

FUTURE ENERGY MODELS

Research findings report

Prepared for Citizens Advice

Prepared by Dawn Mulvey, Nicole McNab and Steve Morley

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1. EXECUTIVE SUMMARY

Project background

The energy market in Great Britain (GB) is changing, driven by 3 key factors:

- Digitisation, through smart metering.
- Technological change behind the meter, through microgeneration, battery storage, electric vehicles, smart appliances etc.

Reforms to industry systems and processes, including switching and settlement.

The current energy supply market arrangement (the supplier hub model) places most of the responsibility for the consumer relationship, including metering, generation and billing, with the supplier. It is widely accepted that this market arrangement may need to adapt to remove barriers to innovation and improve consumer access to the benefits of new technology and new service structures. Ofgem has stated the need for 'a market model that encourages new business models and propositions, in a way that protects consumers while also providing for better default arrangements for the disengaged'.¹

Energy sector consultancy Delta-ee has identified a number of 'New Energy' business model approaches, including:

 Time-of-use optimisation: Models that leverage value from energy-use flexibility (eg electricity demand shifting) through the cost of energy usage varying throughout the day



2. **Energy-as-a-service:** Models that develop ongoing relationships with consumers by providing the use of a product as a continued service offering rather than a one-off purchase, or by focusing on managing the household's existing equipment to improve the delivery of an outcome – selling comfort rather than kilowatts per hour



3. **Peer-to-peer (or marketplace operations):** Trading platforms that transform the way in which stakeholders are connected and transactions occur, developing a marketplace for peer-to-peer trading. For example, solar energy collected from a domestic property and traded to a local consumer



4. **Lifestyle products:** Models focused on improving the consumer's quality of life or experience, and which primarily concern in-home devices and apps



5. **Efficient consumption:** Primarily data-driven and/or commercial arrangement models that demonstrate innovative approaches to improving customer consumption



6. **Bundling:** Models based on offering a combination of services or services packaged together into a single proposition



¹ Ofgem, March 2018, the #FutureSupplyLab workshop.





Citizens Advice is the official consumer body for energy. They use research and evidence from the people and micro businesses who contact their advice service every day to understand the problems facing energy consumers in Great Britain. Citizens Advice help solve these problems by engaging with industry, changing policy and supporting consumers to navigate the market

Citizens Advice is currently seeking to assess the views of a broad cross-section of consumers to ensure that any decisions and policies made on the future energy market are in the best interest of all consumers, including consumers who are disengaged with the current energy market or who are in vulnerable circumstances (e.g. disabled, have mental health conditions, fuel-poor).

Currently, there is limited understanding of how attractive and accessible consumers will find future energy supply models.

In February 2019 a mix of consumers representing different demographics from England, Scotland and Wales attended qualitative workshops to discuss the current and future energy supply models in detail. This was supplemented by in-depth interviews with consumers in vulnerable circumstances who were less able to attend workshop events.

We addressed the question of how to create a fair market for all consumers with a selection of future energy supply models, as well as any mitigation necessary to maintain consumer access to a range of products and services.

Feedback from these workshops will inform Citizens Advice's advocacy on behalf of consumers, ensuring that any change to the current energy supply model leads to positive outcomes for consumers, including those in vulnerable circumstances.

Scope and objectives

Citizens Advice set out the following objectives for the research:

To understand how consumers feel about these different models, what the perceived benefits and risks are, and how accessible the models are. To assess what consumers think fair access would be in a market with these business models.

To achieve this, Citizens Advice commissioned Impact to conduct in-depth exploratory research with a cross-section of consumers from England, Scotland and Wales. We conducted qualitative workshops in February 2019, with 32 consumers attending workshops in Milton Keynes, 32 in Edinburgh and 33 in Cardiff. We supplemented these with 3 in-depth one-to-one interviews in each of the 3 locations to ensure that consumers less able to attend workshop events (eg due to physical or mental health conditions) had the opportunity to provide feedback.

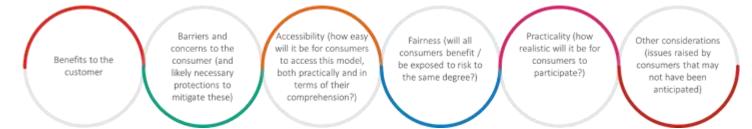
We devised a screening questionnaire to guide recruitment and to ensure that consumers who attended the workshops were representative of GB society in terms of age, gender, financial circumstances, ethnicity, religion, living situation and rural/urban location. In addition, the research included consumers in vulnerable circumstances (including consumers with mobility or mental health disabilities, fuel-poor consumers, consumers



with English as a foreign language, consumers of pensionable age, and parents with children under 5 years old). The research also included consumers who were more and less digitally savvy, and more and less engaged with the current energy market (based on recent switching behaviour).

The consumer research focused on 3 of the 6 future energy supply models, selected in consultation with Citizens Advice as well as energy sector consultancy Delta-ee, who provided consultancy support for this project and peer-reviewed the findings. These 3 models have been selected because they span the breadth and depth of the models being considered and are the most consumer-relatable models.

The research involved an initial exploration of what research participants like or dislike about the current energy supply model. Participants were then asked to assess the 3 future models according to the following consumercentric criteria:



Key findings and conclusions

Current energy supply model

Consumers are ambivalent towards the current energy supply model, and on the whole are not very engaged with it. They find the model complex and do not trust their suppliers.

They are receptive to technology that could improve their experience, but their feedback on smart meters is negative and there are fears that an increase in the role of technology may further exclude consumers in vulnerable circumstances. The concern is that such consumers may be less technology inclined and thus less able to engage with their providers, getting left behind on standard variable tariffs, which are least cost-effective.

However, consumers view the current energy supply model as somewhat familiar and 'low-maintenance', and therefore find the idea of changing the current model as risky due to associated unknowns.

From the feedback given, it seems that GB consumers will require clear guidance and reassurance in the event of any changes to the current energy supply model, with sufficient flexibility in any new regulations and rules to ensure that consumers are protected in case they do not engage with their suppliers or unforeseen risks emerge.



Future energy supply models

Time-of-use

Intro: A **time-of-use** model leverages value from energy-use flexibility (eg electricity demand shifting) with the cost of energy usage varying throughout the day. Participants during the study quickly understood this model, and drew comparisons with Economy 7 tariffs (tariffs that offer 2 different rates on electricity: 1 during the day and 1 during the night).

Time-of-use can involve fixed unit costs at specific times of day (for example where energy is 10p per unit in the morning, 5p in the day and 20p in the evening), or it can be dynamic (where the price changes based on availability of energy in the system and consumers will be told ahead of time what that price is likely to be). Use of appliances in response to the tariff can be manual (according to consumer choice of when to use them) or automatic (with consumers signing up to a system that automatically uses energy at a cheaper time, for example via smart appliances).

Positives:

Consumers find fixed pricing periods more straightforward and easier to understand than dynamic pricing.

They think dynamic pricing would be too complex and confusing for many in society, and would require excessive effort for consumers to plan ahead and ensure they can capitalise on lower prices.

Consumers also prefer manual adjustments over automated ones, as they dislike the lack of control in an automatic model, which acts on the consumer's behalf.

Instead, consumers would prefer to be responsible for making the adjustments need as this puts them in the driving seat and helps them understand the process.

Negatives:

This model consistently has low appeal to consumers and is deemed too inflexible. Consumers feel that this model places too much onus on them to make substantial lifestyle changes, with little input from suppliers, who it is felt should also assume some responsibility to make adjustments to their operations.

There is also concern that not everybody would be able to benefit from a time-of-use model, with consumers having differing opinions on who would and would not benefit.

Consumers who are able to change their energy behaviour are perceived as most likely to benefit, including those who do not have traditional 9–5 lifestyles, and under some circumstances, older consumers. Shift workers are generally seen as unable to take advantage of a time-of-use model, and also consumers who become temporarily ill or families with school-aged children.

There is a lack of consensus concerning consumers who are typically at home during the day – some consumers feel this segment is able to adopt a more flexible energy approach, while others feel such consumers have a need for energy during peak periods and so are unable to reduce their use at expensive times.

Consumers are also apprehensive over the implications of shifting their energy use. This includes safety concerns (risk of leaving electrical equipment on overnight or during the day when no one is at home) and anti-social considerations (using energy through the night may become a nuisance for neighbours – for example washing machines being programmed to start during the night). Consumers also raise concerns that this model might simply cause different peaks in demand rather than smooth it out.



Peer-to-peer

Intro: The **peer-to-peer** (or marketplace operations) model transforms the way in which stakeholders are connected and transactions occur, developing a marketplace for peer-to-peer trading. As part of this model, consumers are able to invest in technology such as solar panels, electric vehicles or battery storage, and to become prosumers or traders,² selling their excess energy to the grid or other consumers.

Positives:

Consumers are consistently the most positive about the peer-to-peer model, and it receives more support than the other models discussed, including the current energy supply model. When given time for reflection and contemplation, Consumers favour this approach to the energy market.

Consumers are very positive about:

- The level of choice the peer-to-peer model offers the consumer, and being able to choose who they pay for their energy (for example local micro-suppliers or ethical traders)
- How the model embraces community energy and the potential ability to support local institutions such as schools and hospitals
- The perceived strong and tangible link with renewable energy

For some consumers there is an appetite to cut out the middleman and purchase directly from a trader, and with the majority of consumers there is a willingness to engage with this model over the current energy supply model.

Negatives:

Consumers recognise that this is the most 'future-focused' energy supply model tested, and perceive a number of barriers to adoption.

These include the need for guarantees over security of supply, as well as regulation to protect all parties. For example, certain sections of society may not be able to access the technology required to become a trader (eg due to financial constraints or restrictions placed by landlords or local authorities for consumers in social housing), so fair access for all is a key consideration.

Moving forward: On the whole, consumers believe that the wider community would be more likely go through a third-party platform to access and purchase energy in a peer-to-peer market. This would help negate some of the concerns about security of supply as it would be a company's responsibility to ensure measures were in place and upheld, dedicating resources to security that consumers may be unable or unsure how to do. Regardless, regulation would need to be in place to ensure that large traders are not able to alter prices significantly in their favour.

² 'Traders' refer to prosumers, which are consumers who sell their excess energy to the grid/others.



Energy-as-a-service

Intro: The **energy-as-a-service** business model provides consumers with either managing the household's existing equipment to improve energy delivery or offering an on-going service rather than simply paying for usage – for example selling comfort rather than kilowatts per hour.

Positives:

The key benefit of this model for consumers is the simplification of units of energy usage to hours used, which they find more tangible and relatable.

Consumers find the analogy of mobile phone contracts useful in understanding and relating to energy-as-a-service.

They also find the ability to have control over bills appealing.

Negatives:

Consumers find energy-as-a-service (primarily focusing on heat-as-a-service) the most complicated and difficult to understand of all the models, as it differs most from the current energy supply model in terms of how energy use is measured and paid for. They see a number of barriers:

- The requirement to have smart appliances or technology in the home to enable the purchase of energy-as-a-service (for example smart thermostats for 'warm' hours) is seen as a deterrent in the short term
- Contracts longer than 12 months are very unpopular. Longer contracts are outside participants' comfort zone, who are concerned about how changes in circumstances would be accommodated (eg moving house or changes in household composition). Contracts would need to be highly flexible
- There are fears of being overcharged (in the form of consumers paying for energy or heat they did not use) if they cannot 'roll over' energy usage that is left unused

Moving forward: The participants identified some ways that energy-as-a-service could be made more appealing:

- Optimising homes for decarbonised energy use and overall energy efficiency, perhaps with government funding for home insulation, or a guarantee that any initial investment would be counterbalanced by savings over time
- Continuing to develop technology such as smart thermostats to make the model easy for consumers to interact with
- Being able to 'roll over' energy usage so consumers can get their money's worth

Compared to the current energy supply model, energy-as-a-service is liked by some and misunderstood by others. It is seen as suiting those with the financial means to install the smart technology required. However, some consumers may need more support to benefit from managed energy services, regardless of affluence or home ownership, especially consumers in vulnerable circumstances.



Issues to address going forward

There is some consumer appetite for more innovative market models, and consumers are keen to find out more about the energy market, including the current energy supply model and implications of increased peak demand.

Encouragingly, the participants were able to understand the principles behind each of the energy supply models and to debate the merits and disadvantages of each one, though in some cases more education was required than in others (especially for energy-as-a-service). It is clear, however, that the introduction of alternative energy supply models would require support and guidance for all consumers. The participants raise the following considerations to take on board.

Fairness

Consumers, especially those in vulnerable circumstances, would need to receive sufficient support, for example, from energy suppliers, Citizens Advice and support organisations, to engage with the market (eg access the relevant equipment, have guides to educate them, be given incentives to change behaviour).

Transparency

Consumers currently have low levels of trust in energy suppliers and would like any move to an alternative energy supply model to involve more transparency and sharing of information regarding elements such as tariffs and contract length.

Consumer protection

When prompted, the research participants expect Citizens Advice to take a lead role in protecting the consumer by representing the voice of the consumer. The regulator Ofgem would need to regulate actors in future markets so that consumers feel comfortable engaging, for example to ensure continuous access to energy supplies or protect consumers from unfair pricing.

Simplicity

Anything that can be adopted to make the current (or any future) energy supply model easier to understand is a benefit, through means such as well-designed apps, easy-to-understand technology and more straightforward billing. When adopting any future energy supply models, a trial period could help consumers gain an understanding of the practical implications and help alleviate concerns.

Control

Anything that places additional restrictions on consumers is negatively received by consumers. Consumers find future energy supply models or a combination of these more attractive if they incorporate an element of flexibility or personalisation. Examples include the ability to select green energy in peer-to-peer, shorter contracts of 2 years maximum for energy-as-a-service and the ability to specify peak hours in time-of-use.

Environmental responsibility

Protecting the environment is becoming increasingly important to consumers, and new supply models should enable this. There is, however, a general lack of awareness among the participants of the benefits of low-carbon technologies, with some participants citing negative experiences with solar panels. More can be done to educate consumers about emerging technology such as electric vehicles and heat pumps.



2. BACKGROUND

A wide range of digital and technological advances, combined with reforms to systems and processes, are accelerating changes in the energy market. Key drivers include:

Digitisation of products and services, from smart meters to electric vehicles

New entrants to the market from multiple sectors and geographies, including automatic switching companies

Increasing focus from business and government on the 'energy trilemma' (affordability, security and sustainability)*

Policy frameworks moving towards liberalised and competitive markets

Increasing empowerment of consumers, ranging from enhanced service expectations to the proliferation of prosumers who, thanks to technological changes, have increased access to microgeneration and battery storage, and are able to both produce and consume energy

It is widely accepted by the energy industry that the current energy supply model needs to change substantially to remove barriers to innovation and improve consumer access to the benefits of new technology and new service structures. Under the existing model, the supplier is responsible for much of the consumer relationship, including metering, generation and billing. Ofgem has stated the need for 'a market model that encourages new business models and propositions, in a way that protects consumers while also providing for better default arrangements for the disengaged.'³

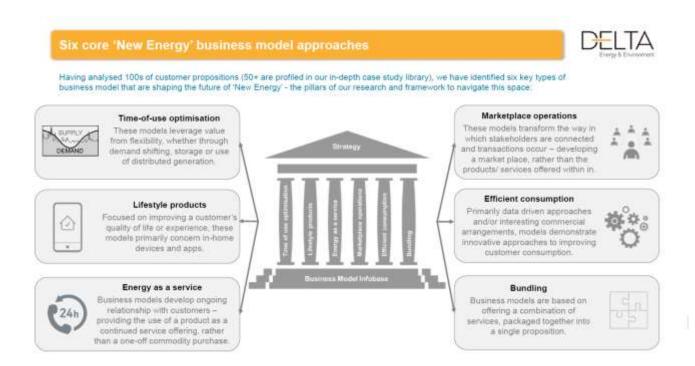
Energy sector consultancy Delta-ee explored and analysed innovative business models in the energy sector and identified 6 core 'New Energy' business model approaches, as outlined in Figure 1 below. While some models would supplement the existing energy supply model (specifically lifestyle products, efficient consumption and bundling), others would require more substantial changes (specifically peer-to-peer). It should also be noted that the models are not mutually exclusive, and it is possible that in the future individual companies will offer multiple aspects from multiple models.

³ Ofgem, March 2018, the #FutureSupplyLab workshop



^{*} For example, GB is committed to reducing greenhouse gas emissions by 34% by 2020 and net zero by 2050, compared to 1990 levels, as set out in the Climate Change Act 2008. The adoption of renewable and other low-carbon energy sources will be required to achieve this, though these need to be evaluated in conjunction with affordability (how accessible and affordable renewable energy is to the GB population) and their ability to consistently meet demand (security of supply).

Figure 1: Future energy supply models



Ofgem's review of the current energy supply model and subsequent changes to that model are set to lead to profound changes in the market and how consumers interact with it. While these changes are intended to benefit consumers by encouraging innovation, greater efficiencies and more choice, they also carry potential risks and raise issues of fairness. For example, some benefits to consumers may depend on consumers' levels of engagement with suppliers, which vary widely. Despite some recent increases in switching, 54% of consumers (excluding prepayment consumers) remain on a standard variable tariff and could be classed as unengaged.⁴

The greatest benefits are likely to come to consumers willing to adopt new technology – electric vehicles, smart meters, household appliances connected to the Internet of Things, solar panels, heat pumps and even smartphones. There is a risk that consumers in vulnerable circumstances in particular could get 'left behind' in the move to smarter, cheaper energy solutions through their lack of engagement or more limited access to newer technology. New rules may be required to ensure that all consumers have fair access to the market.

Ofgem consulted last year on future energy supply market arrangements and along with the government has recently launched a joint review into the future of the retail energy market. Citizens Advice is playing a major role in that consultation process by ensuring that future market and policy decisions are driven by consumer interests.

There is currently limited feedback from consumers regarding their perceptions of the attractiveness and accessibility of future energy supply models. To address this, in February 2019 a programme of consumer engagement was conducted. This took the form of qualitative research that directly explored consumer perceptions.

Citizens Advice will utilise the feedback from this research to continue to advocate for the elements of energy supply models, current and future, that work best and are the fairest for consumers, and to recommend any mitigation necessary to sustain the fundamental principle of equity in service.

⁴ Ofgem, 'State of the Energy Market 2018'.



3. SCOPE AND OBJECTIVES

The overall objective of this research is:

To understand how consumers feel about these different models, what the perceived benefits and risks are, and how accessible the models are. To assess what consumers think fair access would be in a market with these business models.

To achieve this objective, Citizens Advice commissioned Impact to conduct in-depth exploratory research with consumers across England, Scotland and Wales. Delta-ee, an energy sector consultancy, provided project support in terms of:



- Attending consumer workshops to present the current and future energy supply models and answer any question from consumers
- Reviewing educational handouts and leaflets developed to describe the future energy supply models to consumers attending the workshops / taking part in the in-depth interviews
- Peer-reviewing the results

A demographic and geographical cross-section of GB consumers took part in the research, including consumers in vulnerable circumstances and consumers who are engaged and disengaged with the current energy market (see section 5 for full details on consumers consulted).

The consumer research focused on 3 of the 6 future energy supply models listed in section 1:



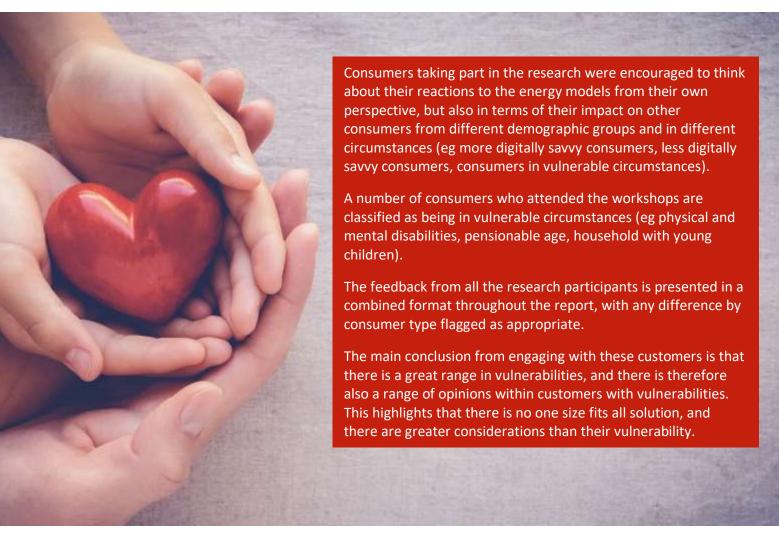


These 3 models were selected, in consultation with Citizens Advice and Delta-ee, because they span the breadth and depth of the models being considered and are the most consumer-relatable models. Where relevant, general consumer feedback can be applied to the assessment of other energy supply models that may evolve over time.

The research involved an initial exploration of consumer perceptions of the current energy supply model. The 3 future energy supply models were then assessed according to the following consumer-centric criteria:

Barriers and Accessibility (how easy Practicality (how Fairness (will all Other considerations realistic will it be for will it be for consumers concerns to the consumers benefit / (issues raised by Benefits to the consumer (and to access this model. consumers to be exposed to risk to consumers that may customer both practically and in participate?) likely necessary the same degree?) not have been protections to terms of their anticipated) comprehension?) mitigate these)

This is a predominantly qualitative piece of research, with qualitative workshops held in February 2019 and attended by 32 consumers in England, 32 in Scotland and 33 in Wales, supplemented by 3 in-depth one-to-one interviews in each location to ensure that consumers less able to attend workshop events (for example due to physical or mental health conditions) had the opportunity to provide feedback. The research includes quantitative elements in the form of polls and a final survey.





There were 3 distinct stages to the research programme:

Pre-task

Fieldwork

(Deliberative workshops and in depth interviews)

Post-task

The first stage aimed to introduce the topic to the participants and to act as a warm-up to the fieldwork stage. The current energy supply model and potential future models were explored during the fieldwork and evaluated at length, before using a post-event task to understand if time to reflect on and discuss the models with friends and family had an impact on participants' opinions and views.

A qualitative approach was determined to be the most suitable methodology to achieve the objectives of the research, as they are exploratory in nature.

The participants were gradually introduced to the different models to ensure that they had a clear understanding of how each model worked.

The research design built in time across the 3 stages to provide Impact with an in-depth understanding of the participants' reactions to and perceptions of the current and future energy supply models.

The deliberative workshops took place over a period of 4 hours, with multiple opportunities to engage with and educate the participants, refine topics and concepts, and debate the benefits and barriers and concerns of the new models.

For details on each stage of the research, please refer to section 5 and Appendix 1.

Abbreviation	Term
ВЗВ	Bottom 3 box score (0, 1 or 2 out of 10)
EaaS	Energy-as-a-service energy supply model
GB	Great Britain
P2P	Peer-to-peer energy supply model
ТЗВ	Top 3 box score (8, 9 or 10 out of 10)
TOU	Time-of-use energy supply model
GB	Great Britain



4. METHODOLOGY OVERVIEW

An overview of the methodology is provided in Figure 2 below. Full details are available in Appendix 1.

Figure 2: Methodology

Pre-Task

How the energy market operates in the UK is largely unknown to consumers. Therefore, to ensure maximum participation in the fieldwork, there was a need to warm up the consumer to the topic. This was done in the form of a pre-task. Recruited consumers were provided with a short task to complete either online or with a pen and paper before fieldwork started, answering questions on their energy use at home, how they interact with energy suppliers and if they believe these will change in the future (and if so, how). As part of the pre-task, consumers were also provided with information about the current energy model.

Fieldwork

The main stage of the research was the deliberative workshops and in-depth interviews. Each event was 4 hours long and used a range of large group discussions, smaller group discussions, introductions to topics and tasks. The workshops were designed to be informative but highly engaging to get the most out of the participants. During the workshops participants took part in 3 polls administered online and completed a paper diary throughout the event to note down their thoughts and opinions.

Post-Task

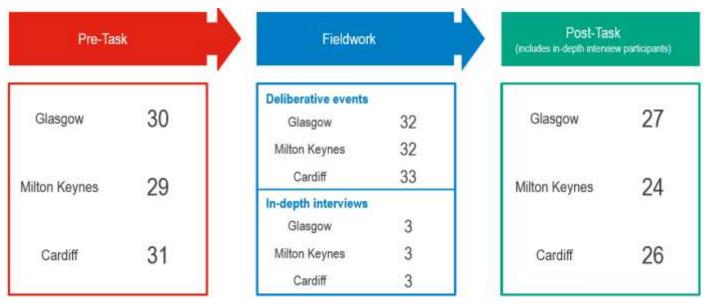
Research in its very nature can take place in a 'bubble', where consumers can hypothesise about what they need and desire within a safe environment. Opinions can sometimes change when going back to 'real-life' and discussing the research with family and friends. To check if perceptions and opinions changed, and/or if new ideas/questions formed, consumers were asked to complete a post-event survey.





In total, 106 participants took part in the research, as indicated in Figure 3 below.

Figure 3: Sample sizes



See Appendix 2 for the full discussion guide followed at the workshops and the in-depth interviews. The overall structure is outlined in Figure 4.

Figure 4: Workshop overview

Introductions/warm-up		5-10 minutes	All together
Current energy supply model introduction DELTA		10 minutes	All together
Current energy supply model evaluation		25 minutes	Break-out groups
Poll completed by consumers on the current energy supply model		5 minutes	All together
Introduction to the new models (pre-break)	\mathbf{x}	10 minutes	All together
Refreshment break / evening meal	\mathbf{x}	10/30 minutes	
Evaluation of new models	>	30 minutes	Break-out groups
Poll completed by participants on the future energy supply model		5 minutes	All together
Lunch break or refreshment break – opportunity to interact with energy supply models		30/10 minutes	
Future energy supply models in depth (1)		45 minutes	Break-out groups
Refreshment break		10 minutes	
Future energy supply models in depth (2)		35 minutes	Break-out groups
Poll completed by participants on all energy supply models discussed		5 minutes	All together
Wrap-up	>	5-10 minutes	All together



In-depth interviews

Impact conducted in-depth interviews in house with participants unable to make the workshops for the following reasons: mobility issues getting to the event, English isn't the first language, elderly consumers and consumers that had obligations such as childcare which prevented them from attending. These were conducted by the lead moderator of the deliberative events, for consistency of approach and knowledge, at a time and place suitable for the participants.

The in-depth interviews ran between 45 and 60 minutes, covering the same topics as the deliberative events. The infographics and educational leaflets used were the same, with each interview covering the current energy supply model and the 3 proposed future models: time-of-use, peer-to-peer and energy-as-a-service.

The one-on-one nature of these interviews meant that less time was required, for example to debate and discuss the merits of each model with other consumers.

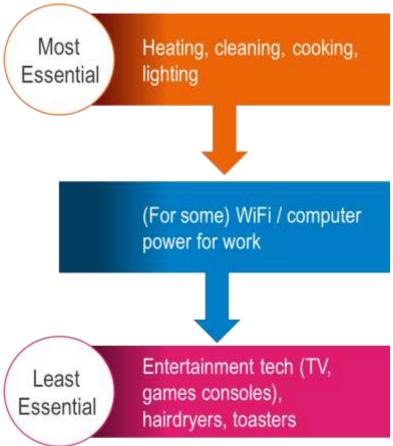




5. PRE-TASK RESULTS

The pre-task comprised 3 questions, each split into smaller sub-questions.

Current energy use



Interaction with supplier

How consumers interact with their energy suppliers varies between demographic and geographical categories.

Some consumers are happy using either an online app or website, whereas others prefer the telephone either as a primary method of contact or if they cannot find a solution online.

Some consumers have smart meters, meaning less contact with suppliers, as information such as meter readings is submitted automatically.

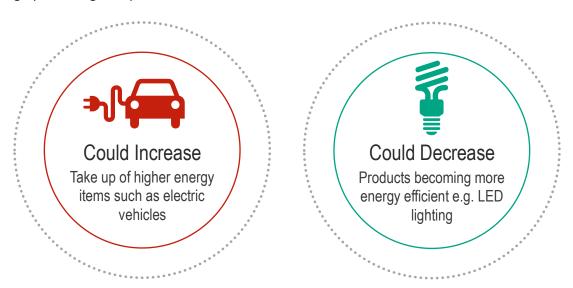
Typically, most interactions between consumers and suppliers happen at bill time, where consumers either submit a meter reading or query a payment. Other occasions when a consumer may contact their supplier are if they are experiencing a problem (eg a power cut) or when looking to start a new contract.



Future energy use

The participants were given a brief explanation of the current energy market and were asked how their relationship with it may change in the future.

When asked specifically regarding their usage, the participants largely split off into 2 distinct groups, although there are no demographic or regional patterns.



However, the majority of consumers expect the way they interact with their supplier to change due to the increase in available technology in the energy industry. The introduction of smart meters is already showing how this could change the status quo, as much of the interaction with suppliers is automated, and consumers are expecting this to continue. Some, however, note that if they experience a problem, they will always prefer speaking over the phone to try and resolve it as soon as possible.

Finally, the participants were asked to consider that if energy were like any other product or service, which would they like it to be. The majority of responses focus around a bundled service, similar to that of a mobile phone contract (eg combined electricity usage with a TV package), where it would be easy to shop around for the best deal.

Ease of use comes through as a key theme, with consumers looking for confirmation that any changes made by the industry or regulator would not complicate things too much.

One participant in Cardiff suggested that energy could be sold like a car insurance package, where a yearly quote is given based on the previous year's usage, paid with either a one-off payment or a monthly direct debit.



Current energy model



The distributor transports energy (gas and electricity) to a supplier.



Currently, the only relationship a consumer has is with their energy supplier.

The supplier buys the energy on their consumers' behalf and charges for the amount of energy used at a rate per unit. During peak times, energy use can strain on the network.



Consumer

A percentage of the bill a consumer pays to their supplier goes directly to maintaining and managing the network. Therefore, higher peak demand can result in higher energy bills for everyone to ensure the network can manage demand.

6. CURRENT ENERGY SUPPLY MODEL

Consumers have mixed opinions when it comes to the current energy supply model. They feel that the model is complex, that they know little about it, but that changing the model (even if for the better) comes with many unknowns and therefore risks.

Consumers are generally unaware of the pressures on the energy network at peak times, and therefore feel that the system did not need to change. They had heard little in the media alerting them to the strains that the current model is under.

In general, consumers see the current energy supply model as low-effort for them to engage with, convenient and relatively familiar. One participant from Milton Keynes pointed out that 'consumers are none the wiser' about the intricacies of the current supply model and therefore do not have to proactively keep up to date about the sector, unlike other sectors such as retail and consumer technology, which are constantly evolving.

In short, the current model works well enough to cause little day-to-day worry – other than when prices go up. Most consumers feel that they only really engage when their bills are unaffordable. To a certain degree the media and aggregator sites have encouraged consumers to consider cost as the primary criterion when assessing energy suppliers.

However, many consumers have reservations about the current system, feeling that the market as a whole should be more innovative, as consumers' customer experience expectations are rising as a result of advances in other sectors such as retail.

Many consumers are also keen to find out more about energy, but admit that to date there has been no need to do this and nor has there been a clear drive from the industry to change the model to pique their interest.

Some consumers are interested in hearing about the pressures on the industry and how change is needed, for example to counter the impact of peak demand or to incorporate more 'green' energy sources such as solar or wind.

Consumer engagement with the market as a whole

Switching

Participants in the research explain that they are reluctant and/or unwilling to switch energy suppliers despite increasing costs. The reasons they gave for this are:

- the current model is too complex, leading to a lack of confidence in switching successfully
- the current energy supply model works well enough for them at present
- there is no guarantee that switching will result in a genuinely better

Many perceive that large hikes in bills are what prompt them to switch, rather than any other factors such as service. Many often cite 'better the devil you know' or a perception that you will end up paying the same eventually with your new supplier as justification for not switching.

Consumers are also quick to share any negative experiences of switching suppliers, such as:

- poor customer service they had received and/or confusion over the final bill
- the bill often being much higher than anticipated
- experiencing a period when they had to pay 2 suppliers at the same time

Those switching to newer suppliers have more positive switching stories to tell.



When challenged, non-switcher consumers are aware they are likely to be paying more annually for their energy if they do not switch supplier or tariffs to avoid being on the default standard variable tariff.

It is only when bills become 'unaffordable' in their eyes that they might start to reluctantly engage with the idea of switching. Some will even adopt energy efficiency measures in the home (turning down the thermostat or putting another layer on) before they contemplate switching.

Some consumers are also not switching because they notice obligatory comparison information from their supplier on the bottom of the bill about the tariff they are on compared with other tariffs available with the same supplier. Where this information highlights that they are on the 'cheapest' tariff or 'most suitable for you', this deters switching, as they consequently assume that they will not get a better price elsewhere.

Consumers in vulnerable circumstances

Consumers are concerned that those in vulnerable circumstances are less able to engage with their suppliers for a variety of reasons, for example:

- being less digitally savvy
- having communication impairments
- having mental health problems

These are the people in society who may have rolled onto the standard variable rate tariffs – often the most expensive tariffs – and who are unaware or unable to take advantage of other available tariffs.

Most consumers believe that there are too many tariffs to make a choice, and reiterate that all suppliers should automatically put households on the most cost-effective or suitable tariff, rather than wait for the consumer to request it.





How to encourage engagement

Consumers would like to see more being done to help the disengaged become more engaged with the energy market, especially if it means accessing more appropriate tariffs or getting lower bills.

They expect energy suppliers to play a key role in being transparent with their customer base on optimum tariffs, particularly for consumers in vulnerable circumstances, and Citizens Advice should be there to support those whom energy suppliers fail to inform sufficiently.

In Scotland in particular, consumers would like to see greater intervention from the government, believing that a 'top-down' approach would be the most effective.

Motivation to switch

When consumers do switch energy suppliers, the motivation is almost always due to price. However, there is increased desire to switch based on customer service ratings and whether the supplier is perceived as ethical or environmentally friendly. Consumers view aggregator sites as focusing too much on price, rather than factors such as service or access to green tariffs.

Interest in green tariffs could assist the uptake of low-carbon technologies within the home, as suppliers offering these are working to achieve similar objectives and to appeal to consumers who are environmentally conscious. At present, the vast majority do not have solar panels, electric vehicles and/or heat pumps, for example. Consumers who do are relatively positive about them and understand the implications of using such technologies for both their individual use and the energy network. However, to date, these consumers are in the minority.

What consumers dislike about the current energy supply model and opportunities for improvement

The participants highlighted certain barriers to engaging with the current energy supply model, centring around 3 themes:





Complexity

Consumers want more clarity over billing. At present, households are charged on energy units used, but this is not in consumer-friendly language that many can understand. Consumers suggest that 'minutes of energy' used (or something similar) would align the energy billing process with other lifestyle products consumers have.

A lack of clarity over billing can prevent consumers from knowing how to reduce their usage as well – what does 5 units of energy relate to, for example?

When it comes to billing, the participants do value consistent monthly or quarterly payments, an aspect that is liked about the current energy system.

Some more financially savvy consumers are comparing bills on Excel across the months and analysing if they are using or spending more, but they are the exception, with most consumers just responding to the bill.

Since many consumers are on direct debit payments, the complexity of the bill is easily ignored, as they just check the monthly or quarterly total without questioning usage levels.





Trust

Consumer trust in energy suppliers is low. This is for a variety of reasons, but is often linked with a perceived lack of transparency from suppliers:

- Why are prices rising?
- Why are suppliers quick to put prices up but slow to bring them down?
- Why do suppliers not apply the best tariff for me automatically?
- Why do I need a smart meter?
- Why do suppliers want my data?

Consumers feel that energy suppliers are only interested in making as much profit as possible, and many are still stuck with the concept of 'fat cat' chief executives who are only focused on shareholders and profit levels rather than helping customers. This has led some consumers to welcome a challenge towards the current status quo.

Consumers also dislike the number of suppliers available in the market. Many find that they are unable to navigate through the variety of unfamiliar suppliers and their many tariffs to determine what is best for their household. Although some consumers welcome the competition, especially when this drives down prices, more feel this only adds complexity.

Consumers are more willing to trust suppliers they have already heard of, as opposed to newer market entrants.

When asked about future market factors, consumers think that there is some appeal in using suppliers whose main business is not energy, as long as the company is well known and provides good customer service, such as Amazon.

Some of the smaller online suppliers (eg Bulb, Octopus) are gaining traction, and consumers who have switched to them seem to be positive about their customer service.

Consumers state that recommendations from friends and family are an important factor in gaining their trust in newer companies.

'You'd want it to be a reputable name that you trust. You'd want to know where the money's actually going.



Technology

Consumers are keen to emphasise that new technology is welcomed, but only if it works smoothly and does not add increased complexity to the market.

At present, most communication with energy suppliers takes place over the telephone or via email. Consumers who are comfortable with technology would like to see more apps being used where possible, and some consumers talk happily about their use of smart thermostats such as Hive or Nest to control energy usage.

However, this does create a concern for consumers who are not digitally savvy or who have not bought or installed the latest technology (or cannot afford it) may be missing out on some key benefits. For example, smart thermostats may help reduce energy usage, but automatic switching depends on being comfortable with internet availability and usage.

Some consumers are on prepayment meters and enjoy the financial control this provides, as it ensures that they do not overspend on their energy. However, those on prepayment meters also feel that they may be excluded from some of the new energy market models because they will not 'qualify' to go on a contract or a direct debit.

'I get the smart meter, no electricity, no gas, nothing. It went on for about three months. I had them coming in, out, in, out trying to sort it out'.

Glasgow workshop

There is general negativity among consumers towards smart meters. Some have had issues where meters were not installed properly or did not work at all. One participant blamed the installation of a smart meter for their loss of gas and electricity.

Other consumers do not like to see the spikes in energy use (and associated cost) when using certain devices such as kettles, and as a result keep smart meter inhome displays out of sight.

Some consumers have first-generation smart meters installed, which means they cannot switch suppliers and retain the benefits, and are now having to request the next-generation of meter, which can be inconvenient as they need to take a day

off work to let engineers in. There is also scepticism about what data is being collected and why, as consumers feel it may relate to pricing changes that may disadvantage them in the future.

Overall, consumers currently resist being told what technology to implement, which makes them wary about future technology in their households relating to their energy use. This perpetuates their belief that the current system, for all its faults, suits them.





Consumer willingness to consider alternative energy models

In the main, consumers are open to the idea of alternative energy supply models.

However, despite trust issues with energy suppliers (and the market as a whole) and a feeling that the current system does not work for everyone, consumers are nervous about moving away from what they understand or are familiar with. Many feel that they currently know how much they pay for energy and can just about afford it, and are therefore reluctant to encourage a new system that may change affordability.

Also, some consumers, especially those who are less engaged and/or less digitally savvy, are unsure whether they want to increase their engagement with buying energy and choosing models of consumption, and are more reluctant to leave the current low-engagement model. There is also, for many, a reluctance to invest more time in their energy supply and a desire to keep it simple.

With consumers displaying risk-averse behaviour, any alternative offerings or models will require clear guidance and reassurance for successful implementation across GB.





Polls taken during the event

During the workshops, we used live polling to gauge on a numerical scale how the participants reacted to the current energy supply model and the 3 new alternative models. While these results are not statistically robust, they do give an indication of how appealing each of the models is to consumers.





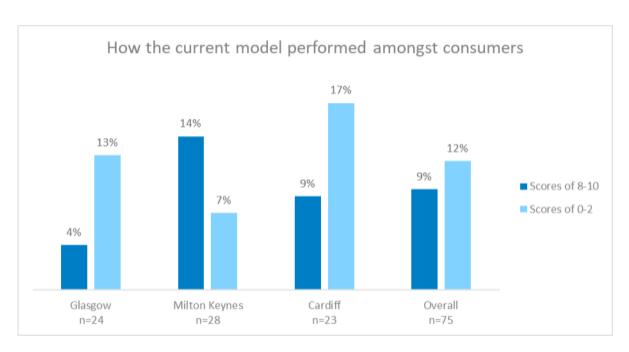
The current model

On a scale where 0 represents the current energy supply model needing to change immediately and 10 meaning it works well, the participants are not very positive.

- Around 1 in 10 (14%) consumers in Milton Keynes score the current system 8–10. This is compared to only 4% and 9% for Glasgow and Cardiff, respectively
- The scores of 0–2 out of 10 show a similar pattern, with the highest percentage being 17% in Cardiff, followed by 13% in Glasgow and 4% in Milton Keynes
- Both sets of results show the largest percentage of participants as being in the 'ambivalent' category (scores
 of 3–7) that is to say, as not having a particularly strong opinion either way, which shows that the current
 model serves a purpose but could certainly be improved

In the chart below, the 8–10 scores are shown compared with the 0–2 scores, for each location.

Figure 5: Current energy supply model performance chart



Future models polling before a deep dive

Following a brief introduction to the 3 new energy supply models, participants were asked about each of them in turn, again using the same 0–10 scale.

- The results of this poll show an overall preference towards peer-to-peer, with 29% of participants giving it scores of 8–10. It is Milton Keynes that drives this, as 46% of consumers from this region give it an 8, 9 or 10 out of 10
- Cardiff, however, scores differently to Milton Keynes and Glasgow, selecting energy-as-a-service as their favourite, with 38% selecting scores of 8–10, compared to only 5% for peer-to-peer

Future models polling after a deep dive

The same exercise was repeated after a more detailed discussion and deep dive into each of the new models.

As each consumer only discussed 2 of the 3 models in detail, they were only asked to vote on the models they discussed in greater depth. Note that this resulted in a smaller base size for the final round of polling.



After collectively evaluating the 3 models in depth, consumers are even more positive towards peer-to-peer.

- Of consumers in Glasgow, 61% score peer-to-peer 8–10 and 40% of those from Cardiff vote the same
- Despite Milton Keynes participants being less favourable after reviewing peer-to-peer in more detail, they prefer this model over time-of-use and energy-as-a-service (where 0% score 8–10)

The below charts show the 8–10 scores for each location, before the deep dive compared to after. The arrows represent the increase or decrease in scores following the deeper conversation around each model.

Figure 6: Scores of 8-10 for time-of-use

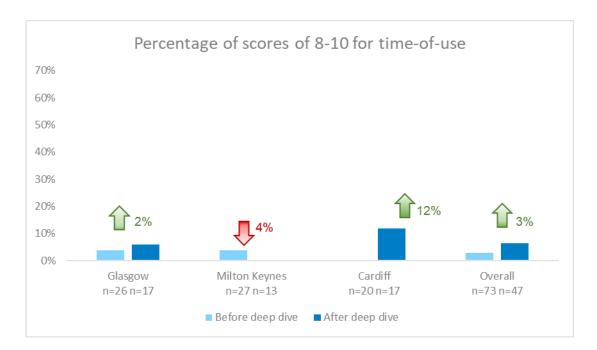


Figure 7: Scores of 8-10 for peer-to-peer

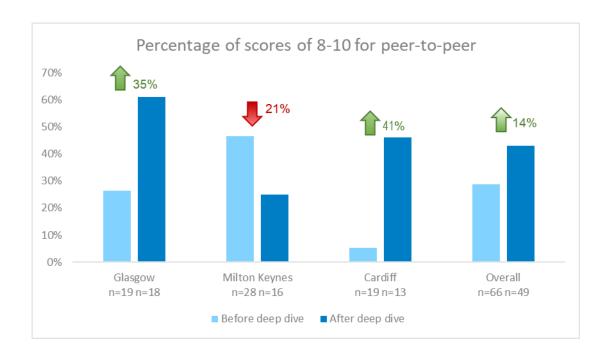
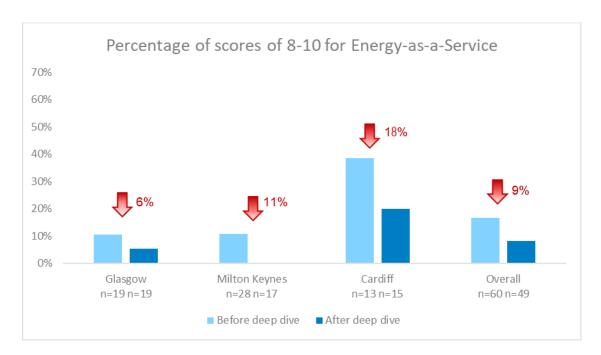




Figure 8: Scores of 8–10 for energy-as-a-service



The following graphs show the remainder of the 0-10 scale, both before the deep dive into each model and after. The bars represent the amount of responses of 0-7, with the combination of 8, 9 and 10 shown as an additional percentage.

Figure 9: Distribution of 0-7 scores for time-of-use - before deep dive

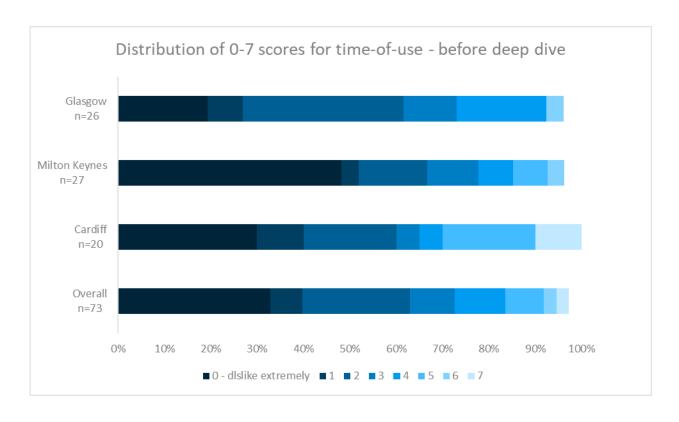




Figure 10: Distribution of 0-7 scores for time-of-use - after deep dive

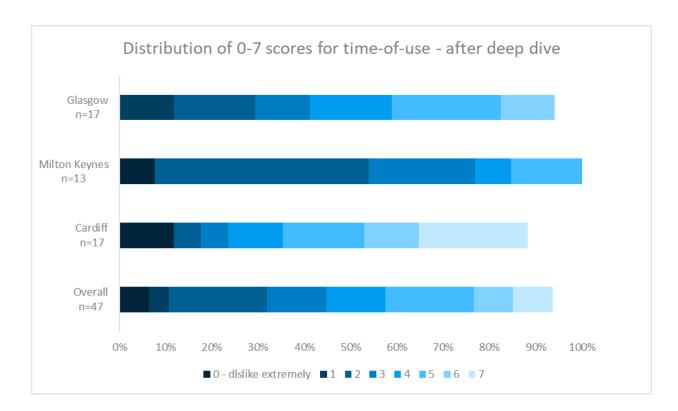


Figure 11: Distribution of 0-7 scores for peer-to-peer - before deep dive

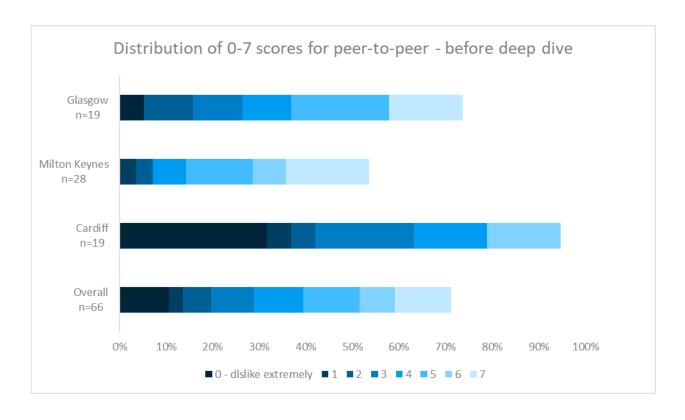




Figure 12: Distribution of 0–7 scores for peer-to-peer - after deep dive

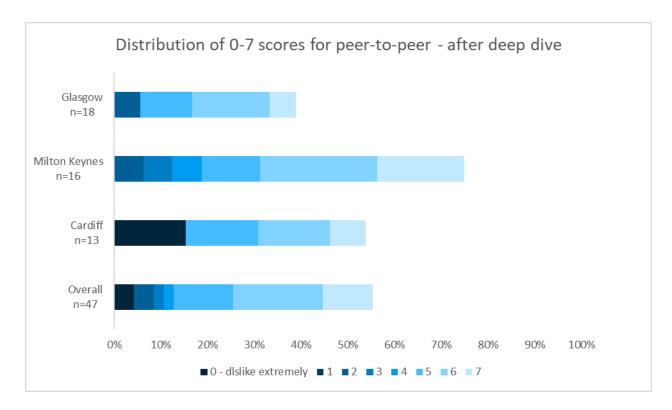


Figure 13: Distribution of 0-7 scores for energy-as-a-service - before deep dive

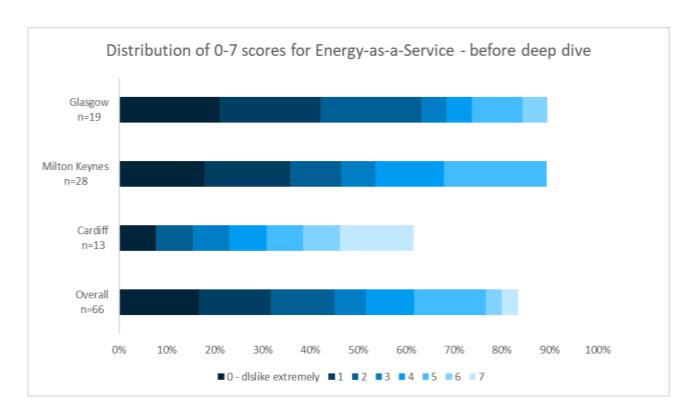
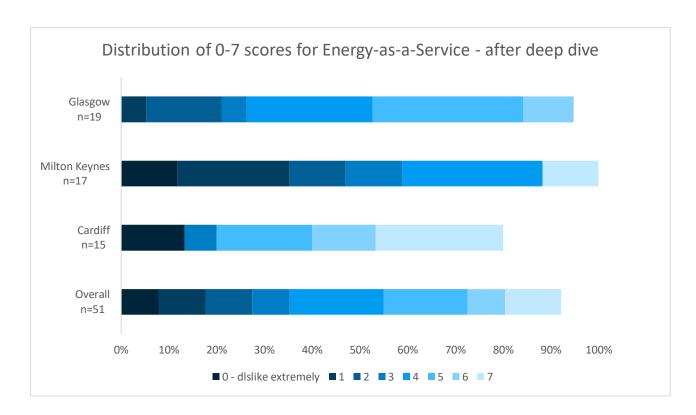




Figure 14: Distribution of 0-7 scores for energy-as-a-service - after deep dive





Voting with their feet

At the very end of the workshop, as a final task, the participants were asked to go and stand next to the model they preferred overall and could see as working best in the future:

- 1. Current energy supply model
- 2. Time-of-use
- 3. Peer-to-peer
- 4. Energy-as-a-service

Initially this included the current model, but then the participants who selected it were asked to pick one of the new models.⁵

Glasgow

In Glasgow, **peer-to-peer** is most liked overall, with approximately half of consumers choosing it as their favourite.

This is closely followed by the **current model**, with very few consumers selecting time-of-use and none selecting energy-as-a-service.

Milton Keynes

The results are much the same in Milton Keynes, although slightly more consumers rate the current model as their favourite, so it is very close between the **current model** and **peer-to-peer** as to which is most liked.

Again, time-of-use and energy-as-a-service are the least liked, with very few consumers selecting these as solutions that would most work in the future out of all those being discussed.

When participants who selected the current model were asked which of the new proposed models they preferred for the future, the majority selected **peer-to-peer**, with many of the remainder choosing **energy-as-a-service**.

Cardiff

In Cardiff, consumers are evenly split, with slightly more favouring energy-as-a-service initially, but after re-selection from current model consumers, all 3 future models are evenly liked and seen as viable for the future.



⁵ Note that those selecting the current model at the Glasgow workshop (which was the first workshop to take place) were not asked to re-choose. This was a decision taken following the first deliberative event to accurately reflect the fact that the current model is very unlikely to be available 'as is' in the future.



7. FUTURE ENERGY MODELS

106 GB consumers evaluated 3 future energy supply models alongside the current energy supply model.

Each model received a range of likes and dislikes from the research participants.

Feedback to each model is summarised below, incorporating views from the deliberative workshop discussions and the in-depth interviews.

The participants typically appraised each model not only from their own perspective but also in terms of how it may impact other demographics.

We have also outlined the role that consumers would like Citizens Advice to play within each proposed model to ensure that consumer protections are in place.





Time of use tariffs



Energy use in GB peaks and troughs throughout the day.



During different times, such as in the morning before work/school and early evening, demand for energy is very high, putting a strain on the network.



Time of use tariffs mean the price of energy changes depending on when that energy is used throughout the day. The availability of renewable energy can also have an impact on price, i.e. cheaper when it is windy.



In order to reduce the pressure, consumers can be rewarded with cheaper energy prices for using energy at 'less busy' times of the day.



Time-of-use

Out of the new models proposed, time-of-use is the **least popular** among the consumers.

This is largely due to consumers feeling that this model would require them to change their behaviour without clear examples of how energy suppliers or industry parties will be 'playing their part' as well. Effectively, the onus is on the consumer to make this model successful.

Consumers do largely understand the need to shift demand outside of peak times when the pressures of the current system are clearly explained to them, and the implication of replacing assets if this does not happen, but they see this as something that the industry should take responsibility for and not just consumers.

Some are sceptical about how much pressure the current system is under and wonder if the new time-of-use tariff is about energy suppliers making higher profits.

Benefits for consumers

- Easy to understand compared to other energy supply models.
- Most easy to introduce in the short term to supplement the existing supply model.
- The more digitally savvy and energy-engaged consumers think that if they had battery storage, time-of-use could provide long-term benefits: during peak energy times they could rely on their battery-generated energy, and use the grid during off-peak times.
- Despite many concerns with time-of-use, consumers do see that elements of this model could work across the nation and feel that it would be the easiest to implement in the short term. They also see clear benefits for consumers able to be more flexible in their energy usage (ie those that do not work 9-5 and have set routines that require energy use during peak times).





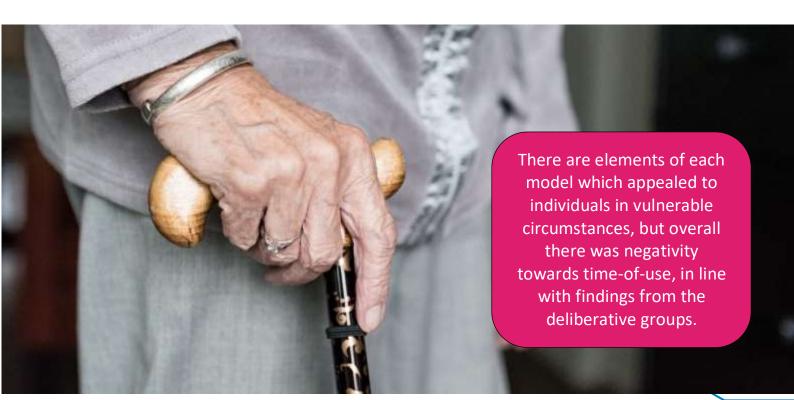
Barriers and concerns for consumers

- Safety is a recurring concern, especially regarding delaying the use of electrical equipment (eg washing machines, phone chargers) to overnight or during the day (when consumers may not be in), which could leave them and their household vulnerable to fire.
- Using energy through the night could become a nuisance for neighbours, especially for consumers living in flats, where there are often restrictions on white goods usage during the evening and at night-time.
- Consumers feel that not many products or energy needs in the home would fit into the time-of-use tariff. For instance, delaying the dishwasher may be possible, but cooking, showering, using the TV, only happens at certain times each day for most GB consumers. This puts into doubt the actual impact of shifting demand usage for the participants, if this is only possible for a few items within the home. This leads some consumers to perceive that the cost saving may not be worth the behaviour change.

'Am I going to have to spend £500 on a washing machine where I could buy a £200 pounds washing machine that does the same job?'

Cardiff workshop

- Consumers think that if all consumers across GB amend their usage
 behaviour as a result of time-of-use, this will simply cause different peaks in demand effectively shifting
 the demand rather than smoothing it out. As it stands, the model could lack flexibility to suit consumers'
 varied lifestyles and working patterns for example, dynamic pricing would be standardised across the
 supplier's customers. Instead, consumers would like to 'select' the time of day that would work for their
 lifestyle to have a low off-peak charge (for example, for some this may be the middle of the day or early in
 the morning).
- Consumers are also keen to know the price differentials between each period of time. There are concerns that peak time could end up being far more expensive than the current normal energy usage rate, and participants would not want to be penalised for having to put the washing machine on at a peak time. They want peak time to be the same price as currently available, and off-peak times priced cheaper than they currently pay. To increase appeal to the participants, time-of-use should offer cheaper energy during off-peak times compared to current 'flat' energy prices offered now.





Pros and cons of fixed pricing versus dynamic pricing

 Consumers find fixed pricing far easier to understand than dynamic pricing, and manual measures are much preferred to automatic ones. Some consumers, especially those who are already digitally savvy, think that autoswitching to the best tariffs and using automatic systems would take the effort away from consumers.

'I don't want to have to be checking something else to switch on my heating on.'

Glasgow workshop

 Consumers feel that dynamic pricing would be too complex and confusing for society. With the weather being so unpredictable for GB, consumers and the industry would struggle to plan ahead for demand (for example, cold one day that requires the heating on, but then supply enough for a harbeque the next.)

that requires the heating on, but then sunny enough for a barbeque the next, with gas cans being used). Consumers believe that it would be frustrating to be told there was a cheap time period coming up, yet they had not loaded the washing machine before they left the house so could not take advantage of that cheap price. This leads to concerns for some consumers about the need for technology. If they did not have a 'smart enough' washing machine or the right app on their phone, would they be able to access the benefits?

Accessibility and fairness

- Consumers feel that those with a traditional 9–5 working regime, or families where household routines are
 fine-tuned (eg washing needs to be done after sport, ready for PE lessons the next day, followed by dinner
 before piano lessons), would be penalised or would miss out on benefits of shifting demand to outside peak
 times.
- Similarly, consumers think that shift workers with changing working patterns and/or consumers who become temporarily ill may be disadvantaged.
- This model could benefit consumers who are at home throughout the day (eg older people, disabled people, stay-at-home parents, unemployed people). Some feel that such consumers have more flexibility to adapt their routines to use energy at cheaper times. This was expressed by consumers in vulnerable circumstances taking part in the in-depth interviews (including one participant with a physical disability and a retired participant).
- Some consumers are also concerned that those in vulnerable circumstances may be at risk of forgoing essential energy usage (such as heating in the winter) to keep costs down during peak times.
- As consumers are used to using energy when they want, they find time-of-use a step backwards as it limits usage time periods. They feel that life is complicated and busy enough and that they are used to on-demand services, so any potential new energy supply model needs to reflect that philosophy.

Overcoming challenges

- Consumers feel too much of the burden of addressing energy system challenges is placed directly on them. They would like to see that their efforts to reduce the burden on the system by shifting their use is accompanied by actions towards this goal from energy suppliers and industry bodies.
- For time-of-use to be acceptable to consumers, it would need to be clear how the model could be simplified
 to prevent confusion, and that this would not be the only or long-term solution being implemented. Time of
 use is more appealing if it is optional, since many consumers would not like to be forced to adopt this model.
- The research participants were initially opposed to the idea of shifting demand, but became more open to it after discussions around practical tips on behaviour changes, such as batch cooking or not leaving equipment on standby.
- Consumers would want reassurance on the safety of using products when they may not be around to supervise them.



- Consumers would like to have control over their energy usage. Barriers to shifting energy use away from peak times might be addressed by offering solutions that involve energy storage or a choice around off-peak times.
- Compared to the current model, time-of-use is less liked, but is unlikely to require many protections in place to support consumers in vulnerable circumstances. In fact, this model may allow some consumers to capitalise on cheaper energy during the day.
- Digitally savvy and energy-engaged consumers see the advantages that time-of-use might offer them if they can rely on battery-stored energy during peak times.

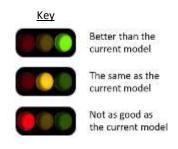
Consumer perception of time-of-use vs. current energy model













Peer to Peer Trading



People, community organisations or businesses may generate energy that they can sell to others.

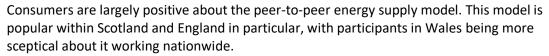


For example, a household with solar panels may create excess electricity they don't need. Consumers could buy this energy directly, through an app or online.



Alternatively, they could pay a third party to do it for them based on their preferences.





There are a number of caveats, however, which centre around needing regulation in place and overall protection from uncertainty and companies/individuals abusing the system.

There is general concern about security of supply from smaller local suppliers or traders and provisions for outages, but overall this proposed model is supported more than other future models.

Benefits for consumers

- Despite being concerned with too much choice in the current model, consumers like the element of choice in the peer-to-peer model. This is due to the control over who to pay for energy, with the ability to reward local micro-suppliers or traders who act ethically, for example.
- Even though there will be potentially hundreds or thousands of micro-suppliers entering the market, consumers are not overly concerned with trusting traders. This is down to low trust in current energy suppliers, essentially meaning that the bar is very low when it comes to any energy trader.
- Consumers are universally positive about embracing community energy in particular. Supporting local institutions such as schools and hospitals is appealing across regions. Consumers think that big organisations such as the NHS and schools should trial being a prosumer first to demonstrate it works. This sentiment is especially strong with consumers in England. This approach would generate awareness and encourage those who do not currently have the means (financially and time-wise) to consider it in the future.

'I like the idea that you can put back to the school, hospital or something like that and help it to become a bit more self-sufficient.' Cardiff workshop

- For consumers, the link between this model and renewable energy is more tangible
 compared to other energy supply models. The green agenda is increasingly important to GB
 consumers, and the option through peer-to-peer to choose renewable energy is very appealing. Scottish
 consumers in particular are very keen to embrace 'green' energy. The clear renewable energy role in this
 model makes it the most viable component in any future model for GB energy consumption.
- When consumers are shown that Scandinavian countries are already adopting this model, they are extremely positive about the approach and feel that if it is workable in other countries, then GB needs to research the potential.
- The example app shown to the participants during the workshops as a way of engaging with a peer-to-peer
 energy market is also extremely popular, providing them with a valuable demonstration of how this model
 could work in practice. However, there is some concern from some of the less digitally savvy consumers
 about how their engagement with such a model could be enabled if they did not have the equipment or
 aptitude.

Barriers and concerns for consumers



One concern raised by consumers relates to the reliability of supply. Some are very concerned that if their neighbours become trusted traders but decide to go on holiday for a month, then their own supply could be interrupted and they would not know who to contact. Many assume that although they would have choice of where their energy comes from, they would probably end up buying from just a few suppliers, rather than taking advantage of all suppliers available.

'Is there going to be enough electric or energy to supply?' Cardiff workshop

Consumers have concerns that this energy supply model is more future-thinking
than others, especially time-of-use, and so would only benefit consumers with the
financial means of becoming a trader in the short term. However, many consumers,
especially those who are comfortable engaging with their suppliers, are interested in becoming traders
themselves and would like more information on this possibility.

These consumers would be willing to invest time and money to make this possible for themselves.

'People running out of electricity and fighting over it. People stealing off people, vulnerable.' Milton Keynes indepth

"A third-party, they'll go,
"we've got ten people
generating energy. I need
more energy, so, I'll just
take a bit more off
someone else and balance
all that out"'. Cardiff
Workshop

- Some consumers worry that they will not be able to access or pay for the equipment required to become a
 prosumer in the market (eg solar panels, an electric vehicle, battery storage). Without the ability to become
 a trader, there is concern that some groups in society (eg the less affluent) would miss out or be left behind,
 and some consumers reject this model on that basis alone.
- Consumers are keen to see funding from local authorities, social housing and/or government grants to encourage engagement with peer-to-peer.

'If it was nationalised and it was run by the government, the money that they're making from that should be reinvested into giving people warm homes.' Cardiff Workshop 'But also, the greedy people,
I'm going to cover my whole
house with solar panels, I'll
put them in garden, that's not
fair and they're going to
exploit on the black market.'

Milton Keynes in-death

Using third-party platforms

Consumers believe that the wider community would more likely go through a third-party platform to access
and purchase energy in the market, but there is appetite to cut out the middleman and purchase directly
from a trader. Consumers say that third-party platforms would reduce the effort required to search and
select energy and therefore encourage engagement with this model. The idea of third parties also helps
negate the concerns some consumers have over security of supply when trading with micro-suppliers.



- There are fears that the third-party platform could act like a current energy supplier and start altering prices in its favour. Consumers would like a regulatory framework around this to ensure that prices set by traders are fair
- Consumers have concerns that the 'Big Six' energy providers could unfairly influence pricing if there were no regulation preventing them from doing so

Accessibility and fairness

- Some of consumers reject this model on the basis that some in society would not be able to become a trader.
- However, some consumers suggest that this model could most benefit those in vulnerable circumstances in the long term. One suggestion is creating an 'energy bank' where traders (or users) could donate a small percentage of their excess energy (eg 2%) to a central storage in the community, which could then be used to fuel households that are fuel poor or in vulnerable circumstances.
- Consumers highlight that peer-to-peer may not be possible for consumers in social housing, or that local authorities might abuse the system by using people's homes to generate income for themselves (eg occupiers would have to deal with the disruption and implementation of low-carbon technologies, but would not benefit financially from this). However, consumers in social housing perceive that if the housing association were to help them buy their own solar panels (or ideally install them for free), the residents could then start to trade and become more financially stable. One such participant in Cardiff (in-depth interview) was keen on this idea and thought that all social housing should include solar panels for a source of renewable energy.
- Consumers have similar concerns for those living in properties with multiple dwellings internally who would pay for the technology required and would they all benefit equally from profits?



Overcoming challenges

While consumers are more open to proactively engaging with a peer-to-peer model, they feel that regulation would be required for traders and third-party sellers to protect consumers, for example, from excessive costs or unsafe energy supply. To support peer-to-peer in the future, they are looking for the following reassurances:

- Regulation in place to protect them from unfair pricing and ensure reliability of supply.
- Clear evidence that technology has been implemented on a large scale, creating hundreds of microsuppliers; that the trading is sustainable for local and national communities; and that local organisations (such as schools and hospitals) can make a fair profit to support themselves.
- Education for GB consumers about low-carbon technologies beyond just solar panels, such as heat pumps and emerging technology. Some consumers have had a negative or unbeneficial experience with solar panels and would not like to see peer-to-peer rely on this technology alone.
- The ability for renters to engage with peer-to-peer, and protections in place to prevent landlords enforcing this on tenants without consent.
- A ratings and/or review system in place, consistent with platforms like TripAdvisor, to provide reassurance over supplier selection.
- Any complexity removed and the peer-to-peer model simplified to ensure it caters for all consumers. This includes for example the ability to interact in a user-friendly way with apps.
- Support available for all parties including consumers (how to engage with the peer-to-peer model, how to switch) and consumers who want to be traders.
- Funding in place to encourage participation with peer-to-peer, ideally from local authorities, social housing and/or government grants.
- Evidence that this model can work on a large scale and in the long term before it is adopted en masse.
- Confirmation from Citizens Advice and other relevant organisations such as Ofgem that consumer supply would not be interrupted irrespective of individual supplier circumstances.
- Prevention of large suppliers intentionally blocking this model, as the 'Big Six' for instance would not support micro-suppliers in the market eating into their revenue.

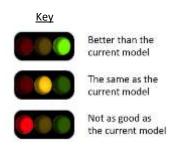
Consumer perception of Peer-to-peer vs. current energy model













Energy as a Service

In a similar way that many people pay for their mobile phone usage as a fixed monthly contract, (which often includes the cost of the phone and your phone usage), you could buy your energy through a service contract.



For a fixed monthly payment, you get your home at an agreed temperature for an agreed number of hours per day.

In some cases, your energy service provider might install additional insulation, or a new type of heating system, but you don't pay for these upfront – they are paid for through the energy savings they bring.

Energy-as-a-Service (primarily focusing on Heat-as-a-Service)

Consumers find energy-as-a-service complicated and difficult to understand, and for most it is a big change from the way energy is currently calculated.

However, some consumers feel that they currently pay for what they use (ie that direct debits pay for the amount used, and not an amount that covers usage peaks and troughs), and therefore energy-as-a-service would be similar.

The simplification of changing units of energy and kilowatts per hour to hours used is appealing to consumers. Using the analogy of mobile phone contracts to explain energy-as-a-service enables consumers to relate to this proposed energy supply model. It is therefore very important to limit terminology and jargon when introducing consumers to the concept of energy-as-a-service.

Benefits for consumers

- Many consumers think that this model would be most appropriate for new builds of the future, which will be pre-fitted with smart appliances, will be low-carbon-ready and will have better insulation.
- Despite concerns about implementing technology, consumers would like to see this model progress to enable the integration of their energy-using appliances in the home with their smart technology now and in the future. For example, this could be a link with Alexa and/or allowing consumers to remotely adjust energy usage using an app while outside the home. This is especially the case for consumers who are digitally savvy, and which is often rooted in a desire to have simplified control over their usage and bills.

'I think this would be really good for elderly people. Because they need it at the same temperature or they get ill, and people who are diabetic or any disabilities.' *Cardiff* in-depth

Consumers view energy-as-a-service for uses other than heat (eg
charging an electric vehicle) more favourably. Energy expenditure
such as electric vehicle charging (still many years from being adopted by a majority) seems more viable and
acceptable to consumers.





Barriers and concerns for consumers

Consumers see a number of barriers to using energy-as-a-service:

- The requirement to have the technology upfront in the home, which
 would prevent this model being embraced in the short term. However,
 many consumers accept that technology within the home is the way
 the world is heading. They think that this model could be more
 attractive if technological innovation enables easier administration of
 the services.
- Longer contracts lasting 5 years or more are very unpopular with consumers. It is likely with energy-as-a-service that consumers' contracts will exceed 12 months, unlike many current fixed-term contracts that need to be renewed annually, which is a sticking point as personal circumstances are likely to change over the duration of the contract.

'What happens to your appliances? Do you give them back because you're moving into another property?'

Cardiff workshop

- At present, this model is viewed by consumers as potentially high-risk (due to being locked into a contract) and requiring effort on their part to estimate energy usage, negotiate contracts and ensure that appliances are compatible. Consumers do not currently view the model as one that 'takes it off consumers' hands', though they see potential for this in the future.
- With this in mind, some consumers think that energy-as-a-service is premature. Consumers feel that when it comes to heating in particular, the government or energy suppliers should be working with GB consumers to better optimise homes for decarbonised energy use. This may involve insulating homes and replacing single-glazed or draughty windows that do not support efficient energy use. Consumers, especially in Scotland, are resistant to paying for energy efficiency measures themselves, with an expectation that the government will pay for these upgrades. Government involvement in all domestic properties is welcomed but consumers believe the first stage should be for Government to focus on housing association properties and/or homes of those

'In order to heat your house up to eighteen, you need to put it to twenty-three. This comes back to putting the groundwork in first. You need to make sure that everybody's house is insulated properly.' Glasgow workshop

Accessibility and fairness

• Consumers feel that this model may work for older customers or those with a disability or health condition where engaging with the energy market is difficult, by ensuring that a basic or comfortable amount of heating is provided. For example, the service could ensure that people's homes are heated to 20 degrees for a set price, meaning that heating bills are not fluctuating, which could encourage some to turn off/down heating due to fear of costs increasing.

experiencing fuel poverty or a disability.

'I just think elderly people or less educated people are just going to be exploited' Milton Keynes workshop

- However, some older consumers and consumers in vulnerable circumstances struggled to understand the
 concept of energy-as-a-service. This is also a concern for many consumers, who feel it would be difficult to
 explain to such customers. This is an area where consumers see Citizens Advice playing a supportive role.
- Consumers feel that those who are less digitally savvy could be excluded from this energy supply model.
 They think that Citizens Advice should support customers so that 'no one is left behind'. However, consumers recognise that fewer people will be digitally excluded over time.



Overcoming challenges

Consumers are willing to be tied into contracts of around 1 to 2 years maximum – much like mobile phone contracts. A longer contract is outside their comfort zone and stirs up anxieties associated with risk. Contracts would need to be flexible enough to reflect changing circumstances (eg illness, a new baby, a house move). There is a general concern among consumers about being locked into contracts and being restricted without guarantees of flexibility.

Consumers would like clarification on certain questions:

- Will unused energy one month be rolled over to the following month(s)? If not, would this promote households to use energy unnecessarily, to get 'their money's worth'? Those who take long holidays would need the flexibility of 'rolling over' without then building up too much energy use at the end of year, when consumers assume there would be a reconciliation (as they currently have with direct debit payments).
- What happens if consumers are locked into a contract but they themselves underestimate what energy service or amount they need and when? What if consumers in vulnerable circumstances underestimate their energy needs and find it too complicated to change their contract?
- How can consumers ensure that they are not locked into a long-term contract that exceeds the time they will be at a property?
- If a consumer pays into an energy-as-a-service scheme in one house, can they then transfer their contract to another house if they move? And will the changes made to the original house (eg insulation) be discounted for the next property? This potentially leads to unfairness for consumers who, for example, have paid for installation but do not benefit in the long term.

Looking to the future, consumers suggest that educating children on how much energy is being used in terms of pounds and/or time would encourage the next generation engage with the energy market more proactively and comfortably. To assist this, accessing energy used in the household needs to be quick and easy, for example via a tablet, an app, or a message that gets sent to people's meters, aligning with modern use of technology.

Compared to the current energy supply model, energy-as-a-service is liked by some consumers and misunderstood by others. Consumers feel that they know the current energy supply model and that this provides a level of reassurance as a result, but they see energy-as-a-service as a way to simplify the current billing process and to align with the modernisation of technology for everyday use.

Consumers view this model as suiting people with the financial means to take up the smart technology required, or those who live in a newly built home with high energy efficiency and smart devices or appliances. Protections need to be in place to ensure that everyone has access to managed energy services, regardless of affluence and home ownership.

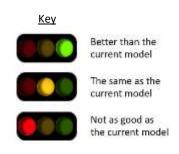
Consumer perception of Energy-as-a-Service vs. current energy model













Models or elements of models most viable for GB in the future

Given the opportunities and concerns with each of the proposed future energy supply models, and that the current model is unlikely to be fit for purpose in the future (without some changes), different models would be more suitable to different timeframes.

Consumers' thoughts and perceptions fit into the following short-term, mid-term and future-looking timeframes.

Short-term resistance with time-of-use

Consumers show reluctance towards the time-of-use model overall but accept the need for a solution to the current energy supply model soon.

This means that if implemented, time-of-use would likely receive some resistance initially and is not perceived to be the ideal long-term solution.

Most consumers would want to be offered the option of adopting time-of-use rather than it being 'forced' upon them.

Mid-term hybrid approach is likely to be well liked

Before long-term models and solutions are in place, consumers view a hybrid model as working well for GB.

This is likely to include elements of energy-as-a-service, where smart technology in the household is well established, houses are better insulated, and low-carbon technologies are widespread and working well.

This is likely to be combined with time-of-use tariffs and early iterations of peer-to-peer trading (linked to low-carbon technologies being adopted).

Consumers prefer a choice of model elements to suit them and their household.

Looking towards the future of the energy market

Consumers see peer-to-peer as a model that may be successful in the long term, but is unlikely to experience mass take-up in the short term.

Consumers like peer-to-peer or elements of this model as it aligns with the green agenda being adopted by consumers (and companies) and enables community models that support consumers in vulnerable circumstances or key institutions (eg schools and hospitals).

For this model to work effectively, however, regulation needs to be firmly in place to protect users and traders, as well as technology working successfully.





8. POST-TASK

Following the workshops and interviews, each participant was sent a post-event survey to see if their opinions had changed at all following the event.

There remains a clear preference for **peer-to-peer**, with 50% of consumers choosing this model.

This is largely due to many seeing it as a great way to bring the community together and thinking it is fairer to be paying someone in the local community for energy instead of a large supplier, and that it could lead to cheaper prices.

The preference for peer-to-peer is even stronger when consumers are asked which model would benefit the community most, with 69% of participants thinking peer-to-peer would. Consumers see this model as a way of giving back to the community, especially if energy is sold by local bodies such as schools and hospitals.

Time-of-use remains relatively unpopular with consumers. However, scores for both this model and energy-as-a-service improved since the workshops.

This shows that when consumers are given the chance to think more about the models and discuss this with their peers, they are more willing to accept them as a viable solution, at least in the short to midterm.

One particular participant claims: "I think I became more open to other options [after the group sessions]. I was not keen on time-of-use at the beginning but I see it could be something that would be useful to me in the future perhaps."

This sentiment is echoed across the 3 new models. Once consumers have had the chance to digest the information given and compare them with the current model and its limitations, they are more willing to accept the new models.

That being said, they are very keen to reiterate the need for the right amount of controls and legislation to be in place to ensure a fair market, as one consumer explains: "I changed to see the potential benefits of the peer-to-peer in the local community but again, I feel this would need to be heavily regulated."

Consumers are also keen to understand how the government is going to help them adopt these new models. One consumer explains: "I was hoping to hear about government initiatives regarding solar panels on all new-build properties, and making new builds more carbon-neutral in general." This highlights the need for the government to show that it is invested in whichever new model(s) are used in the future.





9. CONCLUSIONS

The status quo

There is a general feeling of ambivalence among the research participants towards the current energy supply model. They know little about it and feel it is complex, and on the whole there is low engagement. However, they see it as familiar and 'low-maintenance', and there is some resistance to changing the model as it could come with many unknowns and therefore risks.

The trust level of the consumers towards energy suppliers is low. They are reluctant and/or unwilling to switch energy suppliers, citing complexity, low confidence in choosing or distrust that switching will yield a genuinely better service or lower price over the long term.

When participants have switched energy suppliers, the motivation was almost always price.

However, there is increased desire to switch based on customer service ratings and whether the supplier is perceived as ethical or environmentally friendly.

There is strong concern among the consumers that those in vulnerable circumstances are less able to engage with suppliers for a variety of reasons and may be stuck on standard rate variable tariffs, which are more expensive than other available tariffs. Consumers would like suppliers to proactively put households on their cheapest tariff without waiting for the consumer to contact them to request this.

Consumers highlight barriers with the current model, centring around complexity, a lack of trust and the need for the latest technology (eg smart meters, smart thermostats) within the home:



Consumers call for greater clarity over billing, specifically energy units charged, and for help navigating through the many tariffs from multiple suppliers.



Consumers' trust in energy suppliers is low due to perceived lack of transparency from suppliers (on mainly prices, tariffs, smart meters and data). Suppliers are perceived as heavily focused on profit, and therefore any challenges to the status quo are welcomed.



Consumers welcome more technology if it helps with simplification and control, but are aware that this may exclude older consumers and consumers in vulnerable circumstances. Smart meter feedback is fairly poor, and many consumers feel uncomfortable with compulsory installation.



Alternative energy models

Consumers are nervous about moving away from what is familiar, despite low understanding and low engagement with the current energy supply model.

With consumers displaying risk-averse behaviour, any alternative models will require clear guidance and reassurance for successful implementation across GB.

Time-of-use



This is the least popular future energy supply model among consumers. This model has consistently low appeal and the applicable times are deemed too restrictive as consumers have no influence over these. Consumers also feel that this model requires them to make significant lifestyle changes, while suppliers would do little aside from benefit from higher prices.

The main benefit to this model is the consumers' ability to quickly understand the proposed model, which they often relate to Economy 7 tariffs.

However, the consumers raise a number of disadvantages:

- The lack of flexibility is a key negative. Consumers see this is a 'step backwards', as currently they access energy when they want but time-of-use adds more restrictions. To increase consumer acceptability, the ability for consumers to have some control over selecting when 'off-peak' charges apply would be preferable, but would add complexity additional complexity would not be welcomed. Time-of-use encourages available and under-utilised energy to be used, therefore selecting 'peak times' may not match the energy supply.
- There is also concern that not everybody would be able to benefit from time-of-use. Shift workers with
 changing working patterns and/or those who become temporarily ill may be disadvantaged, as could families
 with traditional 9-to-5 lifestyles. Conversely, time-of-use is considered likely to benefit consumers who are
 able to change their energy behaviour, perhaps older consumers, consumers with disabilities or consumers
 who are in during the day.
- Consumers are also apprehensive over the implications of shifting their energy use. This includes safety
 concerns (risks of leaving electrical equipment on overnight or when out during the day) and anti-social
 considerations (using energy through the night would become a nuisance for neighbours). Indeed,
 consumers raise the concern that if all consumers amend their usage behaviour, this could cause different
 peaks in demand effectively shifting the demand rather than smoothing it out.
- Consumers find fixed pricing periods easier to understand than dynamic pricing, and prefer manual measures over automatic ones. They think that dynamic pricing would be too complex and confusing for society, and would require excessive effort from consumers to plan ahead and ensure they can capitalise on lower prices.

Peer-to-peer



Consumers are consistently most positive about the peer-to-peer model, which receives more support than the other models discussed, including the current energy supply model. Given time for reflection and contemplation, consumers are more likely to opt for peer-to-peer as their preferred approach, ahead of the current energy supply model.

Consumers are very positive about:

- Embracing community energy and the potential ability to support local institutions such as schools and hospitals
- The element of control provided, offering consumers choice over the type of energy used as well as whom they pay for it (rewarding local or ethical traders)



• The ability to choose renewable energy

However, consumers recognise that this is the most 'future-focused' energy supply model tested, and identify a number of caveats that centre around regulation to protect the consumer from uncertainty in supply and from parties abusing the system.

Energy-as-a-Service



Energy-as-a-service (primarily focusing on heat-as-a-service) is the most complicated and difficult to understand of all the models tested. The key benefit to consumers is the simplification of changing units of energy to hours used, which is more tangible and relatable.

However, consumers see a number of barriers:

- The requirement to have the technology upfront in the home is seen as something preventing this model from being embraced in the short term. Consumers are reluctant to invest in the equipment themselves and would hope for some financial support from the government or the industry.
- Consumers believe that the issue of upfront technology in the home is where Citizens Advice should focus its support when it comes to this proposed new model, making sure 'no one is left behind'.
- Contracts longer than 12 months are very unpopular. A longer contract is outside consumers' comfort zone and stirs up anxieties associated with risk. Contracts would need to be flexible to allow for changing life circumstances.
- Consumers want to be able to roll over energy usage that is left unused, which is seen as a fair measure for the consumer. Losing unused energy is perceived as only benefiting energy suppliers and reverts back to feelings of distrust.

Some consumers think that energy-as-a-service is premature at present, but are encouraged by the idea that the government and energy suppliers could be working with consumers to better optimise homes for decarbonised energy use and overall energy efficiency. After such measures are taken, the model could become more appealing.

Compared to the current energy supply model, energy-as-a-service is liked by some consumers and misunderstood by others.

It is seen as suiting those with the financial means to embrace the smart technology required or perhaps living in a newly built home with high energy efficiency and potential for smart devices or appliances.

Therefore, protections need to be in place to ensure that everyone has access to managed energy services, regardless of affluence or home ownership.



10. RECOMMENDATIONS AND NEXT STEPS

Despite the consumers' low levels of engagement with the energy market currently, they do feel that the market should be more innovative and are keen to find out more about energy.

Consumers have limited understanding of the need to change the current model (eg lack of knowledge about peak demand), so this would need to be communicated as part of any change to the current energy supply model.

If this is not clearly understood, there is a danger that consumers will be resistant to change. For example, when the implications of peak demand are not sufficiently understood, consumers feel that the purpose of the time-of-use model is mainly to benefit suppliers by offering them the ability to inflate prices.

Encouragingly, consumers are able to understand the principles behind each of the energy supply models and to debate the merits and disadvantages of each one. However, it is clear that any changes to the status quo would require substantial education, support and guidance for all consumers.

Consumers raise a number of concerns that would need to be addressed, many of which are applicable to all models.

Fairness

Fairness is high on the consumers' agenda, and this often equates to ensuring that there is sufficient support for those in vulnerable circumstances.

This is applicable to the **current energy supply model**, with consumers concerned that low engagement has negative financial consequences, with consumers in vulnerable circumstances

remaining on default standard rate variable tariffs. Consumers would like more to be done to encourage switching (especially for consumers in vulnerable circumstances), with more transparency from suppliers, intervention from bodies such as the government or Citizens Advice (a top-down approach), and suppliers prevented from defaulting disengaged consumers onto the worst tariffs.

Time-of-use tariffs may benefit some consumers more than others, for example those who live in properties where noise at night-time is less of a concern, or those who can adjust their behaviour more easily to non-peak times. There is also concern regarding the need for investing in new technologies for time-of-use, with consumers able to purchase technology with more advanced delayed timing settings achieving most cost savings.

There is also concern among consumers that if **peer-to-peer** is to be introduced, some consumers, especially those in vulnerable circumstances, could miss out on trading themselves due to the need for higher engagement and investment in technology required to become a trader. The introduction of grants (eg from the government or local authorities) to support participation is positively received. There is also some discussion about collaboration from social landlords, though this would need further investigation both among the landlords and tenants to ensure that any arrangement would be beneficial to all parties involved.

For **energy-as-a-service**, there are also concerns among consumers regarding investment in technology, in terms of the need for digital engagement and equipment. However, if introduced correctly, there are possibilities to provide additional support for consumers in vulnerable circumstances than they currently receive. For example, traders in a peer-to-peer model could donate a small percentage of excess energy to benefit consumers in vulnerable circumstances.



Related to fairness, transparency is also important. Consumers currently have low levels of trust in energy suppliers and would like any move to an alternative energy supply model to involve more transparency. This could take many forms:

- With peer-to-peer, the ability for consumers to provide and share feedback on different traders.
- With time-of-use, flexibility for consumers working non-standard hours.



• With energy-as-a-service, the ability for consumers to have a clear understanding of their current usage.

There is a definite call from consumers for a continued regulatory framework that ensures customers are protected, and consumers expect Citizens Advice to take a lead role in contributing to this by representing the voice of the consumer. Regulation would need to provide sufficient protection for consumers, ensuring for example:

- in peer-to-peer models, continuous access to energy supply.
- in time-of-use models, that essential energy use for heating and cooking is not eliminated.
- in any future energy supply models or combinations of models, that consumers are protected from unfair pricing.

Further, for peer-to-peer a third-party platform would ideally be needed to access and purchase energy, which could take some of the effort away from the consumer when purchasing energy. However, it is key that this third party be independent and unable to alter prices in its favour by charging excess commission, so more thought is required as to who should adopt this role.



Simplicity is key, with consumers finding elements that make energy easier to understand and engage with very appealing (eg the selling of 'warmth' hours is preferred over kilowatts per hour, which means little to consumers).

Anything that can be adopted to make the current energy supply model (or any future model) easier to understand is a benefit. This may take the form of apps to manage interactions for **peer-to-peer** trading, or if **time-of-use** were introduced, fixed pricing would be preferred over dynamic pricing due to its simplicity.

Ensuring that any future energy supply model(s) is grounded in consumers' current expectations and experiences is also recommended. For example, **energy-as-a-service** is easier to comprehend when likened to a mobile phone contract.



Anything that places restrictions on consumers is negatively received, for example long-term contracts for **energy-as-a-service** or the inability to choose peak-charge hours for **time-of-use**. Overall, consumers do like the option of maintaining control where possible.

Any future energy supply model(s) introduced should incorporate an element of flexibility for the consumer.

Phased rollout

A phased rollout of **any future energy supply model(s)** may help alleviate concerns and allow consumers to be slowly introduced to a new way of interacting.

For example, if **peer-to-peer** were adopted, the ability to become a trader could be first limited to larger organisations such as schools and hospitals – or indeed commercial organisations, which are better equipped to cope with any negative financial impact – before being rolled out to domestic properties.



Tackling climate change is increasingly important to GB consumers and should be a focal point of **any new energy supply model**, and a benefit that should be stressed in any communications about it – especially as this is one of the primary reasons for needing to change the **current energy supply model**.

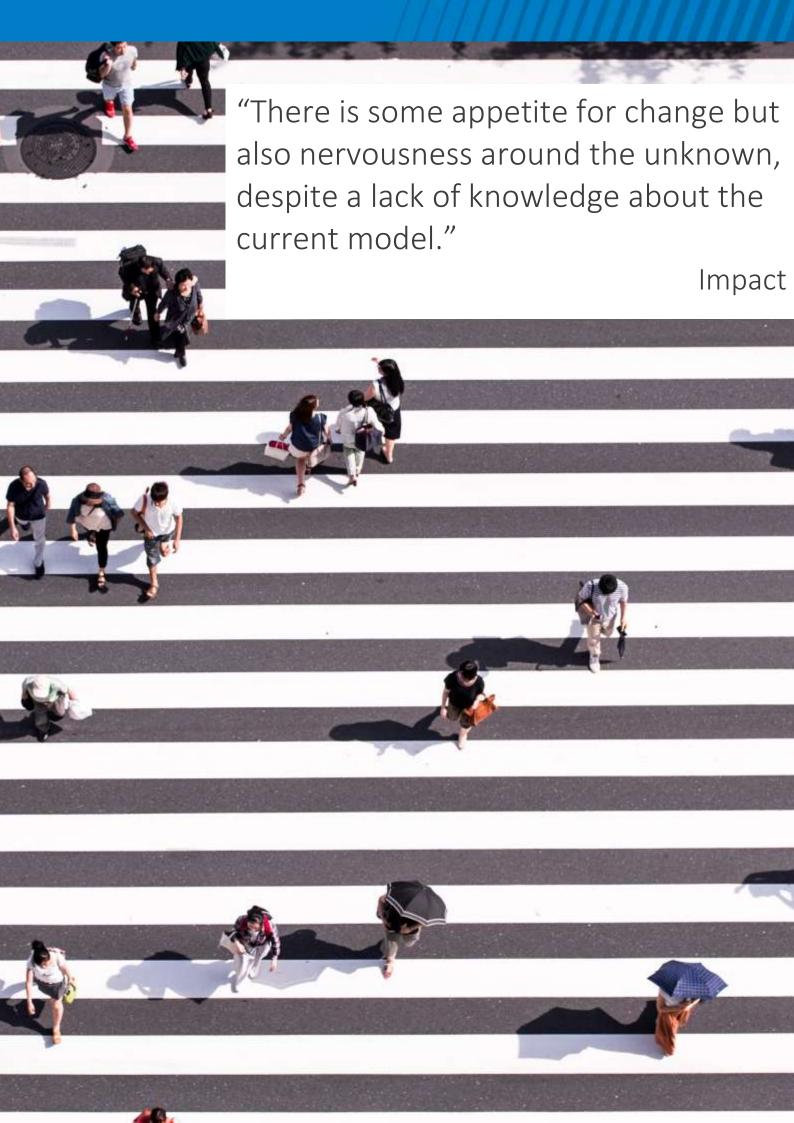
However, there is a general lack of awareness among consumers of the benefits of low-carbon technologies, with some participants citing negative experiences with solar panels. Perhaps more can be done to educate consumers



about emerging technology such as electric vehicles and heat pumps and the benefits of **time-of-use** tariffs in tackling climate change.

Finally, as consumers see each energy supply model as having a range of benefits as well as associated risks, there is a possibility of **introducing elements from each of the models**, as each brings different value for different demographics. If this were the case, it would likely require substantial investment in organisations that could support and advise consumers on the best models or elements of models for them. This would ensure fairness, accessibility and, if successful, more engagement from consumers with the energy market.





Appendix

11. APPENDIX 1: TECHNICAL APPENDIX

Overview of how each stage of the project was conducted

Pre-task

How the energy market operates in GB is largely unknown to consumers. Although consumers engage with energy suppliers when paying bills or switching suppliers, there is little to no interaction outside of emergencies with generators, networks and the regulator. Therefore, in order to ensure maximum participation during the fieldwork, there was a need to 'warm up' consumers the topic of the energy market and usage.

Impact has found the use of pre-tasks in previous research to be very effective in maximising the outputs of workshops, especially when the topic is energy, a subject many consumers give limited consideration to.

How the pre-task worked

Recruited consumers were provided with a short task to complete online or on paper before fieldwork started, answering questions on their energy use at home, how they interact with energy suppliers and if they believe these will change in the future (and if so, how). As part of the pre-task, consumers were also provided with information about the current energy model. Further information about the current energy model was also handed to all consumers as they arrived at the deliberative workshop, to ensure that everyone had a basic understanding of – or at least the opportunity to understand – the subject before in-depth discussion took place. For the pre-task, please see Appendix 1.

For consumers who could not complete the pre-task online, they were able to complete a paper copy and bring it to the deliberative workshop – for example, consumers who are not digitally savvy or lack access to a PC/laptop.

Pre-tasks were sent out and completed in the week before the deliberative event (see Appendix 12). Those received prior to the workshop were then analysed by the Impact team and summaries were sent to Citizens Advice and moderators prior to the event starting. This allowed the team to gather consumers' initial perceptions and opinions before exposing them to additional information about current and future energy models, as well as ensure that topics/ideas of interest were captured and explored at the events.

The pre-task was only completed by those who attended the workshops, not by those who participated in the indepth interviews.

Fieldwork

The key engagement was conducted through the deliberative events and in-depth interviews (pre and post tasks supplemented information gained during the events and depths interviews). Qualitative workshops were conducted in February 2019, with 32 consumers attending workshops in Milton Keynes, 32 in Edinburgh and 33 in Cardiff. This was supplemented by three in depth one to one interviews in each location to ensure consumers less able to attend workshop events (for example due to physical or mental health conditions) had the opportunity to provide feedback.

Deliberative workshops

One of the key advantages of deliberative events is the ability to introduce consumers to a series of concepts by starting with a basic top-level overview, then providing increasing levels of detail and information. This enabled the team to probe and understand why consumers express the perceptions they do and make the choices they make. Each event was 4 hours long and used a combination of large group discussions where consumers were given introductions to topics and tasks, and smaller group discussions where the models were talked about in greater detail. The workshops were designed to be informative but highly engaging to get the most out consumers.



The events were run by professional and experienced moderators from the Impact team, with the lead moderator responsible for keeping to the schedule and ensuring that the workshops ran smoothly. Delta-ee, experts in the design and articulation of the proposed future energy models also attended the workshops to provide an overview to consumers on the current supplier model and future energy models. They were also available to answer any specialised/technical questions that consumers had, acting as industry experts.

The full discussion guide can be seen in Appendix 3.

There are a range of potential future energy models that could be implemented in GB in the future. To ensure adequate time for consumers to meaningfully understand and evaluate the current and future energy models, the workshops focused on three business models: time-of-use, peer-to-peer and Energy-as-a-Service. As a note, Energy-as-a-Service can be complex for consumers to understand, and therefore Heat-as-a-Service was primarily used as an example to explain this model. The models chosen to include at the events were decided in consultation with Citizens Advice and Delta-ee as these span the breadth and depth of the models being considered, as well as being the most consumer-relatable models.

In addition to the above, each event also contained the following:

- Posters and individual infographics for consumers to use for reference (current energy model and future energy models) – these were created in consultation with Delta-ee (see Appendix 3)
- Additional materials to help explain new/different concepts, for example diagrams to explain the impact of using energy during peak times on the grid (see Appendix 4 for stimulus used)
- Diaries for consumers to complete throughout the event, noting down additional opinions and views they may have
- A photographer present who took photographs and videos to capture the events as they happened
- Flipchart paper for moderators to capture notes during each session
- Internet access and PC equipment for moderators to run polls that consumers participated in

For consumers' comfort, as well as further incentivisation for attending the event, refreshments were available throughout the day/evening and either lunch or dinner was provided depending on the time of day the workshop was held.

Polls

There were 3 polls put to consumers at the workshop, using the online polling tool Slido. This is a free tool that consumers could access via their mobile phones either through Wi-Fi or their 3G/4G services.

The first question was asked after consumers discussed in depth their likes and dislikes about the current energy model. They were asked to evaluate whether they believed the current model was fit for purpose in the future. The second poll asked to what extent each of the new proposed models would be suitable. The final poll was a repeat of the previous 2 to find out if any opinions had changed after 'deep-diving' into the future energy models.

Diaries

When consumers arrived for the workshop, they were each provided with a 'diary' to complete throughout the event. A copy of the diary can be seen in Appendix 6. Consumers were encouraged to make notes in their diaries, giving them the opportunity to express their opinions, ideas and thoughts away from a group environment.

Diaries were collected in at the end and were analysed by the Impact team (see Appendix 7).

Time and location of events

Workshops were held in 3 locations: Glasgow, Milton Keynes and Cardiff. These locations were chosen to allow both urban and rural consumers to attend a central location from Scotland, England and Wales. We decided to avoid London for this research due to the city often being used to represent England despite the number of transient



consumers living in the capital and the different demographic and socioeconomic makeup of this city compared to many others in GB.

The dates and times for each of the deliberative events were:

- Glasgow Wednesday 6 February 2019 from 5.30pm to 9.30pm
- Milton Keynes Saturday 9 February 2019 from 10.00am to 2.00pm
- Cardiff Tuesday 12 February 2019 from 5.30pm to 9.30pm

Each venue had disability access, was in a central location for either private or public transport and provided able space to have breakout sessions (where consumers were split into smaller groups to discuss topics away from other groups).

In-depth interviews

Impact conducted in-depth interviews in-house with consumers unable to make the workshops for reasons such as mobility. It is essential that Citizens Advice hear from all consumer groups to be able to feedback to Ofgem and other parties what the consumers of GB want and need from any future energy models.

These were conducted by the lead moderator of the deliberative events, for consistency of approach and knowledge, at a time and place suitable for the consumers. Any consumer who wished to have a family member present or a close friend for reassurance was permitted to do so.

The in-depth interviews ran between 45 and 60 minutes, covering the same key topics as the deliberative events though in less detail during the time allowed. The infographics and additional stimulus used were the same, with each interview covering in depth the current model and the 3 proposed future models: time-of-use, peer-to-peer and Energy-as-a-Service.

The interviews were recorded and the moderator passed on key learning after each in-depth interview for the team to learn from ahead of the next workshop, where applicable. Consumers provided their consent to be recorded prior to starting the interviews.

Interviews took place in and around the same locations as the deliberative workshops: Glasgow, Milton Keynes and Cardiff. This ensured that consumers were from the same geographies as other consumers in this research programme.

Post-task

Research in its very nature can take place in a 'bubble', where consumers can hypothesise about what they need and desire within a safe environment. Opinions can sometimes change when going back to 'real-life' and discussing the research with family and friends. To check if perceptions and opinions changed, and/or if new ideas/questions formed, consumers were asked to complete a post-event survey. Consumers were told they would receive the survey at the end of the workshop, but were given no further instruction.

The post-task was available online to be self-completed. To access the survey, a link was sent via email by Impact to those who attended either the workshops or the in-depth interviews (consumers could also complete this via pen and paper if they wished). To allow time for reflection following the workshops/interviews, the link was only sent after 2 weeks had passed from the date of attending.

The survey consisted of a mix of quantitative and qualitative questions, including the polls asked at the deliberative event for direct comparison. The survey took around 10 to 15 minutes to complete and some questions were tailored to the respondent depending on whether they were a workshop attendee or had an in-depth interview. For the post-task survey, please see Appendix 4.

We have analysed the results from the post-task and compared them with the results from the deliberative workshops/interviews. These can be found in section 5.5.



Recruitment and engagement

Impact commissioned a recruitment partner to recruit consumers for this study. The partner used a recruitment screening questionnaire, designed by Impact and signed off by Citizens Advice, to capture relevant demographic, lifestyle and attitudinal information. The aim was to ensure that the consumers recruited were suitable and that the research tapped a wide range of consumers. The 5 minute questionnaire asked questions to capture relevant information about the consumers, as well as secure their permission to use their comments in reports, to audio record them, to take photographs of them and to collect their data. In line with the General Data Protection Regulation (GDPR), consumers' participation in the study was not contingent on their providing permission for all of the above. At each stage of the research, confirmation to continue with collecting consumers' data was sought, and all data has been collected, used and stored under strict data protection regulations and rules in full compliance with GDPR. Consumers had the right to withdraw from the research at any time and have their personal details removed from the research's database. For the recruitment screener, see Appendix 8.

As part of the recruitment process, consumer's emails were collected in order to send them the pre-task and post-task. Dietary requirements and any further requirements to attend the workshops were sought to ensure that consumers' needs were catered for wherever possible.

Sample of consumers recruited

To be eligible for this research, consumers were not allowed to be working within marketing, journalism, electricity or gas supply/distribution, or market research. Nor were they allowed have taken part in another workshop or indepth interview within the last 6 months. Those who had taken part in research about the energy industry within the last 6 months were excluded to ensure that views were not biased and that consumers were interested to learn about the topic and engaged fully. Other criteria included having an electric or gas supply in their homes and being a bill payer.

Minimum quotas were in place to ensure a wide representation of eligible consumers and were agreed with Citizens Advice prior to the events These quotas were placed on the following:

- Age
- Gender
- Number of people within the household
- Social grade
- Different types of tenure (homeowners, private and social rented)
- Different types of dwellings (flats and houses)
- Urban, suburban and rural consumers (self-defined)
- Early adopters of new energy technology versus no smart technology within the home (smart technology examples include electric vehicles, smart appliances and smart meters)
- Engaged and disengaged consumers (classified by switching behaviour)

In-depth interviews were conducted with consumers with the following circumstances (please note, some consumers have more than one circumstance listed below):

- English is not the first language
- Elderly
- Mobility issues
- Ill mental health
- Fuel poor
- Child/children under 5 years old in the household



Number of consumers engaged in each stage of the research

A breakdown of the number of consumers who engaged with the individual stages of the research can be found below:

	Glasgow	Milton Keynes	Cardiff	Total
Pre-task	30	29	31	90
Deliberative events	32	32	33	97
In-depth interviews	3	3	3	9
Post-task (includes in- depth interview consumers)	27	24	26	77

In total, 93% of workshop consumers completed the pre-task, and 75% of all consumers completed the post-task.

Incentivisation

Consumers received cash incentives for participating in each stage of the project. The amounts they received were:

	Pre-task	Deliberative event	Post-task	Total amount
Consumer incentives	£10	£90	£10	£110

Consumers in vulnerable circumstances/hard-to-reach consumers received £50 for taking part in the in-depth interview and were also invited to complete the post-task. The total these consumers could receive was £60.

Pre-task and workshop incentives were combined and handed to the consumers directly at the end of the workshop. In-depth interviewees received their cash incentive from the moderator at the end of the interview and the post-task incentive was paid via bank transfer or cash sent to their address (consumer stated their preference) within 10 days of completing the survey.

12. APPENDIX 2: PRE-TASK

Citizens Advice Workshop Pre-task

Thank you for agreeing to participate in the upcoming workshop. We are very thankful for this chance to receive your valuable opinions. I work for Impact Research, who have partnered with Citizens Advice to hold and run the workshops (I'll also be at the workshop). We would love for you to participate in the pre-task. This will consist of three short tasks/questions. Participation will be rewarded with an additional £10 at the event. You do not have to participate and please let us know if you have any questions about Impact Research.

Assuming you are happy to proceed, here is a reminder of what the event is for: Citizens Advice would like to understand the relationship you have with the energy market and how you might want this to change in the future.



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What is the energy market?

The energy industry is a growing industry that contains all of the companies involved in the production and sale of energy – including both electricity and gas. Your energy supplier is the company that buys the energy on your behalf on the energy market and bills you for the amount of energy you use.

- 3. Please reflect on how your relationship with the energy market might change:
 - a. How if at all do you think the way you use energy might change in the future? (Please give some examples such as the amount of energy you use, or different products you might use energy for)



	How – if at all – do you think the way you interact with your energy supplier might change in the future? (eg channels of communication, frequency of contact, etc.)
C.	If energy could be like another product or service you use, what product or service would you want it to be like? (eg mobile phone plans that bundle various services into one monthly fee, finances where you have different suppliers for different services you use, etc.)
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13. APPENDIX 3: DISCUSSION GUIDE

915 Citizens Advice Workshop Discussion Guide

February 2019	Objective – to understand consumer attitudes to the current
Version 5	energy supplier model and new proposed future models

GROUP STRUCTURE (4 HOURS):

Glasgow evening session on the 6th - 5.30pm to 9.30pm

Milton Keynes Saturday session on the 9th - 10am to 2pm

Cardiff evening session on the 12th - 5.30pm to 9.30pm

AREA OF DISCUSSION	TIME ALLOCATION
(1a) Introductions/Warm up	5-10 minutes
(1b) Current model introduction	10 minutes
(1c) Current model evaluation	30 minutes
Introduction of the new models (pre-break)	10 minutes
Refreshment break / evening meal	10/30 minutes
(2) Evaluation of new models	35 minutes
Lunch break or refreshment break - opportunity to interact with energy models	10/30 minutes
(3) Core services and elements of the core services (1)	45 minutes
Refreshment break	10 minutes
(4) Core services and elements of the core services (2)	40 minutes
(5) Wrap up	5-10 minutes

IN ADVANCE OF THE WORKSHOP, PARTICIPANTS WILL BE ASKED TO COMPLETE A PRE-TASK DISCUSSING THEIR ENERGY USAGE AT HOME AND HOW THEY CURRENTLY INTERACT WITH THEIR ENERGY SUPPLIER. THEY WILL HAVE ALSO RECEIVED INFORMATION ABOUT THE CURRENT ENERGY SUPPLIER MODEL

AT REGISTRATION, PARTICIPANTS WILL BE GIVEN A DIARY TO COMPLETE AT THEIR LEISURE DURING THE WORKSHOP – IT WILL BE EXPLAINED THAT THESE WILL BE COLLECTED AT THE END



1A. MODERATOR INTRODUCTION (5-10 minutes):

- Introducing the research team
- Housekeeping
- Explain that the research is being conducted on behalf of Citizens Advice
- Explain purpose of the workshop (to understand consumer attitudes to the energy models, both current and proposed changes)
- Confidentiality is guaranteed, no right/wrong answers, interested in everybody's opinions, in as much detail as possible
- Explain moderator's role and set out 'rules' (speak loudly/clearly/not all together)
- Explain audio and video recording and presence of observers
- Explain badges will tell you which group you are in
- Any questions?

1B. INTRODUCTION TO THE TOPIC BY SECTOR EXPERT (10 minutes):

INFORMATION ABOUT THE CURRENT ENERGY SUPPLIER MODEL TO BE GIVEN OUT AS A REMINDER

DELTA-EE TO PRESENT ON THE FOLLOWING:

- The current supplier hub model
 - What is the model
 - Role for consumers in this model
 - Who benefits from the current model and what limitations does the model currently have?
- The regulatory context
 - What Ofgem say about the current supplier model and why they feel now is the time to consider alternatives
- The current landscape
 - Opportunities and challenges now and in the future relating to what this means to consumers

1B. CURRENT MODEL EVALUATION (30 minutes)

WE WILL COLLECT AND ANALYSE THE PRE-TASKS BEFORE THE WORKSHOPS START AND THEN TALK THROUGH THE RESULTS. THIS WILL BE EMAILED TO THE TEAM AND/OR DISCUSSED BEFORE THE WORKSHOP BEGINS

POSTERS OF THE CURRENT SUPPLIER MODEL TO BE AROUND THE VENUE FOR PARTICIPANTS' REFERENCE

PARTICIPANTS WILL BE SPLIT INTO 3 GROUPS - TO ENSURE EVERYONE CAN PARTICIPATE

- Each respondent will be asked to introduce themselves to the group
- A WALK THROUGH HOW THE CURRENT ENERGY MARKET IMPACTS CONSUMERS USING THE INFORMATION SHEET /
 POSTER TO CHECK UNDERSTANDING
- How do consumers use energy now? MODERATOR TO AVOID/LIMIT DISCUSSION ABOUT SPECIFIC ENERGY SUPPLIERS
 - What energy is being used (eg gas/electricity)?
 - What is most important to you when it comes to using and purchasing energy?



- What is seen as must have / nice to have when it comes to accessing energy from suppliers? MODERATOR TO PROBE CONTRACT LENGTH, PRICE, ETC. AND PROBE ON WHY THEY ARE MUST HAVES
- Do you have any low carbon technologies or innovations in your household/friends/family? For example, EVs, solar panels, smart heating, heat pumps, etc.
 - If not, would you like to? Do they appeal to you? MODERATOR TO AVOID TOO MUCH DISCUSSION ON THIS TOPIC
- How are these expected to change in the future eg more EVs, smart home technology, etc.?

OVERALL TASK: What are your thoughts on the current energy supply model?

START BY TALKING IN PAIRS FOR LIKES AND DISLIKES, THEN IN GROUPS OF 3-4 PEOPLE FOR BENEFITS/CONCERNS – PARTICIPANTS WILL BE ASKED TO MARK THEIR THOUGHTS UP ON FLIPCHART

- What do you like about the current energy market?
 - O Why do you like it?
 - O How does that benefit you / your community?
 - Competition among suppliers means better tariffs
 - Not much effort is required to engage with suppliers / the market
 - The market is familiar and therefore doesn't create any/many unknowns
- Is there anything you dislike about the current model?
 - Lack of innovation from the sector
 - Costs rising
 - Inflexibility with tariffs / energy services being offered
 - Who does this impact? You/community?
 - What could and should be better in your opinion?
 - Communication content/channel/frequency?
 - More competition from new suppliers?
 - Innovation what would you like to see? How could contracts/services be changed?

MODERATOR TO PROBE ON FLEXIBILITY, COSTS, LOW CARBON AGENDA, TRUST OF CURRENT MODEL, CONFIDENCE IN MANAGING ENERGY BILL, ETC.

- Are there particular groups in society that most benefit and/or are missing out with the current model?
 MODERATOR TO PROBE AROUND THE PSR GROUPS: THOSE WITH PHYSICAL DISABILITIES, MENTAL HEALTH, ELDERLY,
 THOSE WITH YOUNG CHILDREN AT HOME, ETC.
 - O Who benefits / misses out?
 - o How do they benefit?
 - O How do groups miss out and why?
 - MODERATOR TO PROBE FOR SHORT/LONG-TERM ISSUES WHERE POSSIBLE. MOVE THE CONVERSATION ON IF OVERALL SPECULATIVE
- Are there any third parties that could support those not benefitting from the current model? If so, what would you expect them to do?



PARTICIPANTS ENCOURAGED TO MAKE THEIR OWN SUMMARY POINTS/THOUGHTS DOWN IN THEIR DIARY BEFORE FINISHING THE SESSION

BRING GROUP BACK TOGETHER TO SHARE A SUMMARY OF THE SESSION

GROUP ACTIVITY: Electronic voting to score the current model out of 10, where 10 is we should keep this model as it works well, and 0 is the model needs to change immediately

POSTERS WILL BE PUT UP AROUND THE ROOM DEMONSTRATING THE NEW MODELS

DELTA-EE TO PRESENT ON THE FOLLOWING:

- What the three energy models are: time of use, energy as a service and peer to peer trading
 - Explaining how these differ from the current model
 - An overview of each to make it clear how they differ from one another
- An explanation of the relevance to consumers
- An overview and brief explanation of which challenge each model looks to overcome

BREAK FOR 10 MINUTES OR DINNER IF IN THE EVENING (30 MINUTES)

2. EVALUATION OF THE NEW MODELS (35 MINUTES)

INFORMATION CARDS GIVEN TO PARTICIPANTS WHEN THEY SPLIT UP TO DISCUSS THE MODELS (THIS ENSURES EVERYONE HAS ACCESS TO INFORMATION THROUGHOUT)

PARTICIPANTS WILL BE SPLIT INTO THEIR PRE-DEFINED GROUP

OVERALL TASK: Evaluate each model on a top-level, understanding how these compare to the current model

RECORDING THOUGHTS ON A FLIPCHAT

- How will each model change the way you use energy in your household? For example, with the time of use, would you try (and be able to) shift when you use gas or electricity in your home? For energy as a service, would you be comfortable with additional services being offered in the home? For Peer to Peer Trading, would you look for local sources of energy?
 - Would you use more or less energy do you think, with each model compared to one another and compared to the current model?
 - Is there anything about your lifestyle / household makeup that would encourage and/or prevent you from embracing any of the new models
- For each model, how would you interact with energy suppliers (or platforms for Peer 2 Peer) would it be any different to now?
 MODERATOR TO PROBE AROUND CONTRACT LENGTH, DATA SHARING, TRUST, WHO THE SUPPLIER WOULD BE, ETC.
- What model most appeals to you as a whole?
- Why?



We are now going to evaluate the benefits and potential limitations of the models in more detail:

Benefits of each model:

- What do you see as the advantages of each model?
 - Are these advantages the same as the current model or different?
 - Are there any benefits which overlap across the models?
 - O Which are the most attractive benefits to you / your community?
 - O Who would most benefit from each model?
 - Why and how?
- Are there any concerns you have about each model?
 - Are there any concerns you have across all the new models?
 - Are these the same concerns or different ones to the current model?
 - Are there any risks associated with the new models? For example, if you have difficulty switching suppliers, is that going to be a concern?
 - For risks, who and how would they impact?

MODERATOR TO PROBE AROUND THE PSR GROUPS: THOSE WITH PHYSICAL DISABILITIES, MENTAL HEALTH, ELDERLY, THOSE WITH YOUNG CHILDREN AT HOME, ETC.

- Is there a way these risks could be overcome?
 - What more information would you like in order to engage (ie. use the benefits) of each model
 - O Are there any reassurances that you need?

MODERATOR TO PROMPT IF THIS IS FOR REASSURANCE/INTEREST

- Some people do not or are not able to currently engage with the current energy model. For example, some don't ever (or rarely) switch suppliers, some do not like or have the means to invest in new technology to bring into the home, etc.
- What would motivate you to engage with the models?
- If nothing, why? MODERATOR TO PROBE AROUND WHY AND WHAT IS MISSING, IS THERE SOMETHING ABOUT THEIR CIRCUMSTANCES OR IS IT TRUST, ETC.
- Will any of the models encourage greater engagement for those that don't usually engage?
 - How will the model(s) encourage consumers to engage? Why?
 - O Which model (new or current) would be the most effort to engage with? Why?
- What would need to be supplied to you / your community as a minimum, if you/ your community didn't want to engage with the new energy models?
 - Access to auto-renewal contracts
 - Technology support
 - Basic tariffs that people get as a default service, for example, heating at 18 degrees constantly
 - What would encourage you / your community to sign up for each model MODERATOR TO PROBE WHETHER THE
 CONSUMER WANTS A GREATER CHOICE OR WHETHER AUTOMATION WOULD HELP
- For example, if you moved into a new home, how would you expect to be charged for your energy if you didn't have a contract set up?



What reassurances/actions need to be taken to make each model open for everyone to access and engage with? MODERATOR TO
PROBE AROUND THE FAIRNESS OF EACH MODEL IN RELATION TO THOSE THAT EITHER CHOSE TO OR CANNOT EASILY
ENGAGE WITH ENERGY MODELS AND SUPPLIERS

STICK PICTURES OF THE RELEVANT MODELS ONTO THE PAGE THAT HAS THE FOLLOWING HEADINGS: TASK: Choose one model to put into the following categories - has the most benefits, has the most risk associated, most likely to encourage engagement from the wider-community - can choose the same model for more than one area

MODERATOR TO PROBE WHY FOR EACH OF THE THREE CATEGORIES

BRING GROUP BACK TOGETHER TO SHARE A SUMMARY AND QUADRANT FINDINGS

GROUP ACTIVITY: Voting to ask how much consumers like each model (separately, not a comparison of the models directly against one another)?

LUNCH BREAK (IF WEEKEND SESSION) 30 MINUTES OR REFRESHMENT BREAK 10 MINUTES

Opportunity to review posters, talk to Delta EE

3. CORE SERVICES AND ADD-ONS (1) (45 minutes)

PARTICIPANTS WILL FULLY EVALUATE THE CORE SERVICES AND ADD ON CONSIDERATIONS FOR ONE MODEL, THEN WILL REPEAT THIS EXERCISE FOR ANOTHER MODEL. EACH GROUP WILL THEREFORE REVIEW 2 MODELS IN FULL IN TOTAL

PARTICIPANTS WILL BE SPLIT INTO THEIR PRE-DEFINED GROUP

OVERALL TASK: evaluated one new model in detail, including additional add-ons.

RECORDING THOUGHTS ON A FLIPCHAT

SHOW POSTER AGAIN AND HAVE ADDITIONAL SHOWCARD INFORMATION – INCLUDING DIAGRAMS (EG FROM OCTOPUS ENERGY)
WHICH BRINGS REFRESHED INFORMATION TO THE PARTICIPANT TO GET THEM TO FOCUS ON THAT PARTICULAR MODEL

Earlier, everyone voted on how much they liked each new business model as a whole. The results for this model were XXX [this is based on the voting prior to this section]

- Why do you think this score was given?
 - O Did you agree? If yes why?
 - o If not why not?



IN SMALLER GROUPS:

- Thinking about this model specifically, what features of the model do you like and are there any you dislike?
 - O Why?
 - O How does this compare to the current energy market?
- What could be improved?
 - What improvements would lead to greater take up / engagement with the model for you, for the wider community?
 MODERATOR TO PROBE ON ANY BARRIERS AND HOW THESE CAN BE OVERCOME INCLUDING WHO SHOULD BE RESPONSIBLE FOR OVERCOMING THEM (EG THE REGULATOR)
- What investment if any do you think you will need to put in upfront to allow people to benefit from the model's elements?
 - O Investment in terms of time effort?
 - Investment in terms of money any equipment you would need to purchase (if you didn't already have it?) MODERATOR
 TO PROBE THE NEED FOR SMARTPHONES/TECH
- What investment if any do you think is needed on-going after initially signing up to the model?
- What support, if any, would be needed to help:
 - Those vulnerable engage MODERATOR TO PROBE AROUND THE PSR GROUPS: THOSE WITH PHYSICAL DISABILITIES, MENTAL HEALTH, ELDERLY, THOSE WITH YOUNG CHILDREN AT HOME, ETC. ALSO, PROMPT THAT SOME MAY FACE BARRIERS AT THE START OF THE CONTRACT OR ON-GOING
 - Those that have previously chosen not to engage with energy suppliers

PARTICIPANTS ASKED TO SHARE FINDINGS IN THEIR LARGER GROUP

- What would need to be provided as a minimum to ensure everyone could access this model. Does there need to be government guidelines on what each household gets as a minimum, etc.
- Do you think other companies would be better equipped to offer you the best service for this model, other than current energy suppliers?
 - O Why? What needs to be improved?
- Does your lifestyle suit this model can you adapt/change your energy use behaviour to maximise the benefits?
- How would you adapt/change your behaviour?
 - O Why would you not be able to adapt?

<u>DISCUSS ADD ONS</u> - MODERATOR TO USE RELEVANT INFORMATION FROM BELOW - IF IS IMPORTANT TO PROBE ON CHALLENGES, HOW THESE CAN BE OVERCOME AND WHO CAN HELP THESE BE OVERCOME, THROUGHOUT THIS SECTION

Time of use - add ons

DYNAMIC VS. FIXED

Time of use can be either fixed costs where energy is 10p per unit in the morning, 5p in the day and 20p in the evening for example, or it can be dynamic where price will change throughout the day based on availability of energy in the system. For example, there might be excess energy



available on Tuesday at 2pm which means the cost per unit is 2p, whereas there is a surge of demand on Wednesday at 2pm so the cost is 7p per unit. MODERATOR TO ENSURE UNDERSTANDING OF THE EXAMPLES

- Which would you prefer and why?
- What benefits would there be to a fixed rate vs. a dynamic one?
- Would you be happy to share your energy usage data with third parties to make a dynamic one work smoothly?
- Why do you say that? If not, what is holding you back, concerns, barriers?
- Do you want to play an active role in getting the best price (dynamic) or would it be convenient to use a fixed rate? Or would you rather invest in equipment that can do this work for you?

AUTOMATIC VS. MANUAL

There are two ways you could engage with this model. One would be to sign up to a system that automatically uses energy at a cheaper time (for example, you can put washing in your washing machine and inform your supplier you want it to turn on soon, however the supplier will ultimately decide at what time of the day to turn it on to prevent usage during peak time).

- Which would you prefer and why? MODERATOR TO PROMPT THAT AUTOMATIC SYSTEM WOULD NEED INVESTMENT TO ENGAGE WITH IT (IE. LIKELY EQUIPMENT NEEDS TO BE PURCHASED)
- What information would you need to feel confident to use an automatic system (eg app notification, manual overrides, etc.)?
- With a manual system, would you still like notifications that encourage you to delay your energy use to a cheaper time?
- What are the benefits of both systems?
- What are the risks with both systems?
- What are the challenges/concerns and barriers with both systems?

ADDITIONAL ADD ON QUESTIONS FOR ToU

- Are you comfortable sharing your data with third parties to get the best price when you use your energy?
 - O Why? If not, what concerns do you have? How can these be overcome?
- Who does this model work best for? MODERATOR TO PROBE ON THE WIDER COMMUNITY, THE INDUSTRY VS. CONSUMER,
 CERTAIN TYPES OF CONSUMERS. ETC.
- How fair would it be to have different costs of energy across the country? For example, there might be greater generation of electricity in Scotland than London, so Scottish residents would have access to cheaper energy

Peer to peer trading - add ons

DIRECT BUYING OR BUY THROUGH A COMPANY

For peer to peer trading, you could buy from a peer directly (off a trading platform), or you could sign up to a third-party company that would source the energy for you based on your preferences. The latter will likely incur an additional cost that seeking out the energy directly, but will reduce consumer effort.



- What are the benefits of both methods?
- Which method would you / your community most likely use?
 - O Why do you say that?
 - Would fees put you off the third party?
 - Is cost more important to save than effort?
- What information would you need for both methods to get the most out of them. For example, what support and/or notifications would you need through the app/website? Would you need regulatory reassurances that the third party is acting in your best interests, would you need a list of local energy generators and if so, where would you expect to see this, etc.?
- What are the risks with both methods?
- What are the challenges/concerns and barriers with both methods?
- Would you be happy to share your data with a third-party?
 - O Why? If not, what reassurances would you need?
 - Are there any limits to sharing your data? For example, happy to meter data for the company to switch your supply, but not happy to share your usage data that they could use to recommend a potentially better supplier for you

BECOMING A TRADER

In this model, each household could generate electricity/energy and trade with other households or companies – effectively selling excess energy for a profit. In order to do this, you would need to have the equipment to generate or store energy, for example solar panels, an electric car, battery storage.

- Would becoming a trader appeal to you?
- Who would becoming a trader most appeal to?
 - O Why would it appeal to them / what makes becoming a trader appealing to you/others?
- In your opinion, what are the barriers to becoming a trader? MODERATOR TO PROBE FOR MONEY TO SET UP, TAX
 IMPLICATIONS OF EARNING EXTRA, KNOWLEDGE OF EQUIPMENT NEEDED, HOUSING SITUATION THAT MIGHT MEAN
 THEY CANNOT CHARGE AN EV OR HAVE SOLAR PANELS, ETC.
- What information would you like to know to become a trader?
 - o For example, what equipment you need, which companies could help, what your regulatory obligations might be
- If you wouldn't want to be a trader, would you be happy that your neighbours/others could be traders? MODERATOR TO PROBE
 WHETHER THE PARTICIPANTS HAVE ANY FAIRNESS ISSUES WITH LOCAL TRADERS OF ENERGY

Energy as a service - add ons

OTHER ENERGY NEEDS

We have predominantly been speaking about heat as a service. However, there are other energy needs that this model could deal with. For example, household appliances, electric car charging, etc. It would work in a similar way to the heat example, in that you would pay a single price for a contract that includes all related services. The service provider might want to install a battery in your home, or have some control of your appliances, built around your preferences, as part of the agreement.



- Would you be interested in other energy services, beyond heating for the household?
 - O What would you be interested in?
 - Why, is this savings, or interest in the latest technology/innovations, or convenience, etc
 - What other services in the house could this model include?
- What would be the benefit of other services being included in this model?
- What would be the risks with other services being included in this model? MODERATOR TO PROBE FOR COMPLEXITY, HOW THE
 PRICING FOR EACH SERVICE WOULD WORK, WHAT HAPPENS IF PREFERENCES/LIFESTYLE/HOME CHANGES ETC.
- If other services were available and the price of energy was cheaper for you, would you be interested in investing in new technology up-front (rather than through the life of the contract) to gain more savings in the long run? For example, smart home technology that allows your washing machine usage to be managed by a cheap supplier, a company that automatically switches you to the cheapest supplier etc.
- Are there any groups in the community that would most benefit from more services being managed?
- Are there any groups in the community that would most miss out / feel excluded from this?
 - O Who, why and how?
 - What would these groups need to be able to fully access 'energy as a service' MODERATOR TO ENSURE UNDERSTANDING THROUGHOUT
 - O What EaaS services should these groups be able to access as a minimum (if anything)?

ADDITIONAL ADD ON QUESTIONS FOR EaaS

- Are you comfortable sharing your data with third parties to be offered additional energy services within the home?
- Would you be comfortable sharing your data with third parties so your energy supplier could also offer you different products that are
 not related to energy for example, a technology company could manage your electric car charging and may also sell GPS systems
 MODERATOR TO PROBE IF PARTICIPANTS ARE COMFORTABLE / HAVE ANY OPINION ON THE PROVIDER POTENTIALLY
 NOT BEING A TRADITIONAL ENERGY SUPPLIER
 - O Why? If not, what concerns do you have? How can these be overcome?

EVERYONE IS ASKED AT THE END ON THE MODEL EVALUATION:

Thinking back again to the score that was given earlier for this model. After discussing it in detail, has your opinion changed?

- What impacts do the add ons have on your opinion?
 - o Positive/negative why?
- Any other thoughts about the model we haven't covered?

BRING GROUP BACK TOGETHER TO SHARE A SUMMARY OF THE SESSION

REFRESHMENT BREAK 10 MINUTES



4. CORE SERVICES AND ELEMENTS OF THE CORE SERVICES (2) (40 minutes)

REPEAT SECTION 3 WITH A DIFFERENT ENERGY MODEL

BRING GROUP BACK TOGETHER TO SHARE A SUMMARY OF THE SESSION

TASK: Voting to ask how much consumers like each model (separately, not a comparison of the models directly against one another)?

- What elements/features of the models you have seen today are <u>most important, most appealing</u> LEAD MODERATOR TO WRITE ON FLIPCHART AT THE FRONT OF THE ROOM
- What elements/features of the models you have seen today are <u>least important, least appealing</u> LEAD MODERATOR TO WRITE ON FLIPCHART AT THE FRONT OF THE ROOM
- What elements/features/protections do you think are missing?
 - O Why? Who should ensure those elements are included?
- Is there a hybrid of the models discussed that you would like to combine to make a better model? MODERATORS TO POSE QUESTIONS ON WHETHER THIS IS REALISTIC
- Is there anything you expected to see/hear about today that you haven't seen?
 - O What? Who would it benefit? Would it exclude anyone?

5. WRAP UP (5-10 minutes)

- Thank you very much for your time. To finish, I'd like to recap on the most important things that came out from today
- Time to cover any areas that need further insight/not concluded on the day
- Any final comments any participant would like to make?
- Explain post-event survey and how they can confirm consent to be re-contacted the survey will be emailed out two-weeks after the event; there is an additional incentive for completing the survey

THANK EVERYONE FOR ATTENDANCE TODAY

END OF WORKSHOP



14. APPENDIX 4: STIMULUS

Current energy model



The distributor transports energy (gas and electricity) to a supplier.



Currently, the only relationship a consumer has is with their energy supplier.

The supplier buys the energy on their consumers' behalf and charges for the amount of energy used at a rate per unit. During peak times, energy use can strain on the network.



Consumer

A percentage of the bill a consumer pays to their supplier goes directly to maintaining and managing the network. Therefore, higher peak demand can result in higher energy bills for everyone to ensure the network can manage demand.



Current and future trends



The current model is designed around fossil fuel energy. We have a legally binding target to reduce carbon emissions by 2050. A low carbon energy system could look quite different. The energy system is increasing in complexity, however, consumers are not currently exposed to these changes.



Some consumers want greater choice over their energy supplier and energy needs are evolving as we use energy in different ways, for example using an electric vehicle.



Solar panels can create more energy than the household needs. In the future, this extra energy can be sold back to the grid or could be sold to other households.





The cost on the network depends on how big the peak (the amount of energy used at the busiest times) is. With electric cars and heating, the peak would get bigger and these costs are passed onto customers.





Pricing: Many households pay a fixed amount every month which is estimated by energy companies based on their typical usage. Consumers with a smart meter will monitor their sending more regularly.



Suppliers need to know how much energy you use each year, and will know more regularly if you give meter readings, or have a smart meter.



Contract Type:

Typically 1-2 years, unless you switch suppliers. Customers do have the option of 'no contract', however price may vary depending on contract length.

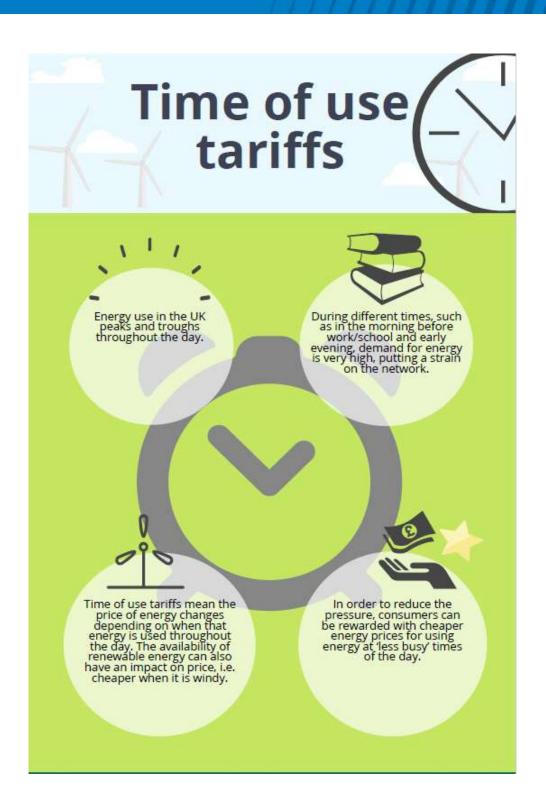




You have full control over how much energy you use at any time, and in the end you'll be charged for exactly what you use.









Challenge this model aims to overcome

Currently, there is little incentive for consumers to use energy outside of peak times.

It is more expensive for the network at these times as it needs to cope with maximum usage. But most consumers pay a fixed price, regardless of when energy is used. Time of use tariffs could reduce the cost of the network, by getting consumers to shift their usage.



If you are able to change the times you use energy, you could save money. If you primarily use energy during the peak and cannot be flexible, it is likely your bills will increase.



Data: Your supplier will need half-hourly usage data from your smart meter to accurately bill.



Contract Type: Same options as the current model.



Medium if trying to use energy outside peak times, but interaction with suppliers is similar to the current model.



Control over energy usage:

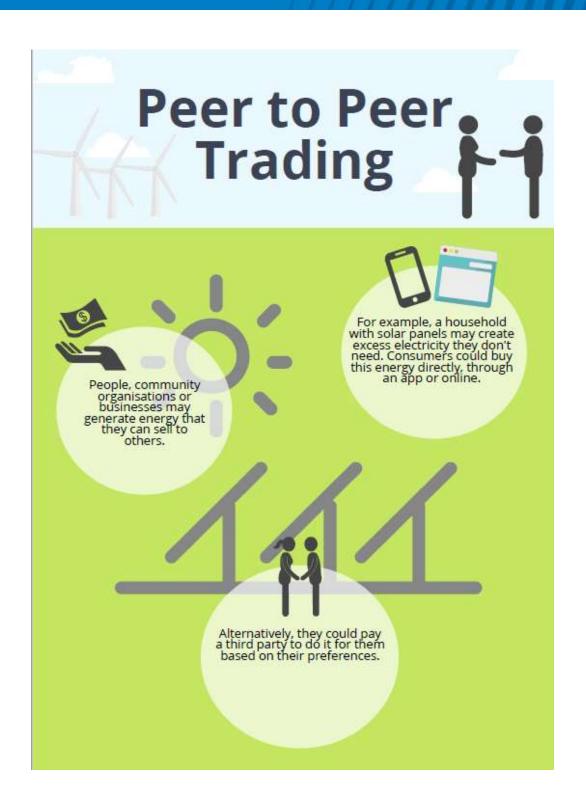
You could allow your supplier to turn some appliances on or off automatically, to help avoid expensive peak times.



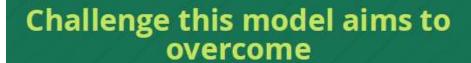
Bills could increase if you don't engage/ adapt when you use energy at all, and to benefit most you may need to invest in further technology to change usage.





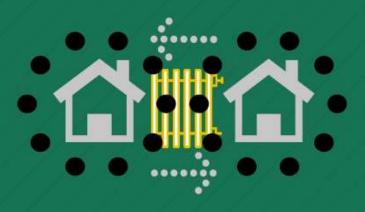






Currently, there are schemes to incentivise households to generate renewable energy.

Although these incentives will reduce, peer to peer trading allows people to sell excess energy, and for other households to know that the energy they buy is 100% renewable.





Similar price to current model, however may fluctuate more depending on consumer choices. For households trading energy, they could make money.



Data: You would need to share half hourly usage data from your smart meter.



Contract Type: Short-term or rolling contract.



Consumer effort to engage with High if you want to regularly select where your energy is coming from. this model:



Control over

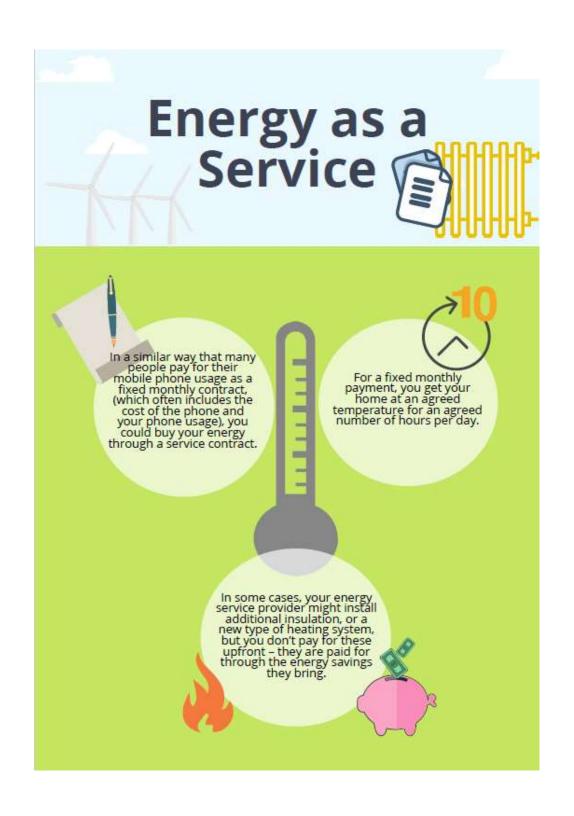
You will have more control over energy usage: choosing where you energy comes from. But some areas might have more choices - or cheaper energy - than others.



Those that cannot afford the equipment, will find it more difficult to become a trader.









Challenge this model aims to overcome

Reducing carbon emissions can be complicated, requiring a change in the way we use energy, and the introduction of new, perhaps unfamiliar, technologies.

Energy as a Service makes it easy for the household as the complexity is left to someone else (the energy service provider), and the household just has to define the outcomes they want.





A fixed amount rather than paying for exactly the energy that is used. The amount will depend on the outcomes you want.



Data: Increased data sharing is required to allow the service to be best matched to individual household needs or preferences.



ontract Type: Longer term (e.g. 5 years or more) than the current model and more difficult to leave, especially if new heating technologies or insulation measures are included.





Control over energy usage: Energy service provider optimises your energy use, but household can override. This may be within agreed 'fair usage' limits, e.g. you can't heat your home above 22 degrees without paying an additional charge.



In a longer contract changes to your preferences or lifestyle might mean the service is no longer suitable.





15. APPENDIX 5: POST EVENT SURVEY

Citizens Advice Post Event Survey

Thank you for taking part in our workshop/interview and agreeing to be re-contacted, your opinions are greatly valued.

This is a short survey about your experiences and opinions following the workshop/interview, and should take between 5-10 minutes to complete. As a thank you for completing the survey, you will receive £10 sent to you either by bank transfer or cheque (you will be able to specify your preference at the end). Please note, this will require you to leave your email address and/or telephone number at the end of the survey. You should expect to receive the bank transfer within 5 working days of completing the survey and within 10 working days if you request a cheque.

By completing the survey, you are consenting to have your data collected. This data will be used for research purposes only and no personally-identifiable information will be shared with third parties.

S1 Are you happy to continue with the survey and have your data collected?

- a) Yes
- b) No (close survey)

S2 First, please can you tell us which event you attended?

- a) Glasgow workshop (Wednesday 6th February)
- b) Glasgow 1-2-1 interview (Wednesday 6th February)
- c) Milton Keynes workshop (Saturday 9th February)
- d) Milton Keynes 1-2-1 interview (Monday 11th February)
- e) Cardiff workshop (Tuesday 12th February)
- f) Cardiff 1-2-1 interview (Wednesday 13th February)

INFO: We are now going to ask a few questions relating to the workshop/interview.

- 1. How satisfied were you with the event/interview overall?
- a) Not at all satisfied
- b) Not very satisfied
- c) Somewhat satisfied
- d) Very satisfied

2. How satisfied were you with each of the following?

Not at all satisfied	Not very satisfied	Somewhat satisfied	Very satisfied	Not applicable
----------------------	--------------------	--------------------	-------------------	-------------------



The tasks						
The moderator(s)						
The venue						
The posters/leaflets provided						
The food that was provided						
INFO: Now we would like there was: The current model (the enday. This is because when it is in high of the enday. The current model (the enday. This is because when it is in high of the enday. The enday is in high of the enday is in high of the enday in the enday is in high of the enday in the enday i	to ask a few que nergy market we e of use tariffs me se energy is cheat demand (eg in the rice: In a similar v cost of the phone machine running, ding: Through the sell excess energe	estions about the use today), Time ean the price of eaper to use when exercing around eaper to use when exercing around eaper to use of technology that you can put	ne of Use, Energy as there is excess end dinner time). ople pay for their me usage), you could be charging). gy such as solar par urchase for your hou	models that yours a Service and ending on where ergy available (exposure phone as pury your energy and electrical electri	ou discussed. And Peer to Peer in that energy is useg overnight) and a fixed monthly on through a service.	s a reminder, Frading. sed throughout the more expensive contract, (which ce contract (such

5. Which - if any - of the energy models do you think would most benefit the wider-community in the future, and why?



6.	Given what you discussed at the workshop/interview and assuming all these models are available, on a scale of
	0-10, what is the likelihood of you using each of the energy models in the future, thinking about the next 10-20
	years. 0 = would activity resist using this model and 10 = extremely likely to be using this model

	0 – would actively resist using this model	1	2	3	4	5	6	7	8	9	10 – extremely likely to be using this model
Current model											
Time of Use											
Energy as a Service											
Peer to Peer Trading											

7.	Thinking about the opinions you had at the workshop/ interview regarding all of the energy models, do you think you've changed your opinion/view at all since the event? If so, what has changed and why? What there anything at the event itself that has made you change your view?
3.	Have you discussed the content of the workshop/interview with friends and/or family at all? If so, what was their reaction? Were they positive or negative about the current energy model and the proposed new energy models?

9. Thinking about all the energy models that were discussed, was there anything missing or that you expected to see, in relation to how your energy supply might change in future? For example, do you think there is another model, other than the ones discussed, which should be considered?



1		there any further feedback you would like to give following the workshop/interview, that has not been covered eady?
INFO:	Final	ly, we would like to ask you a few questions about yourself.
D1		nich of the following best describes your gender? We collect this information in order to help us understand w gender impacts people's experiences.
	a)	Man
	b)	Woman
	c)	Non-binary, genderqueer or genderfluid
	d)	Prefer not to say
	e)	If you prefer to use your own term, please describe it here
D2	Wł	nich of the following age bands do you fall into?
	a)	18-24
	b)	25-34
	c)	35-44
	d)	45-54
	e)	55-64
	f)	65-74
	g)	75 and over
D3 H	ow m	any people currently live in your household (including yourself)?
	a)	1 to 3 people
	b)	4 to 5 people
	c)	6+ people
D4a	Do	es your household contain any children under 16 years old?



a) Yes - 1b) Yes - 2 to 3c) Yes 4+

	d) No	
D4b	Does your household contain anyone that is 65 years old or older?	
	a) Yes – 1 b) Yes – 2 to 3 c) Yes 4+ d) No	
D5	In which type of location do you currently live?	
	 a) City location b) Other urban location c) Semi-rural location d) Rural location 	
D6	Which of the following best describes your ethnicity? Please note, this information will not be passed back to Citizens Advice.)
	a) Asian b) African c) Caribbean d) Black e) Caucasian f) Mixed g) Another ethnicity please record here: h) Prefer not to say	
D7	Which, if any of these, is your religion? Please note, this information will not be passed back to Citizens Adv	ice
	a) Buddhism b) Christianity c) Hindu d) Islam e) Judaism f) Sikh g) Another religion please record here: h) Agnostic i) Atheist j) Prefer not to say	

Do you have a disability or long term physical or mental health condition? Please note, this information will not be passed back to Citizens Advice.

- a) Yes
- b) No



- c) Prefer not to say
- D9 Are you responsible for paying for your energy bills?
 - a) Yes, sole responsibility
 - b) Yes, joint responsibility
 - c) No
- D10 We would like to understand a little more about how your household's financial situation is affected by your energy bills (electricity and/or gas). Which of the following statements best describes your situation?
 - a) I / my household never struggle to pay my/our energy bills
 - b) I / my household sometimes struggle to pay my energy bills but I/we usually manage to keep on top of them
 - c) I / my household struggle to pay my energy bills and I/we am often behind in my payments
 - d) I / my household always struggle to pay my energy bills and I/we am nearly always behind in my payments
 - e) I would rather not say
- D11 Would you be happy for your comments to be used externally, for example on published reports, on the Citizens Advice website, etc.?
 - a) Yes, and happy for my name to be attached to the comment
 - b) Yes, but would like to remain anonymous
 - c) No

INFO: Thank you for completing the survey and participating in this research. For us to pay you the incentive, please can you provide the following:

- Email address:
- Telephone number:

INFO: The team will contact you personally to arrange payment to be sent either electronically or via cheque to your home address.



16. APPENDIX 6: POLL RESULTS

Full results for the three polls conducted at the workshops are shown in the table below:

			Before d	eep dive		After deep dive			
		Glasgow	Milton Keynes	Cardiff	Overall	Glasgow	Milton Keynes	Cardiff	Overall
Current model	Scores of 8- 10	4%	14%	9%	9%	-	-	-	-
	Scores of 0-2	13%	7%	17%	12%	-	-	-	-
Time-of- use tariffs	Scores of 8- 10	4%	4%	0%	3%	6%	0%	12%	6%
	Scores of 0-2	62%	67%	60%	63%	29%	54%	18%	32%
Peer-to- peer	Scores of 8- 10	26%	46%	5%	29%	61%	25%	40%	43%
trading	Scores of 0-2	16%	7%	42%	20%	6%	6%	13%	8%
Energy-as- a-Service	Scores of 8- 10	11%	11%	38%	18%	5%	0%	23%	7%
	Scores of 0-2	63%	46%	15%	45%	21%	47%	15%	29%



17. APPENDIX 7: DIARY

l	Current energy market
Future Energy Models	
Participant Diary	Overview of the new models
Time of Use energy model	Energy as a Service
Peer to Peer Trading energy model	General notes
Peer to Peer Trading energy model	General notes
Peer to Peer Trading energy model	General notes
Peer to Peer Trading energy model	General notes
Peer to Peer Trading energy model	General notes
Peer to Peer Trading energy model	General notes
Peer to Peer Trading energy model	General notes



Summary of the diaries that consumers completed

Consumers across GB agree that the current energy market is imperfect. Consumers from Scotland say that the system requires minimal effort but is also very outdated, especially when it comes to its reliance on fossil fuels. Welsh consumers, on the other hand, highlight the poor customer service they have received, with a focus on suppliers being greedy with money, which has created distrust within the market. Consumers from Cardiff also state that the system is overcomplicated. All consumers believe that this system is putting consumers in vulnerable circumstances at a disadvantage. For example, a Scottish consumer states: "Best rates available to internet savvy consumers, elderly miss out and pay more." Thus, the responses in the diaries suggest that there is room for improvement within the energy market beyond our existing energy model.

There is a consensus in attitudes towards the time-of-use energy model. Consumers state that the model feels too restrictive: "It's like you're being penalised for not being flexible" (Scottish consumer). Many consumers feel that this model is unfair, being more beneficial for people at home during the day, such as retired people and parents of young children, while being biased against those at work during the day when it might be cheapest to use energy. With this in mind, many consumers do not feel that this model would benefit them. However, there are some contradictory beliefs about its effect on certain groups, for example night shift workers, possibly showing an incomplete understanding of the model. GB consumers also believe that the time-of-use model would be too effortful for consumers, requiring them to plan when they would need to use energy. A Welsh consumer also raises the question of whether this model would just result in a shift in when peak times are, and therefore would have no real benefit. Overall, consumers from all 3 locations view the time-of-use model in a predominantly negative light.

However, the peer-to-peer trading energy model is viewed very differently. Although there is a general agreement that this model would be beneficial for the community and would also allow more control for consumers, there is disagreement between consumers in the different locations beyond these aspects. Consumers from Glasgow and Milton Keynes see this model as the best option. Despite acknowledging that it would be difficult to set up and would take time for people to adapt to, consumers from these groups praise the increased investment in renewable energy, and love the emphasis on helping others within this model. "The idea of being able to donate energy to something like an energy bank for the vulnerable and less fortunate would be an interesting feature" (Scottish consumer). On the other hand, consumers from Wales are much more negative regarding this model, with many not seeing it as a practical option, believing it to be too problematic. One Welsh consumer says: "I like the idea of peer-to-peer supporting hospitals and schools, but worry then that I would run out and I would have no energy." Some people in the Cardiff groups are apprehensive at the idea of buying energy from other consumers, with one person writing that it "sounds dodgy!". Thus, despite some level of agreement on the benefits of peer-to-peer across all GB consumers, this model is favoured much more by the groups in Glasgow and Milton Keynes, as opposed the Cardiff groups.

Welsh consumers show more of a preference for the Energy-as-a-Service model, appreciating its clarity and the prevention of unexpected bills. "Energy as a service is less complicated and easy for everyone to understand" (Welsh consumer). Consumers from all 3 locations appreciate the model's resemblance to mobile phone contracts, making it easier to grasp. However, many people are concerned about the length of the contracts, with one consumer highlighting that this would be especially problematic for consumers living in rented accommodation with short tenancy contracts. Consumers from Glasgow in particular feel that this model is too restrictive, and some feel that it is not different enough from the current energy market model: "I thought it was already a service!" Therefore, although some benefits of the Energy-as-a-Service model are seen by all, there are also some concerns, especially among the Glasgow groups, while a stronger preference is shown among the Cardiff sample.

In summary, GB consumers view the current energy market model and the time-of-use model largely unfavourably. The peer-to-peer trading model is preferred by consumers from Scotland and England, while consumers from Wales show a slight preference for the Energy-as-a-Service model.



18. APPENDIX 9: RECRUITMENT SCREENER

Citizens Advice Workshop Recruitment Screener

	RESPONDENT CONTACT DETAILS						
1.1 RESPONDENT NAME	Scotland –						
FULL ADDRESS	Mercure Glasgow City Hotel						
(including postcode)	201 Ingram Street						
	Glasgow						
	GQ 1DQ						
	England –						
	Double Tree by Hilton Hotel Milton Keynes						
	Stadium Way						
	Bletchley						
	Milton Keynes						
	MK1 1ST						
	Wales –						
	Glamorgan County Cricket Club						
	Sophia Gardens						
	Cardiff						
	CF11 9XR						
TELEPHONE - mobile							
EMAIL ADDRESS							

INTRODUCTION



Good morning/afternoon/evening. My name is ... from ... on behalf of Impact, an independent market research company. We are looking for people to take part in workshops to help Citizens Advice understand your opinions on the current energy supplier model and how it could possible change in the future.

We would like to invite you to participate in a 4-hour workshop. These will take place on certain dates and at these addresses as follows:

Group	Date/time	Planning to drive?	Dietary and other requirements
1 Scotland – Glasgow	5.30pm-9.30pm		
2 England – Milton Keynes	10.00am-2pm		
3 Wales – Cardiff	5.30pm-9.30pm		

RECRUITER INCENTIVE INFO: £90 per person paid at the end of each meeting in cash. Drinks and biscuits will be provided while respondents register/wait for the meeting to commence. Lunch/an evening buffet will be provided during the workshop, depending on the time of the workshop.

READ OUT:

There will also be a pre-task, which you will be informed about at the end of the call, which provides a further financial incentive.

Please arrive at least 15 minutes before the start time for registration/to receive further instructions.

If you require reading glasses to view literature (eg leaflets) or watch the television please bring them to the meeting.

QUOTA REQUIREMENTS IN RED TEXT

EXCLUSIONS SECTION

ASK ALL

E1 Can you tell me if you, or any of your close friends or family members work in any of these professions?

Please code one option from the list below.

1	Marketing	YES	NO
2	Market Research	YES	NO
3	Journalism	YES	NO
4	Electricity or Gas supply/distribution	YES	NO
5	None of the above	YES	NO
EXCL	UDE ANY RESPONDENT WHO SAYS YES TO ANY 1 – 4		



E2 Have you taken part in a market research group or depth-interview in the past?

Please select one option from the list below

1	Yes, within the last 6 months	1 CLOSE
2	Yes over 6 months ago	2 ASK E3
3	No, I have never taken part in research	3 GO TO E4

ASK IF E2 = 2

E3 Can you tell me how many discussions you have taken part in during the last 3 years?

Please select one option from the list below

1	1 – 3	1
2	4 or more	2 CLOSE

ASK IF E2 = 2 AND E3 = 1

E4 Have you participated in any energy related (eg for a gas or electricity company) market research group or indepth interview in the last year?

Please select one option from the list below

1	Yes	1 CLOSE
2	No	2

ASK ALL

E5 Which of the following sources of energy do you use at you home?

1	Mains electricity	
2	Mains gas supply	
3	Other fuel supply eg Oil or gas canisters	



CLOSE IF DOES NOT HAVE MAINS GAS OR ELECTRICITY SUPPLY

ASK ALL

E6 Are you responsible for paying for your energy bills?

1	Yes – sole responsibility	QUOTA: ALL
2	Yes – joint responsibility	
3	No	CLOSE
4	Don't know	CLOSE

DEMOGRAPHIC INFORMATION

We would like to ask a small number of questions to find out a little more about you.

D1 CODE GENDER: DO NOT READ OUT

Please select one option from the list below

	1	Male	QUOTA: MINIMUM 10
Ī	2	Female	QUOTA: MINIMUM 10

ASK ALL

D2 Which of the following age bands do you fall into?

CODE RESPONDENT AGE: READ OUT AGE BANDS

1	18-24	QUOTA: MINIMUM 7
2	25-34	
3	35-44	QUOTA: MINIMUM 7
4	45-54	
5	55-64	QUOTA: MINIMUM 7
6	65+	

ASK ALL



D3 How many people are there in your household all together (that are currently living at home with you)? Please include yourself in the total.

1	1 to 3 people	QUOTA: MINIMUM 5
2	4 to 5 people	QUOTA: MINIMUM 5
3	6+ people	QUOTA: MINIMUM 5

ASK ALL

D3a Does your household contain any children under the age of 5 years old?

1	Yes
2	No

ASK ALL

D4 Which of the following categories best describes the employment status of the highest income earner in your household?

1	Semi or unskilled manual worker (eg caretaker, non-HGV driver, shop assistant, etc.)	QUOTA C2DE: MINIMUM 10
2	Skilled manual worker (eg bricklayer, carpenter, plumber, painter, bus driver, HGV driver, pub/bar worker, etc.)	
3	Supervisory or clerical/ junior managerial/ professional/ administrative (eg office worker, salesperson, etc.)	
4	Intermediate managerial/ professional/ administrative (eg newly qualified (under 3 years) doctor or solicitor, middle manager in large organisation, principle officer in civil service/local government, etc.)	QUOTA ABC1: MINIMUM 10
5	Higher managerial/ professional/ administrative (eg doctor, solicitor, board director in a large organisation, top level civil servant/public service employee, etc.)	
6	Student	
7	Casual worker – not in permanent employment	
8	Housewife/husband or homemaker	
9	Retired	QUOTA C2DE: MINIMUM 10
10	Unemployed or not working due to long-term sickness	
11	Full-time carer of other household member	



12	Would rather not say	

D5 Please describe your current living situation.

1	Own house	
		QUOTA: MINIMUM 7
2	Own flat/apartment	
3	Private rented house	
	1 Tivate refited flouse	QUOTA: MINIMUM 7
4	Private rented flat/apartment	
5	Social rented house	
3	Social refiled flouse	QUOTA: MINIMUM 7
6	Social rented flat/apartment	
7	Live with partner/family (don't pay rent or own) in a house	
'	Live with partition and it pay font of own) in a floade	
8	Live with partner/family (don't pay rent or own) in a house	
9	Other	
	- Out 101	

ASK ALL

D6 In which type of location do you currently live?

1	City location	QUOTA: MINIMUM 7
2	Other urban location	
3	Semi-rural location	QUOTA: MINIMUM 7
4	Rural location	QUOTA: MINIMUM 7

ASK ALL

D7 Which of the following best describes your ethnicity? Please note, this information will not be passed back to Citizens Advice. We intend to use this information to ensure we are speaking to a range of different consumers in your area.

1	Asian
2	African
3	Caribbean



4	Black
5	Caucasian
6	Mixed
7	Another ethnicity (please record)
8	Prefer not to say

D8 Which, if any of these, is your religion? Please note, this information will not be passed back to CA. We intend to use this information to ensure we are speaking to a range of different customers in your area.

1	Buddhism
2	Christianity
3	Hindu
4	Islam
5	Judaism
6	Sikh
8	Another religion (please record)
9	Agnostic
10	Atheist
11	Prefer not to say

ASK ALL

Do you have a disability? This can be physical or mental, and may impact your communication and/or mobility. Please note, this information will not be passed back to Citizens Advice. We intend to use this information to ensure we are speaking to a range of different customers in your area.

1	١	Yes



2	No	
3	Prefer not to say	

D10 We would like to understand a little more about how your household's financial situation is affected by your energy bills (electricity and/or gas).

Which of the following statements best describes your situation?

1	I/ my household never struggle to pay my/our energy bills
2	I/ my household sometimes struggle to pay my energy bills but I/we usually manage to keep on top of them
3	I/ my household struggle to pay my energy bills and I/we am often behind in my payments
4	I/ my household always struggle to pay my energy bills and I/we am nearly always behind in my payments
5	I would rather not say

PROFILING QUESTIONS

ASK ALL

P1 On a scale of 1-5 how would you rate your digital skills?

A small device is an electronic device that is able to connect, share and interact with its user and other smart devices. Examples include a smart watch and a smart lightbulb.

1	I do not use the internet or any smart devices	
2	I use the internet but do not own any smart devices and do not plan to soon	OUOTA, ENGLIDE A COOR
3	I do not own any smart device but plan to buy some soon	QUOTA: ENSURE A GOOD SRPEAD
4	I own a few smart devices	
5	My house is fully connected with smart devices	

ASK ALL

P2A Have you ever switched your energy supplier?

4	Vaa		
	Yes		



2	No

ASK IF P2A=1

P2B When did you last switch energy supplier?

1	Within the last year
2	Within the last two year
3	Within the last three years
4	Not within the last 3 years

QUOTAS:

ENGAGED CUSTOMERS IF P2A = 1 AND P2B = 1, 2 OR 3 - MINUMUM 10

UNENGAGED CUSTOMER IF P2A = 2 OR P2B = 4 - MINUMUM 10

ASK ALL

P3 Which of the following do you own?

Please select all that you own

1	Electric Vehicle	
2	Smart Meter	
3	Smart TV	
4	Smart water	
5	Smart speakers	QUOTA: ENSURE A GOOD
6	Coffee machine	SPREAD ACROSS ALL
7	Games console	
8	Streaming device (eg Now TV stick, Amazon Fire TV stick)	
9	Laptop/desktop computer	
10	Smart Phone	



RECRUITER CHECK:

- Ensure respondent meets the full recruitment profile
- Check that you have provided the respondent with an invitation, map/directions (if appropriate), and that you have a contact number for reminder calls to be made
- Please ask respondents if they wear glasses if so, they must bring them to the group
- Please tell the respondents that they will be asked to turn off their mobiles prior to the discussion
- Please advise all respondents that the interviews may be audio and/or video-taped
- Respondents should not know other members of the group please do not snowball or recruit in friendship pairs

PLEASE ENSURE THE RESPONDENT UNDERSTANDS THE FOLLOWING LITERATURE

The group discussion or interview you take part in can be: (RECRUITER TO TICK APPROPRIATE BOXES)

a.	Audio recorded		
b.	Video recorded		
C.	Observed by people in the room/from another room/locatio	n	

Video sounds bites

Workshop discussions might be audio and video recorded. The Data Protection Act requires that we collect and use the information you provide to us in a manner that respects and protects your confidentiality. Your personal details (name, address, phone number) will not be disclosed to anyone else without your permission other than the company carrying out the research.

We would like to ask your permission to use soundbites and/or video footage from the groups in presentation materials about the project. This may range from anonymized sounds bites of what people at the groups were saying to actual clips from the video recording.

These have been used by Citizens Advice for similar projects and have been found to be an engaging means of demonstrating feedback from customers. They will be used purely at industry events to highlight key findings and will not be used for sales or promotional purposes.

You will not be identified by name. However, it will **not be possible** to protect the anonymity of those who can be seen or heard in the video footage eg by blurring out people's faces.

The tapes will **not be used** for commercial purposes, such as promotion or direct sales activities.

The tapes will be dated and deleted at the latest two years after the research is completed.

Are you happy for us to use [ALL RECRUITED CUSTOMERS MUST ANSWER YES]

Audio clips of your comments	Yes	No
Video clips of your comments	Yes	No

