meter, definitely in favour of that."*

Removing the need for estimated billing was also perceived to be a benefit. Whilst estimated bills were generally considered to be sub-optimal, it was not an overwhelming concern for most and the option of providing their own meter readings to suppliers was generally understood to ensure accurate bills. However, others did think that accurate billing was important and represented a fairer service. It was felt that suppliers tended to increase bills if a consumer was identified as using more energy than estimated but didn't appear to decrease bills if a consumer was actually using less.

> *"I don't see the benefit, except you don't get an estimated bill. But does it actually reduce the bill? Still, I like to know what I'm actually using."*

Many felt that allowing customers to see what they are using would be the most transparent and fairest approach, allowing people to clearly understand how their bills are worked out, what tariffs are being used and remove the potential for surprises around large bills. Panellists also expected that Smart Meters offered the potential for the removal of paper bills and the environmental benefits associated with this, along with being able to effectively offer tailored tariffs.

> *"Smart meters could show the cheaper time to use electricity. There is a massive peak during breaks in TV so the smart meter would really help."*

Drawbacks

Whilst being able to see the amount of energy used was perceived as the core benefit of Smart Meters, it was also identified as the main drawback by some Panellists. A few of these Panellists would personally prefer not to know more about how much energy they were using, but most thought it would cause *other* consumers undue worry or anxiety. Panellists could envisage individuals, particularly the elderly or unemployed, over-compensating to reduce their energy bill by 'sitting in the cold'.

> *"If the figure shows 55 and then goes to 60 – old people will switch things off and sit in the cold."*

Some also thought that certain types of consumers would be put at a disadvantage because they would find the Smart Meters and IHD difficult to understand or use. The types of consumers identified were predominantly the elderly but also included blind people and those with learning or difficulties.

> *"Some people may not be able to understand the display and what the different signals mean."*

There were also a few Panellists who questioned the value of Smart Meters given that they wouldn't in themselves reduce energy usage or make bills cheaper but rather require consumers changing their energy use behaviour in order to achieve this.

> *"At the end of the day it's up to the consumer to change their energy use, so a bit of technology [Smart Meter] may not do it alone."*

There was also a feeling that, especially amongst those who already had energy monitors, the novelty of monitoring energy use would fade in time.

> *"IHD is similar to what I have – you watch for first couple of months then novelty wears off."*

Certain barriers were mentioned in changing people's behaviour, including the necessity of use of certain appliances, which would not change even if people could see how much they were using and spending. It was noted that specific energy uses associated with children would prove difficult to change. Those with young children note that bringing them up can be energy intensive, especially with regard to heating and washing, and most are not prepared to compromise on this. Those with teenagers often complained of them being high users of energy and as paying little attention to issues around efficiency (perhaps not surprising given they are generally not paying the bills – and so energy has little currency for them). Some Panellists in Inverness spoke of not having a choice when it came to heating the home due to the colder climate in Scotland as opposed to more southern parts of the country.

> *"We have no choice in the Highlands, the Southern softies don't experience -12 degree temperatures, so we need the best prices we can to pay for it."*

Other drawbacks mentioned included arguments and friction being caused between family members and house sharers as a result of seeing how much money was being spent on energy within a household.

> *"It will probably end up with me having an argument with my kids."*

Concerns and areas for further clarification

The most commonly raised question was that of cost. The greatest concerns were around who would be funding the roll out, whether there would be a cost to the consumer and, if there is, how would this be implemented – would it, for example, take place through energy bill increases?

There was a general feeling that because the Smart Meter roll out was a top down programme and not something in which consumers had a choice, they shouldn't have to bear any costs. Despite this, there was also a degree of reluctant acceptance that consumers would probably end up contributing at least partly to the cost. It was felt that these costs would be added onto people's bills.

> *"What is the cost? The meter should be free. Surely if it is a government initiative and replacing the meter, which belongs to the supplier – you shouldn't have to pay."*

> *"If the supplier will make savings in terms of staff then can we have this offset for us?"*

Few Panellists said that they would be happy or prepared to contribute to the costs and the provisos for this were that the benefits to consumers were clearly evident or demonstrated and any charges transparently outlined. Alongside this, some Panellists felt that the programme would be more of a benefit to suppliers and primarily reduce their costs, with scepticism of whether these cost savings would be passed on to customers.

> *"This is clearly going to increase the suppliers' profits, otherwise why would they be doing it?"*

Another common and spontaneously mentioned concern was that, as a result of Smart Meters, there would be more personal consumer data created, which could be shared with energy suppliers and 'third parties' (referred to by some as unknown individuals and organisations). Most notably, questions were raised around who the third parties would be, what information they would have access to, what they would do with this information and whether the consumer have any control over the use of their data.

There was an unprompted tendency to think of this in terms of an extension of 'Big Brother' to which there was an instinctive, principle-based aversion. It was felt that with more information available to these 'third parties', there was more chance for individuals to be targeted with irrelevant marketing and advertising. More specific worries regarding data privacy and sharing of data were relatively few. One issue raised was whether individuals would be identified as using too much energy and subsequently be made to use less or incur some form of penalty.

> *"Could they up prices if they think you are saving too much energy?"*

> *"I am not happy about the 'third party' – who is the third party?"*

> *"It's a bit Big Brother, are they going to know too much about us?"*

Other issues referred to the security of data, and the possibility that their Smart Meters could be 'hacked', although the specifics of this apprehension were not abundantly clear. Some participants countered that meter readings were not sensitive data in the same way that, for example, bank details are. Overall, Panellists were not overly anxious about these issues and were mostly noted as 'things to think about'.

There were also questions raised about the reliability of Smart Meters and Panellists wanted to be reassured on a number of points. Firstly, some recognised that there are often 'teething problems' with new technologies and wanted to know whether the Smart Meters were 'tried and tested'. Following this, there were concerns about how consumers would know if their meter was faulty or not working properly.

> *"If it's all controlled by a central computer, what happens when that goes up the wall?"*

> *"Will you be told if your meter is faulty? How would they know?"*

Furthermore, the capacity of meters to send and receive information remotely was questioned in the event of power cuts, if the network 'went down' or there was interference from other meters or electrical devices. Panellists felt that reassurance would be needed about what would happen if the transmission of information failed. For Panellists in Inverness and Kendal, there was the additional concern of whether the information would transmit reliably in remote areas. Some compared it to the digital switchover, which had resulted in disrupted and poorer quality of signal in the region.

> *"You don't get a proper TV signal in these types of area. Handheld Sat Nav doesn't work here. And we don't even have proper broadband."*

Some Panellists queried whether Smart Meters would result in meter readers losing their jobs. Whilst there was a level of concern at such job losses, Panellists weren't outraged by the idea. Some in Kendal and Norwich wondered whether there might be a benefit because suppliers would save money and may pass this on to consumers by lowering their bills. A few also noted that there would be opportunities for job creation through the requirements for meter installers.

> *"Will the meter readers lose their jobs? That's the majority of what happens up here. More people losing jobs!"*

Other less commonly held points of concern or areas for further information included:
What types of tariff would be available and whether the Smart Meters could cater for different tariffs?
Would there still be different payment options available?
Would the Smart Meters be standardised or would there be different models depending on the supplier?
What would happen if more advanced meters became available after the roll out?

Who would actually be responsible for the provision and ongoing maintenance of the Smart Meters – would it be the government, supplier or consumer?

The Roll Out of Smart Meters

Panellists were then asked to consider the forthcoming roll out of Smart Meters; what challenges they could foresee, what important principles should be followed when implementing the roll out, and the information and support needs of consumers at specified stages of the process – pre-installation, the point of installation and post-installation.

Challenges

A brief discussion of the anticipated challenges raised a few immediate concerns. Overall, while nobody explicitly stated that it would be an impossible task, concerns were nonetheless aired over some potential stumbling blocks.

Several Panellists talked about the scale of the rollout in terms of logistics, timescale and cost, and there was scepticism from some that it may be a difficult target to achieve in the space of around eight years.

> "It sounds like a real logistical challenge. What happens if they don't have enough time?"

The cost of the rollout was mentioned as being potentially very high, and some questioned whether Great Britain can genuinely afford to run such a project, particularly given the existing economic climate. A small number of others mentioned that much can change in the space of eight years in terms of both the sophistication of technology (how future proof is the rollout?) and of Government agendas (what happens if the next Government reverses this decision?).

Inverness Panellists expressed concern that rolling out the programme would be more challenging in remote and rural areas, and that the scheme may be difficult to manage logistically as a result.

Finally, a number of Panellists raised queries about consumer resistance to change and what the response would be to those who decided that they would rather not have their meter changed.

Key Principles for Implementing the Roll Out

An information and awareness campaign should be started before the roll out, it should be far-reaching and regularly reinforced to embed in consumers' minds.

Information should be concise, jargon-free, standardised and industry-wide.

Information, language and support should be accessible to all and should take the needs of vulnerable consumers into consideration.

There should be no charge to the consumer for the installation of the Smart Meters or the roll out in general.

Rules should be set for the installation process so consumers know what they should expect e.g. by Ofgem or a similar independent body.

Area supervisors should handle the roll out and any problems specific to a certain postcode. (Who should be responsible for this service was not made explicitly clear by Panellists).

Installation appointments should be flexible in terms of time and day. Ideally, weekend or out of hours installation should be available for those who can't take time off work or work several jobs, and the time-window for when the installer will visit should be as narrow as possible.

The installer should be trained, have ID and a uniform, be polite, courteous and respectful of property.

Sufficient explanation of how to use and maintain the Smart Meter and IHD should be imparted at the installation visit in a manner suitable to the individual consumer e.g. demonstration, DVD or information pack.

Meters need to be installed in a place that is accessible but out of reach of children. Although some in Inverness wished the meters to be installed outside their house.

Consumers should not be left with information on other products at the installation visit i.e. it should not be used as a 'selling opportunity'.

Consumers should have to consent to their information / data being shared with allowed third parties.

Information and support needs of consumers

1. Pre-installation

There were two key pieces of information that Panellists thought should be provided in the time leading up to installation of the Smart Meters. The first was an explanation of the roll out, what Smart Meters are and what the benefits will be to consumers. It was felt that emphasising the benefits of Smart Meters would help get the public's 'buy-in' and foster a feeling that the roll out is being done for the public rather than imposed upon them. This information should be provided through a range of channels to ensure that it is far-reaching and targets the whole range of consumers.

> *"They need to publicise the benefits, we'll be more likely to be onside if we know it's being done for us rather than to us."*

The channels suggested by Panellists included:

- TV adverts – TV was considered the most far-reaching medium for communication.
- Helpline – free-phone, non-automated, UK-based.
- Radio – both local and national.
- Inserts with the bills – made at an appropriate and logical time to communicate information.
- Website – this would be particularly useful to provide basic details with key Q&As. The internet is a common resource utilised by Panellists but many were aware that not all consumers have access to the internet.
- Emails – some Panellists currently receive bills and information from their supplier via emails. A few also mentioned using their energy supplier's web-chat service and thought this would be a useful tool.
- Letters.
- Newspapers, leaflets – although there was some debate as to the extent to which people read leaflets.
- Billboards and posters.
- Well-known personality / figurehead endorsement – it was felt that this could help to raise the profile and gain "buy-in".

In general, Panellists thought this information should be provided prior to the commencement of the roll out and reinforced until the time of installation. Initiating communication as soon as possible before the roll out (i.e. starting now) was thought to be appropriate, irrespective of the that the time at which an area would receive Smart Meters. Panellists were in favour of this on the basis that where consumer awareness of smart meters would be present, there would be a desire for more information about the meters and the rollout. Panellists felt it important to reinforce the information throughout to ensure both sufficient impact and to ensure that consumers are reminded of the details.

> *"They need to start telling people now, then repeat it and be consistent."*

However, there were some Panellists who thought targeting of information should be dependent on when an area would be receiving the Smart Meters. These Panellists felt that giving information too far in advance of this event would be unnecessary and ineffective.

The second critical piece of information consumers must receive is information on the installation process; when their installation would take place and what to expect, especially what the installation process entails; what disruption they may face; and how long it takes. Panellist responses varied with regards to the timing of this information. The majority felt that it should be
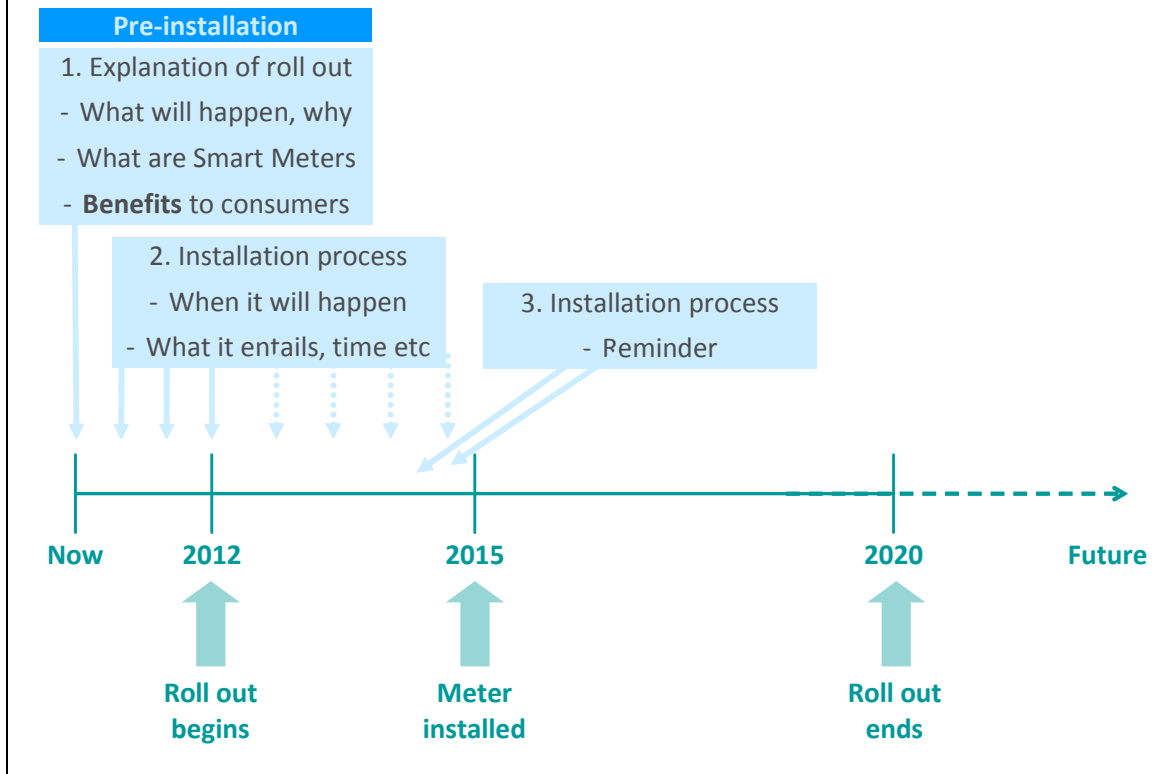
a few months to a month before the installation, whilst others said that it should be a few days to a day before.

> *"I want to know what is going to happen – who is coming round, when, for how long, simple information like that."*

Further to these two primary information requirements, there were other aspects on which Panellists thought consumers would require reassurance:

- Who has overall responsibility for the roll out? e.g. it should be emphasised that it is a government scheme and not a marketing ploy for individual suppliers
- Who is going to pay for the roll out and installation?
- What are the specific roll out plans for difficult to reach areas e.g. remote and highland areas?
- How will consumers' data be used, both in terms of data privacy and in terms of gaining reassurance that consumers won't be forced to decrease energy use?
- Will consumers need to continually change their meter as technology develops?
- What happens if a consumer doesn't want or refuses to have a Smart Meter?
- What happens if the roll out isn't completed, or if there is too much demand for Smart Meters?
- How will the roll out be undertaken e.g. will certain consumers be prioritised, will it be street by street, will it be by supplier?
- Are Smart Meters generic or branded?
- What will happen to the old meters?
- Where in the home will the Smart Meter be fitted / Will the Smart Meters be fitted in the same location as the old meter it would be replacing?

Key information and support needs

Pre-installation

1. Explanation of roll out
- What will happen, why
- What are Smart Meters
- **Benefits** to consumers

2. Installation process
- When it will happen
- What it entails, time etc

3. Installation process
- Reminder

| Now | 2012 | 2015 | 2020 | Future |

Roll out begins — Meter installed — Roll out ends

(The diagram above represents an example timeline to allow Panellists to discuss relative timeframes for different activities)

2. The point of installation

The critical piece of information at the point of installation is an explanation of how the Smart Meter and the IHD work and how they can be effectively used by the consumer. This information should be simple, jargon-free, concise and available in a range of media to best suit the individual consumer. Panellists suggested a practical demonstration, a DVD and a short information pack e.g. double-sided leaflet with illustrations. The demonstration should be given by the installer when the meter has been installed and the IHD set-up. The DVD and / or information pack could be left with the consumer after installation to act as a point of reference. Further support such as demonstrations in community centres was also thought to be useful, particularly for consumers who were less technologically savvy such as the elderly.

> *"Elderly and those who are less confident should also be offered demonstrations of how to use the IHD."*

In addition to an explanation of how to use the meters and IHDs, Panellists identified the following information needs that should or could be addressed at installation:

- How do you know whether the meter and IHD are working properly?

- How do you maintain the meter and IHD?
- Who do you contact if there is a problem and will there be a contact telephone number?
- Will there be safety information on the meter and IHD?
- How will the meter affect billing? / How will continuity of billing be assured with a new meter and what billing options will be available?
- Will there be hints and tips for saving energy?
- Where can you go to access further information and advice?
- Will there be reassurance on data privacy, including who can access the data and for what it will be used?
- What will happen to those who do not use the IHD? / Will there be a negative impact for consumers?
- What happens if consumers switch suppliers or move house? / Who is responsible for the meters? / Can consumers take their IHDs with them and / or transfer data when moving home?
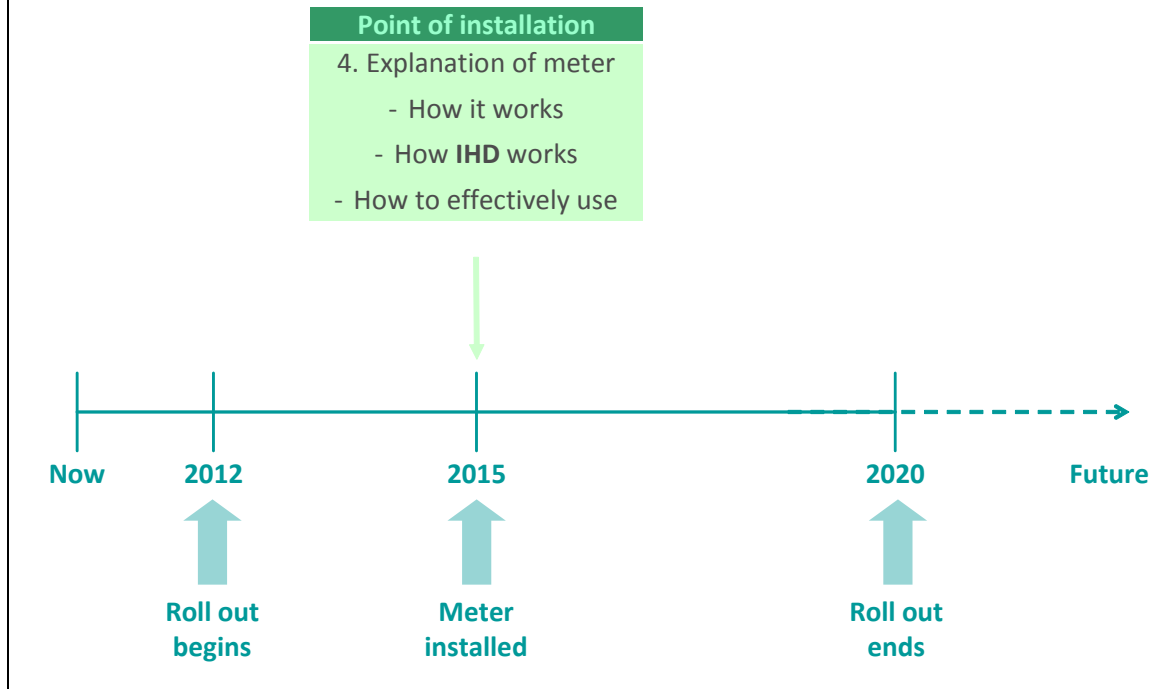- Are Smart Meters compatible with other suppliers?

Panellists felt that it was important that the installation visit was hassle free and not used as a marketing opportunity. Most Panellists were, therefore, in opposition to the prospect of being left with materials or information relating to products other than the Smart Meter and IHD. Likewise, there was hesitancy at being made to sign up to any service during the installation. Some felt that this would dilute the overarching messages and information about Smart Meters. Those Panellists who were happy to be left information about how to save energy in the home, emphasised the need for the individual to have the choice of what to do with that information.

> *"They need to emphasise that it's a government scheme and not a marketing ploy, like with the digital switchover."*

Finally, there was little resistance to having to take time off work to have a Smart Meter fitted, so long as they received the necessary information beforehand and in due time. It was also felt that people should be given a choice of when the installation could take place.

> *"They should let you know when they're coming but also give you a choice of dates and times."*

Key information and support needs

Point of installation

4. Explanation of meter
- How it works
- How **IHD** works
- How to effectively use

Now   2012   2015   2020   Future

Roll out begins   **Meter installed**   **Roll out ends**

(The diagram above represents an example timeline to allow Panellists to discuss relative timeframes for different activities)

3. Post-installation

It was more difficult for Panellists to think about the types of information and support they would require after the Smart Meter had been installed. However, Panellists did consider both a follow-up soon after the installation and a continued information service or source to be important at the post-installation stage.

It was suggested that a follow-up should be undertaken by the supplier fitting the meters approximately one month after the installation and might include checking that a consumer is confident using the Smart Meter and IHD and confirming that both are working properly. Some felt that this was especially important for vulnerable customers, with the elderly being the most commonly mentioned group. There was also a suggestion to include a customer satisfaction survey to allow consumers to feedback on their experiences. There wasn't a clear consensus on how this follow-up should be implemented, for some a telephone call seemed to be the most appropriate method.

"They need to follow-up, particularly for vulnerable consumers; to be sure they are comfortable."

For others, a pro-active follow-up was deemed unnecessary and having an 'as and when' information service or source would suffice. Alongside this, Smart Meter 'after-care' was felt to be important, which centred on knowing who was responsible for maintaining and updating the Smart Meter, more specifically the IHD, in the long-term. As part of this, Panellists specifically wanted to know what would happen if they experience a problem, fault or power-cut and where they should go for a replacement Smart Meter, details of updates and new technologies.

"There should be clear information on who to go to for what."

Some Panellists (in particular those that could not see the benefits of Smart Meters) felt that having a Smart Meter and IHD installed meant that their relationship with their supplier would be intensified, something that did not appeal to them (even though Smart Meters potentially mean less contact given that meter reading would be automatic and accurate). A few Panellists felt that it should be possible to not use the IHD and have a similar low level of interaction with the Smart Meter in much the same way as they currently do with their meter. However, a couple more technologically-savvy Panellists were aware of the ability to update and monitor such devices remotely, comparing it to other technology such as smart phones.

"If you don't want to engage with it, you should just be able to leave it to work like it did before."

"You should be able to communicate with it via your PC or Bluetooth to check that it's working and track your usage."

Again, there was a call for this information to be provided in a variety of ways to serve as many people as possible such as through websites, advice lines, TV, radio, libraries and through local authorities. Some Panellists suggested having a free-phone number provided on the Smart Meter itself for consumers to call if needed. A few Panellists made the point that it might be too expensive to run a bespoke Smart Meter advice line for an indefinite period of time and therefore suggested having a Smart Meter option when calling the regular customer service number of their energy supplier.

"I would want to have a number to call… free of course."

During discussions, Panellists were also asked what they thought would keep them engaged with their Smart Meter and continue changing the way they use energy. Some Panellists thought that providing an incentive would help encourage energy saving, such as a concession on energy bills. There was little consideration as to the fairness of such an incentive scheme on those who could not reduce their energy consumption

Some Panellists also suggested providing advice on energy saving, which would serve to keep them focussed on the ultimate aim of Smart Meters. A few also mentioned presenting personal data to show individual reductions in energy use and also collating national or regional data to show the impact on the UK's energy use and how people are contributing to society.

Key information and support needs
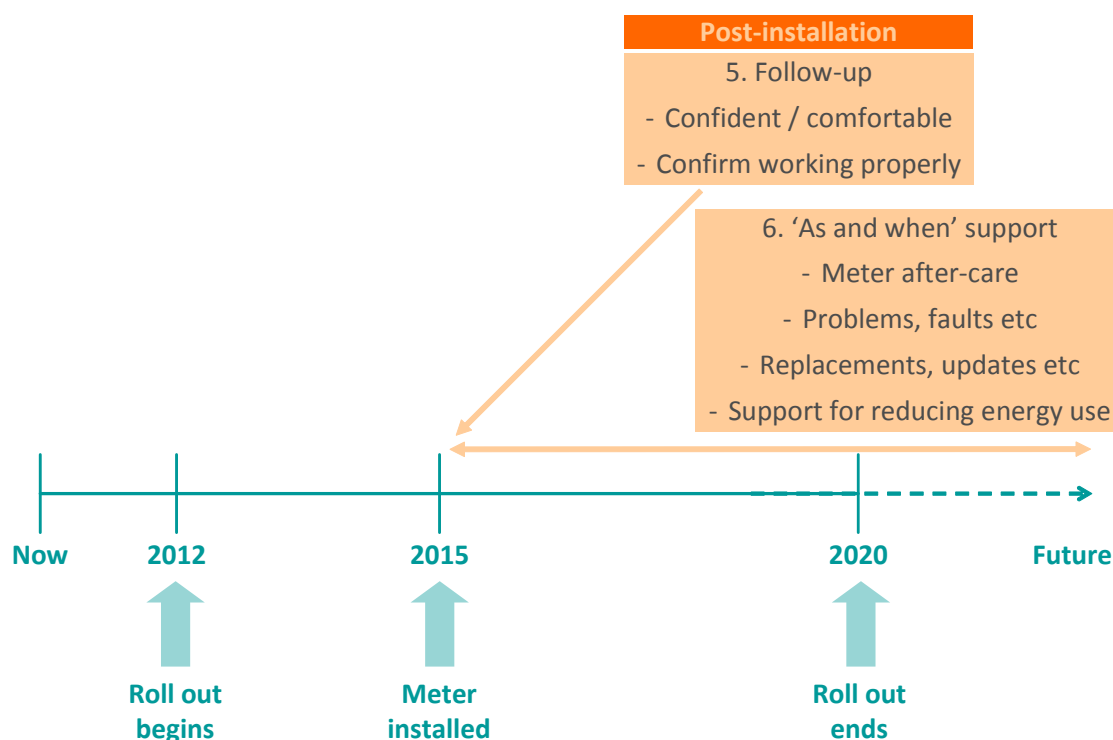
(The diagram above represents an example timeline to allow Panellists to discuss relative timeframes for different activities)

Who should provide the information?

There were mixed opinions both across and within locations as to who should be providing information about Smart Meters and various aspects of the roll out.

For many, the logical sources of information and support were the energy suppliers as they would be the ones providing the Smart Meters to their customers and are viewed as the experts in the field. Energy suppliers are also the current inter-face for Panellists in terms of information about their energy usage, bills and meters. Most Panellists did not offer further thought on who should have the responsibility of providing information.

> *"Suppliers I guess are the natural people to give us this information, they know about all of this and they will be giving us the meters won't they?"*

However, for some Panellists, energy suppliers were not seen as the most appropriate source of information; this was either because they were not seen to have overall responsibility for the roll out or they were not seen to represent an impartial, reliable or even trusted authority.

> *"You should be able to go to an independent party if there's a problem."*

For those who considered overall responsibility for the roll out to confer responsibility for communication, the government was perceived to be the natural provider of information. However, Panellists were not specific as to what they meant by the term 'government'. For those prioritising a neutral or impartial source, the government was not always trusted in this respect and Panellists suggested an independent or central organisation, with some giving the example of Ofgem (though this may in part have been due to the fact that they were at an Ofgem event).

> *"Ofgem should have rules on what one should expect on installation like what you expect to see happen."*

Some Panellists spontaneously compared the roll out to the success of the digital switchover and referred to Digital UK as an example of the type of independent organisation that could be suitable. Others readily offered comparisons when prompted and most could see how the Smart Meter roll out and the digital switchover related. They specifically noted the success with which Digital UK has supported vulnerable customers and provided a wide range of communication about what was taking place and when. However, some of these Panellists were not altogether sure as to the type of organisation that Digital UK is and whether it is independent of government.

> *"The digital switchover went by like a breeze. I barely noticed it happened so I assume that means it has been really successful."*

Whilst there was not a clear consensus, Panellists themselves could appreciate the merits of different sources of information with a mix of sources offering a suitable approach. For example,

some Panellists suggested that energy suppliers maintain their interface with their customers, particularly regarding the actual installation and associated practicalities such as time, date, usage, maintenance and after-care. It was suggested that an independent body or the government gives over-arching messages regarding the roll out and its rationale and / or set principles through which consumers could know what to expect from their energy supplier. Irrespective of the source, messages or information should be standardised, consistent, comprehensive, concise and jargon-free.

"As the government is responsible for this programme, it should play a part in giving us the main messages."

Vulnerable consumers and special considerations

When considering the roll out, Panellists raised concerns for certain consumer groups, most notably the elderly but also blind people, the disabled, those with language barriers and those who live in remote areas. The main issue was that some consumers such as the elderly would be wary of having new technology in their homes and would find it more difficult to use the IHD.

"I'm not sure how the blind will be able to read the meters."

Obviously they have to think of those people who might fall through the net…like the old and those who can't speak English very well."

It was suggested that information should be tailored appropriately for these consumers using different languages and Braille. Also emphasised was the need to use community demonstrations and community work, alongside and with local organisations that support and understand the needs of vulnerable consumers, such as Age UK, disability groups and the Citizens' Advice Bureau, to help in disseminating the information. This was especially important as the majority of Panellists were unaware of any of the consumer representation or advisory bodies, such as Consumer Focus or Consumer Direct. Similarly, post-installation follow-up was considered to be a greater priority for these consumer groups to ensure they understood and were comfortable using their meter and IHD.

"They should go through charities like Help the Aged as they have people's concerns at heart."

Appendices

Appendix 1: Pre-task

We would like you to think about how your energy use has changed in the last 5 years or so.

To do this, draw a simple outline of your house and think about what things have increased or decreased your energy use in each room. Jot down these things in each room.

Your energy use may have been affected in a couple of ways. Firstly, by the type of appliances you use or new appliances you have bought e.g. switching to energy-saving light bulbs or having a TV in your bedroom when you didn't before. Secondly, by changes to how you use energy e.g. you've started turning off lights when you leave a room or you have more or less people in your household – perhaps your son/daughter has left home and so energy use in their bedroom has decreased.

These are just a few examples of how your energy use could have changed but there may be many others. You don't need to think of them all but just consider the main ways that you think your energy use has changed in the last 5 years.

The outline of your house doesn't need to be exact, just a basic drawing like the one below. Or, if you would prefer, you could just write a list
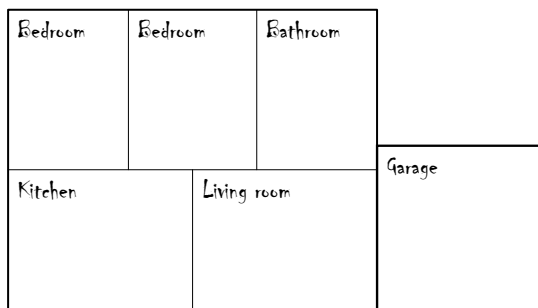
We would also like you to do some of your own research into other people's energy use and how this has changed in the last 5 years.

Talk to a friend or your neighbour to discuss how they think their energy use has changed. As a guide, we have outlined some questions you may want to ask but feel free to ask your own questions too!

Briefly jot down what your friend or neighbour has said in the space below:

Example questions to ask:

1. How much do you think about the amount of energy you use?

2. Do you think about how much energy other people / family members living in your house use? What about other people in your street? What do you think about their energy use?

3. How has your energy use changed in the last 5 years? What are the main things that have affected your energy use? Have these caused you to increase or decrease your energy use?

4. Have you done anything to try to reduce the amount of energy you use? What are they?

Ofgem Consumer Panel 2010/11– Session 1 Agenda

- PRE TASK – Participants asked to draw an outline of house and fill-in what has changed in last 5 years in terms of energy use in each room e.g. children gone to university, bought a laptop, changed to energy saving light bulbs

How have these changes affected energy consumption?

PRE TASK – Participants also asked to act as 'citizen researchers' to find out how friends' or neighbours' energy use has changed in last 5 years

Timing	Item
17.30-18.00	**Arrival and Registration** Signing contracts
18.00-18.15	**IN PLENARY:** Welcome and housekeeping (Opinion Leader lead facilitator) Introduction to the Panel. What to expect etc BREAKOUT: General introductions on tables – allowing plenty of time for a get to know you

Timing	Item

18.15-18.35	Discussion: Energy habits, switching and quiz
	
	• **Discussion**: Energy habits – **TO DRAW ON PRE-TASK**
	  – Talk through pre-task home diagrams
	    ◦ What has changed in your family/home?
	    ◦ What impact has this had?
	    ◦ Had you considered the impact of these changes before we asked you to complete the task?
	    ◦ What can you do to use less energy in the home?
	    ◦ Are there areas where you think you could use less energy? What are they? Do you already do this / why haven't you started using less energy in these areas?
	    ◦ From whom would you seek advice about saving energy? Friends, government, council etc.
	    ◦ What are the most important issues to you when thinking about your energy use in your home? Spontaneous, then probe on: cost, efficiency, environment/sustainability, other?
	    ◦ Is the amount of energy you use a conscious decision?
	    ◦ Do you think about how much energy the other people in your house use?
	• Have you ever switched energy supplier? Why?
	• If yes:
	  – How easy or difficult did you find the process of changing your energy supplier? What were the key things that made it easy / difficult?
	  – Would you do switch again? Why / why not?
	  –

18.35 – 18.50	**IN PLENARY then BREAKOUT DISCUSSIONS:**
	
	• **QUIZ**
	• (REACTION TO QUIZ)
	  – What were you already aware of?
	  – What didn't you know?
	  – Was anything surprising? What?

18.50 – 19.00	**IN PLENARY:** Presentation on structure of the energy market and key players in industry Any questions?

Timing	Item

19.00 - 19.25	**BREAKOUT GROUPS: Understanding of current events in the energy market**
	• **Discussion:** Roles of different bodies in the energy industry
	• Thinking about the energy market very broadly, what do you think has been happening over the past year? Spontaneous reaction then probe on:
	  – *Smart meters*
	  – *Sustainability / environmental issues*
	  – *Changes to retail prices*
	    ◦ *How do you think changes in retail prices will affect you in the future? Probe on: finances, energy consumption, switching supplier etc*
	  – *Changes to consumer energy goods available*
	  – *Changes to consumer energy behaviour* – Do you think consumers have started changing the way they use energy? What do they do differently?
	  – *The need for new / alternative energy sources*
	  – *Changes to new homes being built*
	• **What** are the future risks to our energy supply? Discuss fully
	• **What** are the future risks to consumers? Discuss fully
	• **Do you know what** kind of things energy suppliers / Ofgem / government might be doing to reduce these risks?
	  – What do you think they should be doing?

19.25 – 19.35	**BREAK** • Please be back by 19.35 at the latest
19.35-19.40	**IN PLENARY: INTRODUCE :** Smart Meters – short presentation on function and legislation *(spontaneous awareness and understanding obtained in 18.50 discussion)* • What are they / what will they do? • Broad overview of rollout –

Timing	Item

19.40 – 20.00	**BREAKOUT GROUPS: Reactions to overall concept and rollout**
	• What impact do you think Smart Meters will have on:
	  − You, personally? Domestic energy consumers generally?
	  − Energy suppliers?
	  − Network companies? *(Give brief re-cap on role of network companies if required)*
	• What do you see as the <u>main</u> benefits to consumers?
	  − Probe briefly on having more information about energy consumption, accurate billing, tailored energy tariffs, easier switching between suppliers, more pre-pay options and easier switching between payment methods, future benefits / impact on wider-energy use
	• Are any downsides for consumers or particular types of consumers?
	  − Probe on any concerns about how their personal data will be used (data privacy)
	  − Probe on vulnerable consumers e.g. fuel poor, sick, disabled, the elderly
	• What challenges or issues can you foresee in implementing the rollout?
	• Use example of digital switchover
	  − What aspects of the switchover went well? Not so well?
	  − Are there any similarities and differences with Smart Meters roll-out

20.00 – 20.25	**BREAKOUT GROUPS: Important principles for the rollout**
	FLIPCHART
	• How should the rollout of Smart Meters be implemented?
	• Work as a group to outline important principles that should characterise the rollout. How should energy suppliers (who will provide the Smart Meters) behave?
	  − What should they do?
	  − What do you need to know?
	  − Who should provide the information? Spontaneous then probe for gov / supplier / other (probe on third parties if mentioned – trust / importance)
	  − **When** should the information be provided? How far in advance of the roll-out and / or visit(s) to install the Smart Meters do you want to receive information? Would you want to receive

Timing	Item
	reminders? When?
	– Where would you be likely to go / look to find information?
	– Remember that there will be 3 phases to the rollout; the time leading up to installation, the visit(s) to install Smart Meters [note: consumers who are not on dual fuel may require two visits to install the Smart Meters] and the time after installation
	• Groups present principles in plenary
20.25 – 20.50	**BREAKOUT GROUPS: Considerations at each stage of the rollout**
	• Collaboration exercise in three groups of six. Each group takes one stage of the rollout and discusses the needs of consumers and important considerations for providers at their allocated stage. Prompt cards and timeline provided to generate discussion.
	• MAKE USE OF FLIPCHARTS FROM PREVIOUS SESSION TO PROMPT UPON INFORMATION NEEDS
	• Pre- installation stage
	– Provide prompt cards for communication and messages, information and support (including content, timing, volume, channels and sources), what is needed to gain your buy-in / provide reassurance, what do you need to know about how the meter installation will take place
	• Installation visit(s)
	– Provide prompt cards for what installers should and should not do during the installation visit, including provision of information about the Smart Meter(s) and in-home display, the type and content of information that would be needed, and information about other products (probe 'selling / marketing' of other products)
	• Post- installation stage
	– Provide prompt cards for follow-up support and information (including content, timing, volume, channels and sources), data privacy (concerns, opt-in/out), future benefits, what would keep you engaged with your Smart Meter and continuing to change how you use energy, what other type of information would you need to help you save energy, who should provide this
	– **For all** (pre, during, post): are there any key consumer groups who would require further consideration, at any stage of the

Timing	Item
	rollout, e.g. vulnerable, old, those resistant to Smart Meters, those with multiple jobs (e.g. for installation), PPM? – Should these groups be managed / supported / targeted differently? How? •
20.50 – 21.00	**IN PLENARY** • Groups present discussions of their stage in plenary • Thanks, give details of next workshop and close

LOCATION OF WORKSHOP	
DATE OF WORKSHOP	

Ofgem Consumer Panel 2010-11

Quiz Answer Sheet

Circle the letter that you think corresponds to the correct answer (A, B, C or D)

Q1.   By what percentage has energy consumption for lighting and appliances per person risen since 1970?

    A.   22%
    B.   52%
    C.   102%
    D.   152%

Q2.   There are approximately 24m households in GB. How many households approximately live in

fuel poverty (these are households that spend more than 10% of their income on gas and

electricity)?

    A.   1.5m
    B.   5m
    C.   5.5m
    D.   7.5m

Q3.   How much money does the average household waste per year by leaving appliances on

standby?

    A.   £15
    B.   £23
    C.   £37
    D.   £56

Q4. In 2009, approximately what proportion of UK electricity generated was from renewables?

A.   2%
B.   7%
C.   12%
D.   20%

Q5. By how much has energy use per household decreased since 1971?

A.   0%
B.   8%
C.   13%
D.   22%

Q6. In total, how long is Great Britain's electricity network?

A.   190,000 miles
B.   290,000 miles
C.   390,000 miles
D.   490,000 miles

Q7. Which organisation represents and protects the interests of consumers of energy?

A.   Consumer Direct
B.   energywatch
C.   Consumer Focus
D.   Energy Ombudsman

What is Ofgem?

- The Office of Gas and Electricity Markets (Ofgem) is the independent economic regulator of Britain's gas and electricity industries

- It's principal duty is to protect the interests of existing and future consumers wherever appropriate by promoting effective competition and regulating the monopoly companies which run the gas and electricity networks

- Ofgem is funded by a licence fee, paid by the energy companies it regulates

- We'll discuss what this means in practice during the course of this evening's discussions

Why are you here?

- Ofgem would like to better understand the views of energy consumers on a range of current and future issues

- You are part of a Panel drawn from six different locations across Great Britain:

| London	Norwich	Reading	Swansea	Inverness	Kendal

- Your role is to be the 'voice of the consumer'

- Thank you for taking part!

What will happen over the year?

- As well as this workshop, you will definitely be invited to a second workshop and most likely a third workshop

- There may also be surveys or discussion groups in addition to these workshops

- You will always be paid for your time
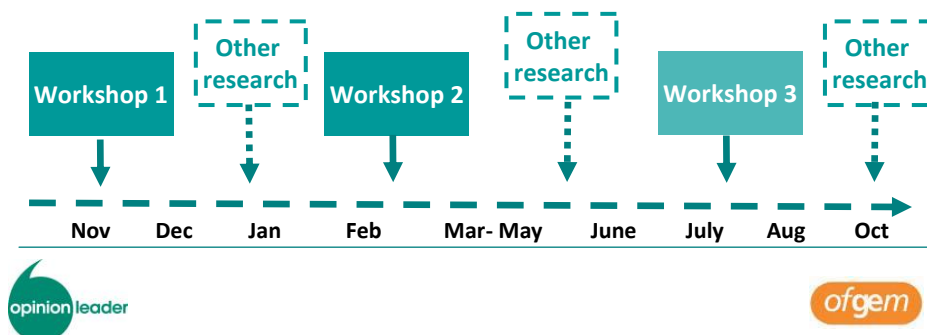
What will happen this evening

- **Discussions on:**
    - Your energy use
    - Your thoughts about the energy market
    - Smart Meters
- **Mix of:**
    - Table discussions
    - Information giving / presentations
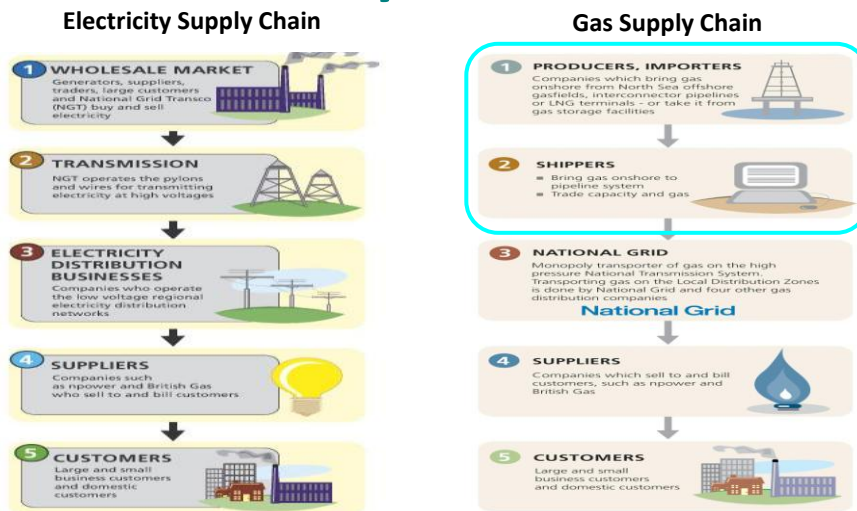   - Feedback sessions

Guidelines

- Make time for everyone to contribute

- Respect the opinions of others

- Let everyone speak

- No right or wrong answers

- Mobiles off please

- Take a break when you need one

- Contracts

Industry structure

Electricity Supply Chain **Gas Supply Chain**

Key organisations – Electricity Network Companies

Electricity transmission

Electricity distribution

Key organisations – Gas Network Companies

Gas transmission

Gas distribution

Key organisations - suppliers

These are the several suppliers in the GB energy market:

Consumer representation

- Consumer Direct is responsible for providing advice to consumers

- Consumer Focus is the consumer advocate and deals with vulnerable customers

- The Energy Ombudsman can investigate complaints that cannot be resolved by the companies themselves

DECC

- DECC is the Department for Energy and Climate Change

- It is responsible for overall energy policy

- Combines the roles of Department for Environment, Food and Rural Affairs and Department for Business and Regulatory Reform

- Greater focus on the challenges of energy and climate change

Ofgem

- The **O**ffice o**f G**as and **E**lectricity **M**arkets exists to….

- ✓ Promote competition (and monitors anti-competitive behaviour)

- ✓ Protect the interests of gas and electricity customers, both current and future

- ✓ Licence and monitor gas and electricity companies

- ✓ Ensure sufficient investment in the energy networks

- ✓ Help companies make environmental improvements

- ✓ Ensure companies take into account the needs of vulnerable customers

- ✓ It does not deal with consumer complaints

What are smart meters?

• A smart meter is a more sophisticated, electronic version of the gas and electricity meter you currently have in your home

• They are 'smart' because they are able to communicate with your energy supplier by sending and receiving information about your energy use remotely

Why are we talking about them?

• Every household will have a smart meter by 2020. This is a requirement set by the Government

• Smart meters will help to reduce overall energy consumption, increase energy efficiency and reduce carbon emissions

How do smart meters work?

• Smart meters work by sending information about your energy use to your supplier via a centralised data collection point

• In your home, you will get :

— A Smart meter for gas and electricity

— An in-home display (IHD) giving you near real-time information about your energy consumption

— A 'home area network' (HAN) to communicate between devices in your home i.e. the smart meter and IHD

— 'Wide area network' (WAN) equipment for communicating back to the supplier or other allowed parties

Traditional meter

Smart meter

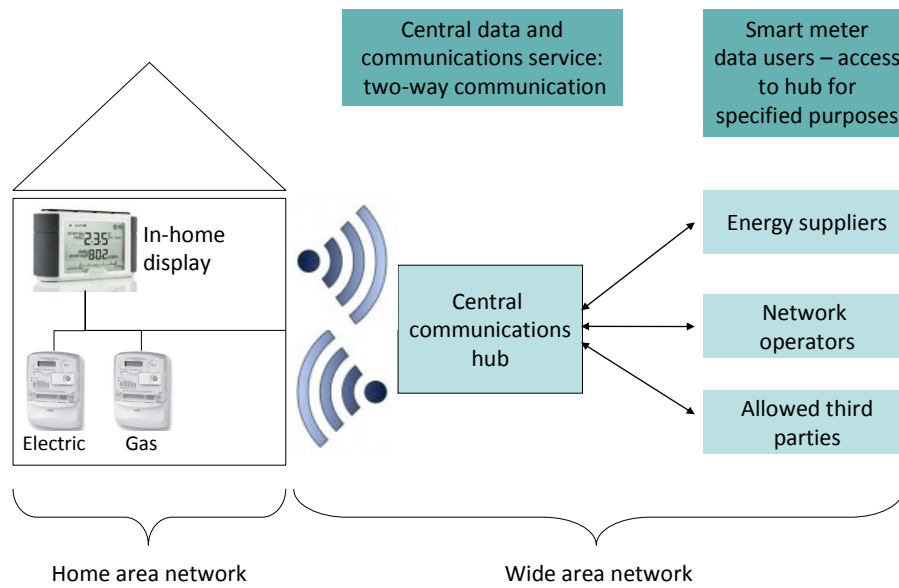**Examples of in-home displays (IHD)**

What is an IHD?

• It is a portable device

• That will be provided to all domestic consumers

What type of information will it display?

• Current and past usage in kWh and how much it is costing/costs

• Visual information on current high and low usage

• Accurate information about your account balance

Introduction to smart meters

	Central data and communications service: two-way communication	Smart meter data users – access to hub for specified purposes

In-home display

Electric   Gas

Central communications hub

Energy suppliers

Network operators

Allowed third parties

Home area network   Wide area network

Introduction to smart meters

What are the benefits of smart meters?

For you

- Enable accurate billing with no more need for estimated bills
  - No need for meter readings to be done manually
- Give you more control and information on your energy use
  - You can see how much energy you use through your IHD
  - And how much that energy is costing you, both currently and historically
  - It will show visual information on current high and low usage
- Enable you to take advantage of tailored energy tariffs from your supplier
- Enable you to switch more easily between suppliers
- More pre-payment options and easier switching between payment methods

For energy suppliers

- Deliver improved customer service, remove need to estimate bills or read meters and enhance the potential for innovative new services and tariffs

For the country

- They will play an important role in Britain's transition to a low-carbon economy

How will the rollout work?

- Government will establish a framework for the rollout

- Energy suppliers will be responsible for customers getting a smart meter

- They will be required to develop a code of practice for the installation covering the more practical aspects of the consumer experience

- All consumers will eventually receive a smart meter, either through:

  – A standard meter replacement

  – By asking for one

  – The supplier providing a smart meter as part of its roll out plan
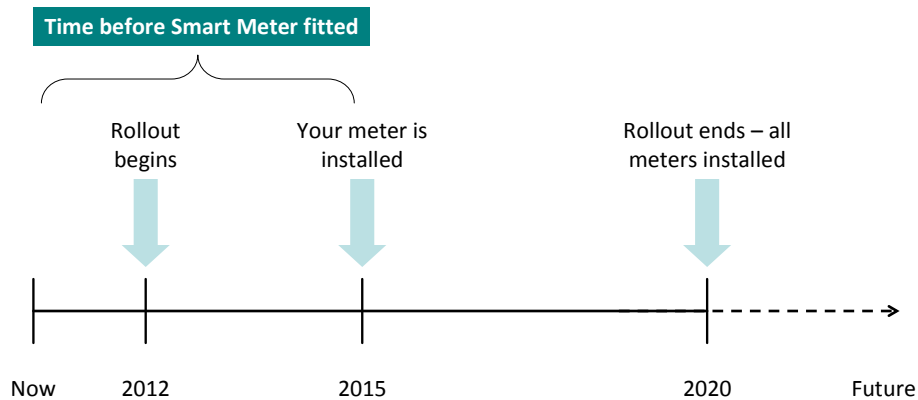
- This will have happened by 2020

Introduction to smart meters

When will I have my meter fitted?
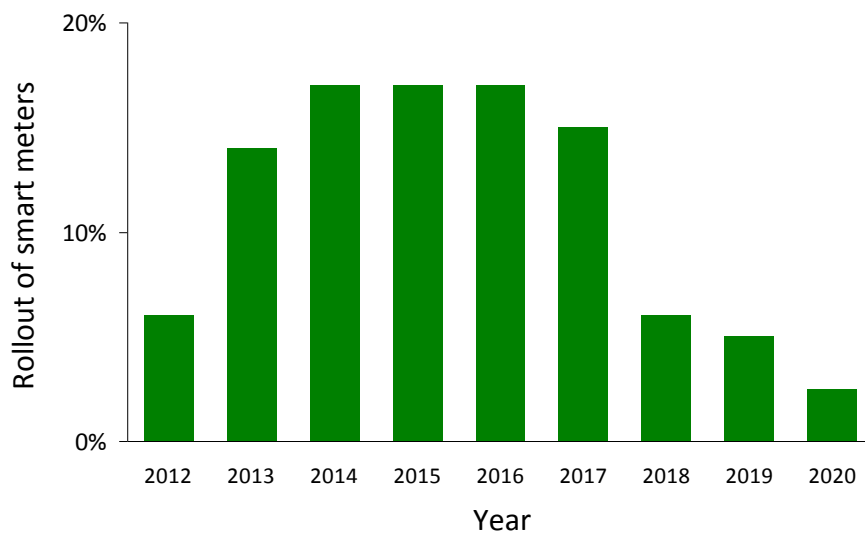
Appendix 5: Pre, during and post installation group exercise

Imagine your Smart Meter(s) will be fitted in your home the year 2015
What do you and other consumers need to know during the time **leading up to the fitting?**
What do Smart Meter providers need to do or think about during this time?

Time before Smart Meter fitted

Rollout begins	Your meter is installed		Rollout ends – all meters installed	

Now   2012   2015   2020   Future

• What will be need to be done to help you "buy in" to Smart Meters?

• What will you need to be reassured about the Smart Metering rollout?

• What should Smart Meter providers be saying to you?

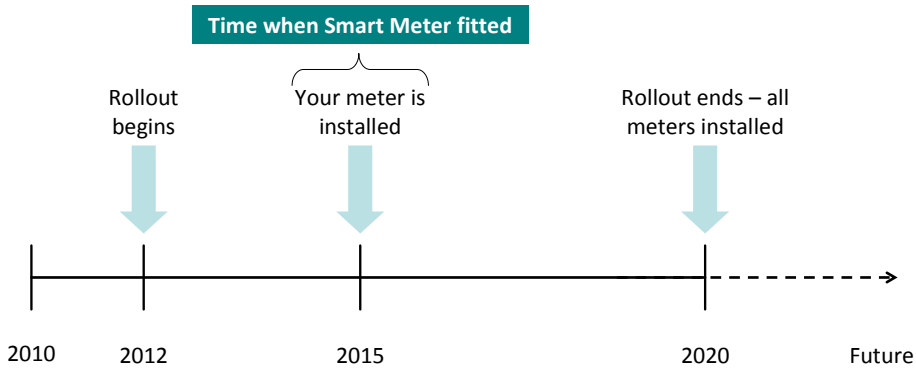• What other information and support will consumers want or need to know?

• What do you need to know about meter installation itself?

```
[                                                            ]
```

• Who should give you this information/support? (e.g. government, energy supplier, other)

```
[                                                            ]
```

• How should it be provided? (e.g. letters, leaflets, websites, other)

```
[                                                            ]
```

• Write on the timeline **when** you need to receive the key pieces of information/support

Imagine it is the year 2015 and your Smart Meter(s) is due to be fitted in your home
What do you and other consumers need to know **at the time** your Smart Meter is being fitted?
What do Smart Meter providers need to do or think about at this time?

Time when Smart Meter fitted

| Rollout begins | Your meter is installed | Rollout ends – all meters installed |

2010   2012   2015   2020   Future

• What are the "do's and don'ts" that installers need to think about?

[blank box]

• What information and support will consumers want or need to know about the meter or in home display?

[blank box]

• Who should give you this information/support? (e.g. government, energy supplier, other)

[blank box]

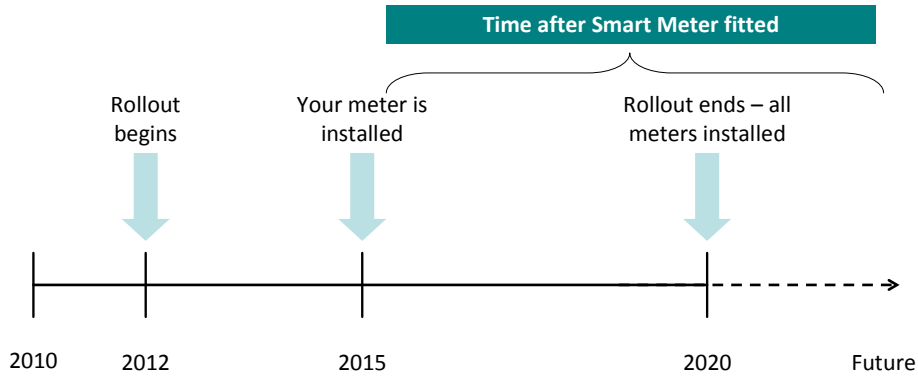• How should it be provided? (e.g. letters, leaflets, websites, other)

[blank box]

• How much information/support should be provided?

[blank box]

• What information should be left with consumers about Smart Meters and what they do?

[blank box]

• Would you want information about other products or services left during the visit? What might this be?

[blank box]

• Write on the timeline **when** you need to receive the key pieces of information/support

Imagine it is the year 2015 and your Smart Meter(s) has recently been fitted in your home
What do you and other consumers need to know **after** your Smart Meter has been fitted?
What do Smart Meter providers need to do or think about during this time?

Time after Smart Meter fitted

| Rollout begins | Your meter is installed | Rollout ends – all meters installed |

2010   2012   2015   2020   Future

• Will consumers need further information and support after fitting? What might this be?

• When should this information or support be given? How often would you expect to get it? How much will you need?

• Who should be giving you this information/support? (e.g. government, energy supplier, other)

• How should it be provided? (e.g. letters, leaflets, websites, other)

• What would you need to keep you engaged with your Smart Meter and help you change the way you use energy in your house?

• What other types of information would you need to help you save energy?

• Do you have any concerns about data privacy? Should there be a choice to opt-in or opt-out of allowing your data to be shared with other companies?

• Write on the timeline **when** you need to receive the key pieces of information/support