



Stakeholder and consumer views on energy transition in Northern Ireland

**Report prepared for the Utility
Regulator**

Karen Paden, Chris Jenkins, Vanessa Martinez

Ipsos Northern Ireland

March 2022



Contents

Contents	3
Executive Summary	5
1.1 Introduction and context.....	5
1.2 Methodology	5
1.3 Key findings	5
2 Introduction	7
Research Objectives.....	7
3 Contextual Background	9
Energy Transition and Northern Ireland.....	9
Wider Strategic Context	11
Conclusions	16
4 Research methodology	17
Phase one: stakeholder engagement.....	17
Phase two: engagement with energy consumers in Northern Ireland	17
Approach to consumer group discussions	18
Development of research materials.....	18
Analytical Approach	19
5 Views on energy transition	20
5.1 Awareness of energy efficiency and energy transition measures	20
5.2 Views on low carbon and renewable technologies	21
5.3 Interest in energy efficiency and energy transition.....	23
6 Motivators for energy transition	25
6.1 Financial Incentives, Support and Grants.....	25
6.2 Views on a One Stop Shop.....	26
6.3 The importance of timing and windows of opportunity	27
6.4 The perceived need for visible leadership	28
7 Barriers to energy transition	31
7.1 Lack of knowledge and awareness of what is available	31
7.2 Lack of trust in technology, suppliers, and regulation	32
7.3 Upfront costs and delayed future savings.....	33
7.4 Concerns around disruption and upheaval	34
7.5 Specific barriers faced by different groups	34
8 The Role of Behavioural Science in Energy Transition	39
8.1 The Behaviour Change Wheel	39
8.2 COM-B model.....	39
9 Conclusions and recommendations	42
9.1 Shift the debate and increase public awareness.....	42

9.2	The need for financing options.....	43
9.3	A focus on accessibility, equity and just transition	43
9.4	Maximise changes around windows of opportunity	43
9.5	Support must be holistic.....	43
9.6	A model for encouraging and enabling energy transition	44
10	Appendix	45
	Appendix 1. Discussion Guide.....	45
	Appendix 2. Stimulus Presentation Slides.....	53
	Our standards and accreditations	58

Executive Summary

1.1 Introduction and context

- Ipsos Northern Ireland was commissioned by the Utility Regulator in December 2021 to conduct a programme of desk and qualitative research in order to understand consumer views on energy transition.
- The purpose of the research was to develop an enhanced understanding of any barriers consumers face on the issue of energy transition and decarbonisation, and the forms of support required to enable consumers to overcome these barriers.
- Additionally, the research programme sought to understand the circumstances in which different groups of consumers face barriers which they have not been able to overcome, and how the Utility Regulator can ensure these consumers are protected as the Energy Strategy develops.

1.2 Methodology

- A total of 12 interviews with key stakeholders and experts in the field of energy in Northern Ireland were conducted, along with 10 online focus groups with consumers from across the region. A total of 73 consumers participated in the research.
- Online focus groups were recruited to reflect a broad range of different ages, areas, and socioeconomic backgrounds within Northern Ireland.
- A deliberative approach was taken to the online focus groups in which consumers were provided with information about different low carbon and renewable technologies, as well as presented with extracts of the Energy Strategy, to ensure discussions were focused and informed.

1.3 Key findings

- Energy consumers involved in the research consistently describe interest in energy efficiency, often framing this in terms of making savings to energy bills.
- Low carbon or renewable energy technologies have been installed in the homes of some consumers, while some have purchased items such as electric cars, but for most this remains unrealistic and too costly.
- Upfront costs of installing new technology are consistently described by consumers as the most significant barrier for changing how they use energy in their homes and more broadly in their lives.
- While many consumers are interested in using energy differently, cost is a significant barrier and is a fundamental reason why many have not adopted various energy saving technologies in their lives. As a result, financial incentives are considered to be essential as a way of making energy changes a realistic option that they may consider.
- Consumers lack not only financial support, but also information on different options available to transition how they use energy, most particularly in relation to what specific options are available and appropriate for their own individual circumstances.

- Trust in new technologies is also a key challenge that must be overcome, with many lacking confidence in regulatory or quality checking mechanisms, and in suppliers and installers, which contributes to discouraging consumers to make energy changes.
- A One Stop Shop is universally considered a useful concept that should be developed; however, it is essential that this is delivered by an impartial and independent organisation, and that information is accessible and easy to understand.
- The current cost-of-living crisis and energy prices crisis have created significant challenges for many consumers. Those from lower socio-economic backgrounds describe their current energy circumstances as “getting-by” and highlight significant stresses in meeting current needs. This highlights that it is likely to be unrealistic to expect consumers to make changes without a financial package of support.
- Specific groups, in particular those from lower socio-economic backgrounds, the elderly, renters, and consumers living in rural areas all experience additional barriers that make it difficult and, in many cases, impossible to engage in energy transition. These include digital exclusion, lack of control to make changes to homes, and lack of infrastructure to support energy transition in rural areas.
- Behavioural science models, such as the COM-B model (Chapter 8), may provide a helpful framework to ensure interventions that encourage energy transition are integrated, connected, and targeted.
- Perhaps most significantly, consumers find it difficult to envision what a low carbon future may look like and how it will be relevant for them. A lack of leadership or communication of a vision may have contributed to this, alongside consumer’s views that Government has not done enough to demonstrate the importance of this area.

2 Introduction

Climate change is one of the major threats and challenges facing societies across the world. It has been described as “the biggest threat to security that modern humans have ever faced”¹. The International Panel on Climate Change’s (IPCC) 2021 Report additionally highlighted that “global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in carbon dioxide (CO₂) and other greenhouse gas emissions occur in the coming decades”². In Rt. Hon Alok Sharma’s opening remarks at COP26 in Glasgow, he said that the “lights are flashing red on the climate dashboard”³.

Locally, the challenges posed by climate change have also been well established and evidenced. If Northern Ireland does not take significant action to reduce carbon emissions, it has been estimated that there will be hotter, drier summers and warmer, wetter winters. Extreme weather events will increase in frequency and sea levels will rise. The high emission scenario for Northern Ireland shows that by 2070 winters could be up to 3.9 °C warmer and summers could be up to 4.9°C hotter; 2070 winters could be 25% wetter and summers 38% drier; and 2,100 sea levels in Belfast could rise by up to 94cms⁴.

Energy transition and energy efficiency are both a major strategic focus to mitigate and respond to climate change. Energy transition is defined as “a pathway toward transformation of the global energy sector from fossil-based to zero-carbon” by the International Renewable Energy Agency⁵, and involves shifting energy production and consumption from non-renewable to renewable forms such as wind and solar. While there are several sustainable energy initiatives in action across the United Kingdom and globally, Northern Ireland has recently released an ambitious new strategy for becoming a world leader in renewable, decarbonised energy. Alongside this strategy, the Northern Ireland Assembly recently passed its first Climate legislation and a Small-Scale Green Energy Bill, highlighting the traction and importance being placed on this issue.

Energy transition and energy efficiency are highly relevant for Northern Ireland consumers. Energy transition impacts heating, transport, buildings, and behaviours, and will impact on consumers lives in terms of creating both opportunities and challenges. Ensuring that consumers are informed, engaged, supported, and protected as this transition takes place is essential, particularly given the challenges many consumers are already facing related to energy costs and costs-of-living.

Ipsos Northern Ireland was commissioned in December 2021 by the Utility Regulator to conduct a programme of desk and qualitative research to understand consumer views on energy transition in Northern Ireland.

Research Objectives

Given this context, and the need for further information to inform strategies to encourage energy transition in Northern Ireland, the purpose of the research was to:

¹ Climate Change ‘Biggest Threat Modern Humans Have Ever Faced’, World-Renowned Naturalist Tells Security Council, Calls for Greater Global Cooperation. United Nations Security Council. 2011. [Climate Change ‘Biggest Threat Modern Humans Have Ever Faced’, World-Renowned Naturalist Tells Security Council, Calls for Greater Global Cooperation | Meetings Coverage and Press Releases](#)

² Sixth Assessment Report. IPCC. 2021. [Sixth Assessment Report \(ipcc.ch\)](#)

³ COP26 President Alok Sharma’s opening speech at COP26. Cabinet Office, UK Government. 2021. [COP26 President Alok Sharma’s opening speech at COP26 - GOV.UK \(www.gov.uk\)](#)

⁴ UK Climate Change Projections. Department of Agriculture, Environment and Rural Affairs. Accessed January 2022. [UK Climate Change Projections | Department of Agriculture, Environment and Rural Affairs \(daera-ni.gov.uk\)](#)

⁵ Energy Transition. International Renewable Energy Agency. Accessed January 2022. [Energy Transition \(irena.org\)](#)

- develop an enhanced understanding of any barriers consumers face on the issue of energy transition;
- understand the forms of support required to enable consumers to overcome these barriers;
- to understand the circumstances in which different groups of consumers face barriers which they have not been able to overcome; and,
- to identify recommendations for how the Utility Regulator can ensure consumers are protected as the Energy Strategy develops.

This report provides an overview of the research conducted by Ipsos, highlighting key themes related to each of these research objectives.

3 Contextual Background

This chapter provides a contextual background for this research. It maps the current policy and legislative landscape in Northern Ireland regarding energy transition, as well as highlighting progress that has been made towards achieving carbon reduction targets. The chapter describes important policies and documents, such as the Department for Economy's Energy Strategy, as well as analysing research that has already been conducted regarding consumers and energy transition in Northern Ireland. The chapter also situates this contextual analysis within a wider overview of strategies and targets established by the UK Government.

Energy Transition and Northern Ireland

Across the world, countries and relevant stakeholders are pursuing the path of renewable, green energy. Initiatives are being established at unprecedented rates to slow climate change and provide innovative ideas to support non-carbon and reduced carbon-based energy. In Northern Ireland, an estimated 60% of carbon emissions come from energy consumption. As part of Northern Ireland's commitment to transition to reduced carbon-based energy and towards more renewable energy, the Department for the Economy has proposed a crucial energy strategy and a set of legislative bills to combat climate change.

In December 2021, the Department for the Economy published its Energy Strategy - Path to Net Zero Energy⁶. The Strategy is a part of the larger Green Growth Strategy and establishes and maps a long-term vision for net zero carbon emissions and affordable energy for Northern Ireland, in line with the UK's Climate Change Committee (CCC) and the Sixth Carbon Budget⁷. The Energy Strategy targets a 56% reduction in energy-related carbon emissions relative to 1990 levels by 2030. Between 1990 to 2020 emissions were reduced by only 25% in Northern Ireland, therefore significant action is required to reach the 56% reduction mark by 2030. In order to achieve this goal, the Strategy identifies three key targets, underpinned by five core principles necessary to achieve net zero carbon and affordable energy by 2050.

Table 3.1: Target and principles of the Energy Strategy

Targets	Principles
1. Energy Efficiency: Deliver energy savings of 25% from buildings and industry by 2030	1. Placing you at the heart of our energy future (Person-focused)
2. Renewables: Meet at least 70% ⁸ of electricity consumption from a diverse mix of renewable sources by 2030	2. Grow the green economy (through jobs, innovation, upskilling and investment)
3. Green Economy: Double the size of our low carbon and renewable energy economy to a turnover of more than £2 billion by 2030	3. Do more with less (energy efficiency)
	4. Replace fossil fuels with renewable energy (decarbonisation and supporting sustainable renewables)
	5. Create a flexible, resilient and integrated energy system (digitisation, integration, and enhanced security)

⁶ Energy Strategy - Path to Net Zero Energy. Department for the Economy. 2021. [Energy Strategy - Path to Net Zero Energy | Department for the Economy \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/energy-strategy)

⁷ [Sixth Carbon Budget - Climate Change Committee \(theccc.org.uk\)](https://www.theccc.org.uk/2021/06/06/sixth-carbon-budget/)

⁸ This target has since been increased to 80% within the Climate Bill that passed through the NI Assembly in March 2022.

The first principle of placing individuals and consumers at the heart of the energy strategy involves the commitment to “make energy as simple as possible for everyone in society and develop policies that enable and protect consumers through the energy transition”. The principles of affordability and fairness are highlighted as key considerations to underpin all policy decisions. The Strategy identifies key objectives including that individuals:

- Are informed, empowered, supported and protected to enable them to transition to decarbonised solutions for all their energy needs; and,
- Have access to essential and affordable energy to enable a decent standard of living, health and competitiveness.

The second principle of growing the green economy concentrates on increasing the skill base for a low carbon economy that is centred on innovation, support, and focuses on Northern Ireland’s competitive strengths, while also creating new jobs in this area which further support the Strategy.

The third principle of doing more with less sets to improve energy efficiency through setting standards, regulations and outlining clear targets, while also supporting investments to improve buildings and assisting consumers to reduce their energy usage.

The fourth principle of replacing fossil fuels with renewable energy focuses on the decarbonisation of transport, power, and heat. This is to be achieved through a phasing out of fossil fuels through increasing the use of renewable energies, which can be further supported by sustainable renewable imports.

Finally, the fifth principle of creating a flexible, resilient, and integrated energy system centres on creating a digitised, smart and flexible energy system which is integrated across transport, power and heat, while also enhancing security of supply and creating value for consumers.

It is through these three targets and five principles that the Path to Net Zero Energy Strategy creates a framework from which to transition energy usage in Northern Ireland. The Energy Strategy identifies a roadmap of actions required to achieve the target of a 56% reduction of carbon-related emissions by 2030 across a range of sectors.

Currently, approximately 45% of Northern Ireland’s electricity comes from renewable resource, with the remaining 55% coming from fossil fuels.⁹ However, electricity makes up a fraction (14%) of energy used in Northern Ireland. Heating and transportation are the largest energy consumption areas, making them a crucial target for the Strategy. Energy for heating and transportation rely almost exclusively on fossil fuels which are imported to Northern Ireland, which came at a cost of £2.8 billion in 2020.¹⁰ Addressing changes in energy consumption for heating and transportation is critical for the transition to sustainable, renewable energy in Northern Ireland.

While the Energy Strategy is an important step in the transition to renewable energy in Northern Ireland, there are also motions to put more sustainable energy practices into law. Although the UK’s Climate Change Act 2008 includes Northern Ireland, until recently there has not been any specific targets set for

⁹ Energy Strategy - Path to Net Zero Energy. Department for the Economy. 2021. [Energy Strategy - Path to Net Zero Energy | Department for the Economy \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/energy-strategy-path-to-net-zero-energy)

¹⁰ Ibid.

reducing greenhouse gas emissions in Northern Ireland.¹¹ However, in March 2022, Northern Ireland's first Climate Bill passed through the Assembly. This Bill provides a legal underpinning for Northern Ireland to take action in achieving net zero emissions by 2050 in line with the Climate Change Act. With both The Path to Net Zero Energy Strategy and the Climate Bill, Northern Ireland has started its transition towards a more sustainable, carbon neutral future.

Wider Strategic Context

The cost of energy is increasing but renewable energy aims to be not only the greener option, but also the most economical for consumers. Ofgem reports that global gas prices have increased by 54%, with wholesale prices quadrupling over the last year.¹² In response the United Kingdom has announced that it is going to expedite the deployment of low-cost renewable energy.¹³ Lower pricing for renewable energy will increase the likelihood for consumers to uptake these newer energy solutions, therefor enhancing the feasibility of net zero emissions. Additionally, UK Business and Energy Secretary Kwasi Kwarteng outlined how the acceleration of domestic renewable energy will “boost energy security, attract private investment and create jobs in our industrial heartlands.”¹⁴

Six principles to support green choices are identified within the Strategy that include the need to:

- minimise the ‘ask’ by sending clear regulatory signals;
- make the green choice the easiest;
- make the green choice affordable;
- empower people and businesses to make their own choice;
- motivate & build public acceptability for major changes; and,
- and present a clear vision of how we will get to net zero and what the role of people and business will be.

The UK's CCC equally highlights the need to support changes to improve energy efficiency and reduce demand for energy across the economy. Extensive electrification, particularly of transport and heating, supported by a major expansion of renewable and other low-carbon power generation are highlighted as a major requirement, as are working with consumers to support them to make choices that lead to a lower demand for carbon-intensive activities¹⁵.

There is strong cross-sector support in Northern Ireland for the Strategy and its goal to a shift to non-carbon energy solutions. Many organisations have provided statements of support towards the Strategy and the importance of achieving net zero carbon emissions from energy, including the Consumer Council, Northern Ireland Business, as well as groups such as National Energy Action¹⁶.

¹¹ Climate Change Act 2008 <https://www.legislation.gov.uk/ukpga/2008/27/contents>

¹² Ofgem press release <https://www.ofgem.gov.uk/publications/price-cap-increase-ps693-april>

¹³ Government hits accelerator on low-cost renewable power <https://www.gov.uk/government/news/government-hits-accelerator-on-low-cost-renewable-power>

¹⁴ Ibid.

¹⁵ Reaching Net Zero in the UK. The Climate Change Committee. UK Government. Accessed January 2022. [Reaching Net Zero in the UK - Climate Change Committee \(theccc.org.uk\)](https://www.theccc.org.uk/reaching-net-zero-in-the-uk/)

¹⁶ [The Path to Net Zero Energy – creating jobs and more affordable energy | Northern Ireland Executive](#)

Consumers and Energy Transition

It has been widely recognised that behavioural change must be a significant element of reaching net zero. Behaviours that reduce wasteful or excessive energy consumption such as using public or active transport, turning down central heating systems, reducing foreign holidays, and making more ecological purchasing choices have all been highlighted as some examples of consumer behaviours necessary to achieve net zero¹⁷. To achieve net zero, it has been estimated that behaviour changes will have to reduce energy by 10-15% over the period up to 2050¹⁸. As the Northern Ireland Assembly seeks to establish new legislation and strategies towards renewable energy, it will require the participation and buy-in of consumers across Northern Ireland. The Green Party's Clare Bailey outlined that people in Northern Ireland are becoming more concerned with climate change and are ready to take action, stating in a recent interview that "we will have a net zero Climate Change Act for Northern Ireland, in whatever form it takes, because people want it, and the climate emergency demands it."¹⁹

Levels of awareness and interest in energy transition

It has been evidenced that consumers in Northern Ireland are concerned about climate change and that many people actively try to reduce their energy consumption and use of non-renewable energies. In a survey commissioned by the Utility Regulator, 64% of consumers in Northern Ireland reported being concerned about climate change.²⁰ People in Northern Ireland report feelings of personal responsibility to act on climate change with the majority of respondents (70%) believing that it was important that they took personal action to help combat climate change compared to a global average of 64%.^{21, 22} A total of 59% said that to reduce carbon emissions or limit climate change they minimised the amount of energy they use at home. The study also found that those who did feel it was important to take action were more than three times more likely (47% vs. 14%) to consciously engage in reducing their impact on climate change.

Overall, there appears to be an increased awareness around climate change and a growing interest by energy consumers to combat the effects on both a small and large scale. In a recent interview Environment Minister Mr Edwin Poots stated that "in recent months, there's been a lot of public, media, political and stakeholder interest in what we do about climate change in Northern Ireland, up to 2050 and beyond – it tells me that we all have the same ultimate goal - to protect our planet."²³

While consumers appear to be on the cusp of creating change, with some already making considerable behavioural shifts to reduce energy consumption, there have been a range of barriers identified.

Identified barriers to energy transition

Focus groups that helped to inform the development of the Strategy suggested that people are aware of climate change, but require information, as well as practical and tangible support (e.g. financial programmes). Many people felt disempowered concerning climate change and expect and need leadership from Government to provide options and information on what changes are required Findings

¹⁷ Behaviour Change: strategies and case studies for reaching net-zero by 2050. Energy Post. November 2021. [Behaviour Change: strategies and case studies for reaching net-zero by 2050 - Energy Post](#)

¹⁸ Net Zero by 2050 A Roadmap for the Global Energy Sector. International Energy Agency. 2021. [Net Zero by 2050 - A Roadmap for the Global Energy Sector \(windows.net\)](#)

¹⁹ Climate Bill Northern Ireland a step closer to law after 25 hours of debate <https://www.msn.com/en-gb/news/uknews/climate-bill-northern-ireland-a-step-closer-to-law-after-25-hours-of-debate/ar-AATBU37?ocid=uxbndlbing>

²⁰ Consumer research on climate change and energy transition. Utility Regulator. June 2021. [Consumer research on climate change and energy transition | Utility Regulator \(uregni.gov.uk\)](#)

²¹ Ibid.

²² Global sustainability survey <https://www.weforum.org/agenda/2021/11/barriers-to-recycling-sustainability-survey/>

²³ Climate Change Bill keeps moving <https://www.northernireland.gov.uk/news/climate-change-bill-keeps-moving>

from focus groups to support the development of a new Energy Strategy for Northern Ireland found that “people will want to play a part, but are looking for leadership, information, direction, and financial help to make changes.”²⁴ This rhetoric was mirrored in findings by the Utility Regulator’s Energy Consumer Research which identified that 82% of consumers supported having a single advice body to provide information, advice and support to reduce carbon emissions to consumers in Northern Ireland.²⁵ Research provided by Citizens Advice identified that consumer trust and engagement was a barrier in the future energy market and required action by business, government, regulators and third-party sectors.²⁶

Additionally, a key finding from the Utility Regulator’s Energy Strategy Consumer Research report found that a quarter of participants felt that the language around climate change was difficult to understand. Those who did find it challenging to understand climate jargon were more likely to be older, have lower levels of education and be of lower socio-economic groups. As a result, the report found that these individuals were less likely to be concerned with climate change, less likely to adjust their behaviours in line with reducing carbon emissions, and less likely to have the means to make significant changes to behaviours impacting on their carbon footprint.²⁷ This was also identified in a piece of energy policy research whereby vulnerabilities were an important barrier to achieve a fair and inclusive future energy market.²⁸

While the majority of consumers from the Utility Regulator report felt that there was something they could do personally to help combat climate change, nearly a fifth of consumers (18%) did not agree and felt that there was not a lot they could do personally to help reduce climate change. Additionally, more than a quarter (27%) of consumers did not know how to reduce their carbon footprint. A lack of awareness and understanding by consumers about what they can do in their day-to-day life is shown to be a barrier in reducing carbon emissions and has been documented in other climate research as well.²⁹ Thus, providing information to consumers on how to incorporate more energy efficient strategies and inform them about the steps they can personally take may facilitate more robust change overall.

Available Schemes to Support Consumers

One of the main mechanisms of support offered for renewable energy to customers is the Northern Ireland Renewables Obligation (NIRO), led by the Department for Economy, working in tandem with the United Kingdom’s larger Renewables Objective.³⁰ This scheme has boosted renewable energy in Northern Ireland through incentivising electricity generation by both businesses and households since it was established in 2005. The target of this scheme was to have 40% of all Northern Ireland’s electricity generated by renewable sources by 2020 and a recent audit of the NIRO found that it exceeded this expectation, reaching 46.8%.³¹ NIRO is now closed to new applications, with only renewable

²⁴ Energy Strategy consumer virtual insight and awareness. Department for the Economy and The Consumer Council. 2021. [Energy Strategy: consumer insight and awareness report | Consumer Council](#)

²⁵ Consumer research on climate change and energy transition. Utility Regulator. June 2021. [Consumer research on climate change and energy transition | Utility Regulator \(uregni.gov.uk\)](#)

²⁶ Future for All <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/future-for-all-making-a-future-retail-energy-market-work-for-everyone/>

²⁷ Energy Strategy Consumer Research https://www.uregni.gov.uk/files/uregni/media-files/Consumer%20research%20on%20climate%20change%20and%20energy%20transition_0.pdf

²⁸ Future for all: Making a future retail energy market work for everyone <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/future-for-all-making-a-future-retail-energy-market-work-for-everyone/>

²⁹ Barriers to adapting climate change <https://coastadapt.com.au/barriers-to-adapting-climate-change>

³⁰ Renewables Obligation <https://www.ofgem.gov.uk/environmental-and-social-schemes/renewables-obligation-ro>

³¹ Generating electricity from renewable energy https://www.niauditoffice.gov.uk/sites/niao/files/media-files/238502%20Renewable%20Energy%20Report_FinalWEB%20PDF.PDF

installations already part of the NIRO scheme able to still receive support. There is no current support mechanism for new renewable installations.

A similar incentive scheme, the Northern Ireland Renewable Heat Incentive (NIRHI), also paralleled efforts in Great Britain. NIRHI provides domestic and non-domestic consumers with payments for the use of renewable heat technologies including air source heat pump, biomass, solar thermal and ground source heat pump.³² The NIRHI scheme also stopped taking new applications in 2016.

Schemes such as the Affordable Warmth Scheme and the Boiler Replacement Scheme are available to consumers in Northern Ireland. While both schemes focus on energy efficiency, and each provide information on renewable energy, financial support for switching to renewable energy sources is limited.³³ The Affordable Warmth Scheme is also aimed at those consumers in Northern Ireland who are experiencing fuel poverty.³⁴ The Boiler Replacement scheme in Northern Ireland, administered through the Housing Executive, allows consumers to replace their boilers with high efficiency gas boilers, oil boilers or wood pellet fired boilers in order to become more energy efficient and is also offered specifically to those who have an income under a specified threshold (household annual income of £40,000).³⁵

The Northern Ireland Sustainable Energy Programme (NISEP), previously known as the Energy Efficiency Levy, is an £8 million fund collected from electricity customers through a Public Service Obligation (PSO). The programme is used to increase energy efficiency and provide funding for a range of renewable energy schemes, as well as to make sure the best value is given to customers and ensuring vulnerable customers can access these energy transitions. NISEP is being used across a range of 22 energy efficiency schemes to help consumers with things such as boiler upgrades, radiator panels, draught proofing and even LED light bulbs, with 80% of the funding targeting vulnerable consumers. More recently, the NISEP has expanded its schemes and are currently (April 2021 to March 2022) running 29 schemes, of which many continue to prioritise low-income households (Priority Category). There are also schemes running for general domestic properties and commercial properties, as well as funding for innovation schemes (Non-Priority Category).³⁶

The 2019-2020 NISEP Annual Report revealed that although there was uptake of the various schemes that were offered, the total spent on the schemes at the end of the year was less than the funds allocated, likely due to the impact of COVID-19 which led to the cancellation of some installations.³⁷ Additionally, 93% of the funding was allocated to the Priority Category due to a lack of uptake from Non-Priority Category, with two schemes closing due to no uptake. There was an energy savings of 219.350 GWh in the Priority Category equating to a lifetime gross customer benefit of £12,129,849 for those most vulnerable in Northern Ireland. The predominant fuel switch during 2019-20 was from oil to gas heating (76%). A further 149.282 GWh energy savings were seen during this time period for the Non-Priority Category leading to a lifetime gross customer benefit of £18,024,062. It should be noted, that although these results mark a significant change towards the energy transition in Northern Ireland, they were greatly affected by the impacts of COVID-19. A comparison on the statistics can be seen in Table 3.2 below.

³² Renewable Heat Incentive <https://www.nidirect.gov.uk/articles/renewable-heat-incentive-domestic-customers>

³³ Energy Advice. NI Direct. Accessed January 2022. [Energy advice | nidirect](https://www.nidirect.gov.uk/articles/energy-advice)

³⁴ Affordable Warmth Scheme <https://www.nihe.gov.uk/Housing-Help/Affordable-Warmth-Boiler-Replacement/Affordable-Warmth-Scheme>

³⁵ Energy efficient grants <https://www.nihe.gov.uk/Community/NI-Energy-Advice/Energy-Efficiency-Grants>

³⁶ Schemes running from April 2021 to March 2022 <https://www.uregni.gov.uk/files/uregni/media-files/NISEP%20List%20of%20Schemes%202021-2022.pdf>

³⁷ NISEP Annual Report <https://www.uregni.gov.uk/files/uregni/documents/2021-08/nisep-annual-report-2019-20.pdf>

Table 3.2: 2018/19 and 2019/20 Comparison Figures

	2019-20	2018-19
Total lifetime energy savings (GWh)	368.632	482.814
Total lifetime carbon saved (tC)	46,015	64,708
Gross lifetime customer benefits (£)	30,153,911	43,814,973
Total incentives earned (£)	28,160	13,666

Previous reports from the UK Government have highlighted similar ambitions. The Ten Point Plan for the Green Revolution (November 2020) highlights within its section on Greener Buildings the need to support “the gradual move away from fossil fuel boilers over the next fifteen years as individuals replace their appliances and are offered a lower carbon, more efficient alternative”³⁸ and highlight financial support available to individuals through the Green Homes Grant, the Homes Upgrade Grant and the Social Housing Decarbonisation Fund. Green home finance initiatives have been estimated to potentially help to improve the energy efficiency of around 2.8 million homes, improving around 1.5 million to EPC C standard by 2030. These schemes are, however, only available in England.

There are also several initiatives to help overcome the outlined barriers in the previous section. For example, Citizens Advice, who has been the statutory advocate and advice provider for energy consumers since 2014, have proposed a series of action plans to help consumers transfer to renewable, smart energy usage. Their Net Zero Protections Puzzle outlined ways in which people can be assisted by a single accredited governing body to better understand and engage with the future of energy, making for a less complicated and more accessible transition.³⁹ Similarly, the transition to more smart energy technologies can be complex and challenging to understand and research from Citizens Advice has identified 3 key areas that government should prioritise: 1) consumers should feel confident about the contracts they sign up to; 2) consumers should know where to go for help; and 3) consumers should have control over their data.⁴⁰

The use of third party intermediaries (TPIs) will become more common. TPIs can seem very complex and confusing so Citizens Advice advocates for a ‘proportionate and flexible regulatory approach’ to ensure that no person is left behind in Northern Ireland’s energy transition.⁴¹ All of the proposals from Citizens Advice work to ensure that decarbonisation is fair and accessible to everyone and is captured in their research Future for All: Making a future retail energy market work for everyone.⁴² Protection and regulation has been highlighted as essential regarding TPIs, with Citizens Advice stating that consumers “don’t have a strong preference about what form regulation should take, as long as the system is obvious

³⁸ Ten Point Plan for the Green Revolution. UK Government. November 2020. [The Ten Point Plan for a Green Industrial Revolution \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/92424/ten-point-plan-for-a-green-industrial-revolution.pdf)

³⁹ Net Zero Protections Puzzle <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/the-net-zero-protections-puzzle-helping-people-piece-together-home-energy-improvements/>

⁴⁰ Smartening up: How to improve people’s confidence in smart home technology <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/smartening-up-how-to-improve-peoples-confidence-in-smart-home-technology/>

⁴¹ Stuck in the middle <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/stuck-in-the-middle/>

⁴² Future for all: Making a future retail energy market work for everyone <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/future-for-all-making-a-future-retail-energy-market-work-for-everyone/>

and easy to navigate and people can understand their rights”⁴³. Additionally, there is a NI Energy Advice is a helpline that assists consumers by giving impartial advice and can guide them to the energy grants they may be eligible for.

Conclusions

Northern Ireland is proactively shifting in line with the global objectives of reducing climate change. Governments, stakeholders, and the public are all pushing towards the reduction of fossil fuels and building a more sustainable energy economy. Northern Ireland has recently passed climate legislation, as well as publishing an ambitious Energy Strategy enable the country to align itself with the CCC’s Path to Net Zero Energy. In addition to these proposed strategies and legislation, there is strong support from various stakeholders regarding energy transition. While evidence suggests that the majority of consumers are keen to reduce carbon emissions, there is still work to be done in facilitating the change through providing support, information and guidance on the shift to renewable energy. Research has shown that in order to transition to a low-carbon future public support is crucial.⁴⁴ This is an unprecedented time for Northern Ireland’s action towards greener energy and the country is at the start of a major energy transformation, with several more piece of legislation, proposals and consultations to come in the near future.⁴⁵

⁴³ [Stuck in the Middle: How to improve protections for people using energy third party intermediaries - Citizens Advice](#)

⁴⁴ Stuck in the middle <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-policy-research/stuck-in-the-middle/>

⁴⁵ Energy Strategy Consumer Research https://www.uregni.gov.uk/files/uregni/media-files/Consumer%20research%20on%20climate%20change%20and%20energy%20transition_0.pdf

4 Research methodology

In order to achieve the research objectives for the project, a two-phased approach was adopted comprising engagement with key stakeholders within the energy sector and energy consumers in Northern Ireland. The remainder of this chapter provides details on the stakeholder and consumer engagement.

Phase one: stakeholder engagement

Phase one involved interviews with key stakeholders representing energy companies, statutory organisations, and consumer organisations. Stakeholders were identified and contacted using a list supplied by the Utility Regulator.

The purpose of the interviews with stakeholders were twofold: firstly, to provide expert opinion and feedback around the issue of energy transition to inform the findings and recommendations presented within this report; and secondly, to inform the development of questions to be used within phase two.

Interviews were conducted with **12 individuals** with expertise in the areas of energy, energy transition, and consumers attitudes and behaviours. Interviews lasted between 45 minutes and one hour and were conducted via Microsoft Teams.

Stakeholder engagement took place between 16th and 28th January 2022.

Phase two: engagement with energy consumers in Northern Ireland

Phase two involved group discussions and interviews with consumers. While qualitative research does not seek to be representative, but rather seeks to target particular populations or sub-groups of interest, a spread of participants from across Northern Ireland was included to ensure the data generated was broadly reflective of the Northern Ireland population.

A total of **10 consumer groups** and **two in-depth interviews** involving **73 consumers** were conducted as part of this research. A demographic structure was developed for each group and agreed with the Utility Regulator, as detailed in Table 4.1.

Table 4.1: Group Compositions

Group	Location	Age group	Socio-economic group
A	Greater Belfast	18-34	ABC1
B	Greater Belfast	35-54	C2DE
C	Ballymena/Antrim	55+	ABC1
D	Ballymena/Antrim	18-34	C2DE
E	Derry/Londonderry	35-54	ABC1
F	Derry/Londonderry	55+	C2DE
G	Fermanagh/Tyrone	18-34	ABC1
H	Fermanagh/Tyrone	35-54	C2DE
I	Newry/Armagh	55+	ABC1
J	Newry/Armagh	35-54	C2DE

All group discussions were conducted via Microsoft Teams, lasted 2 hours and were conducted by key members of the Ipsos project team. All group discussions took place between 9th February and 3rd March 2022.

Consumers were offered the opportunity to participate in a depth interview, if they were deemed to have vulnerabilities that would be more appropriately discussed in a one-to-one setting. **Two participants** were interviewed one-to-one, via telephone, due to being categorised as digitally excluded and unable to participate in an online focus group.

Approach to consumer group discussions

Instead of developing a standard set of group discussions which focus primarily on capturing the current views of participants, Ipsos adopted a more deliberative style of engagement in each session with energy consumers.

In recent years, a range of deliberative methods of public engagement have been used extensively to inform and influence policymaking and strategy. Deliberative engagement is particularly useful when seeking answers about complex topics, or where awareness is low, which makes it an appropriate method to use to understand consumer perceptions on energy transition in Northern Ireland. Deliberative methods have been defined as approaches to qualitative research in which participants are supported to develop informed opinions about a topic through a process of learning, discussion, and public reasoning. Typically, sessions which use deliberative engagement will be longer than a traditional focus group, to give sufficient time and space for participants to gain new information and evaluate it in relation to their existing values, attitudes, and experiences.

A deliberative approach facilitates the development of informed opinions, illuminates what underpins people's views, and demonstrates how views may change when people are given new information. Cumulatively, these benefits serve to provide a much deeper level of insight into the views and behaviours of consumers.

Development of research materials

Adopting a deliberative approach heavily influences the design of the qualitative session. Sessions tend to be structured to include a combination of discussion and presentations of information using stimulus material. This approach was implemented through this programme of research with energy consumers, with pertinent information presented by the moderator during each session to generate knowledge and to enable them to develop informed opinions. The use of stimulus material and interactive exercises also served to maximise online engagement and hold participants' attention throughout the sessions. The full stimulus deck is appended to this report (see Appendix Item 2).

Discussion guides (Appendix Item 1) were informed by both key stakeholder interviews as well as desk research and were designed in conjunction with Utility Regulator. A number of stimuli, for example images of different energy options, as well as extracts from the Energy Strategy were presented to participants via PowerPoint. All information that we chose to present during the sessions with energy consumers was agreed by both the Utility Regulator and Ipsos. All group discussions were conducted over Microsoft Teams, lasted 2 hours and contained between six and eight participants.

Interviews with stakeholders and energy experts provided valuable information to help inform the development of questions and discussion guides for the consumer focus groups. The major themes that emerged from the interviews were included as discussion points, with relevant probes to understand their relevance from consumer's perspectives.

Analytical Approach

Each group discussion was audio recorded. The recording was transcribed to provide verbatim transcripts of each session. Our analytical approach used Grounded Theory. Grounded theory refers to an analysis model in which theory is 'grounded' in data that has been systematically collected and analysed. This approach ensures that theory is developed from data, rather than the other way around.

Data was systematically coded by the research team. Open coding is the process of breaking down, examining, comparing and categorising data and it consists of assigning a label or 'code' to each distinct phenomenon within the data. For each session conducted, detailed verbatim transcripts were produced from audio recordings. These are then subject to the open coding process.

Connections are then made between the categories identified at the open coding stage. This involves linking relevant categories together and identifying the conditions that give rise to it as well as the context in which it is embedded. Based on the open coding completed for the individual sessions, the research team deploys axial coding based on the research questions. This stage of the coding process involves more analytic codes and descriptions to create an explanatory narrative.

The final stage of the analysis process involves the selection of the core category for each research question upon which the final analysis is based. At this point, the story line is explicated further, and an analytic description of the core category is developed. This stage involves the research team reviewing all analytic content to ensure the core categories directly answer the research questions.

Our research team collaboratively coded and analysed the data, collating and categorising data and identifying emerging themes. These themes are presented in the following Chapters.

5 Views on energy transition

This chapter outlines findings from stakeholder interviews and consumer discussions on general views, awareness, and levels of interest in energy efficiency and energy transition. The chapter will touch on general views around energy efficiency and energy transition, views on Net Zero and overall consumer awareness of different low carbon and renewable technologies.

5.1 Awareness of energy efficiency and energy transition measures

Each session with energy consumers opened with a general discussion on top-of-mind thoughts when thinking about energy efficiency and climate change. Consumers were asked their spontaneous thoughts when they heard the terms climate change; energy efficiency; energy transition; renewable energy; and net zero.

5.1.1 Climate change

Consumers largely have a good understanding of climate change and very much associate this term with “global warming”, while describing phenomena such as temperature rises, melting ice, and sea level changes. When discussing climate change, consumers also mention unprompted different renewable energy sources (solar, wind, tidal), as well as naming fossil fuels (oil, coal, gas). Some consumers expressed concern about climate change, with many providing words such as “disaster”. A number of well-known individuals are also spontaneously associated with climate change such as David Attenborough and Greta Thunberg.

5.1.2 Energy efficiency

Energy efficiency is largely well understood, and consumers tend to link this to small actions they do around their homes to save energy, such as turning off lights and cutting down on energy use. Using efficient lightbulbs and using heating controls to manage central heating are measures described by many consumers. These changes are often described in relation to making cost savings and reducing energy bills, however, environmental motivations are also important to some. Energy efficient measures such as installing insulation were mentioned by some consumers.

5.1.3 Energy transition

Awareness of concepts such as energy transition and net zero is lower and in some cases, there is confusion about what these terms mean. Energy transition appears to be a term that many had not previously heard. Only a very small number of consumers had heard of the Energy Strategy, with most only having superficial knowledge regarding its content. Some could deduce that energy transition is the move from fossil fuel energies to renewable forms, but many said that they are unfamiliar with its exact definition. Among others, there were more simple associations, such as changes between any source of energy, for example oil to gas.

I haven't heard that phrase (energy transition), to be honest”

Female, 60+, C2DE, Derry/Londonderry.

5.1.4 Renewable energy

As previously described, renewables were frequently mentioned unprompted when consumers were asked about climate change. Other terms used to describe renewables included “everlasting” and “clean”. There is strong awareness of different types of renewable energies, particularly wind and solar,

with these mentioned repeatedly across various consumer groups. Technologies such as heat pumps were only raised by a small number of consumers.

5.1.5 Net Zero

Knowledge and awareness of net zero is considerably lower than other concepts such as climate change and many do not feel that it is relevant to their lives. While some consumers, particularly within higher socio-economic groups, are able to give full definitions of net zero, those from lower socio-economic groups are less confident about what the terms means. There was some linking of net zero to various carbon reduction initiatives such as carbon offsetting, as well as planting trees.

“I would say it's (net zero) about switching away from fossil fuels and gas and petrol for something along the lines of electric cars and heat pumps and stuff like that”.

Male, 18-34, ABC1, Greater Belfast

There is a strong perception that net zero is linked to larger corporations and industry, rather than individual consumers or households, as they are perceived to be less efficient, produce greater emissions and pollution, and thus have greater responsibility, power, and ability to tackle this issue. Consumers also express doubt on whether net zero targets are possible, with many using words like “idealistic” and “impossible” to describe targets. Lack of faith in the ability to achieve net zero targets is attributed to infrastructural challenges (for example the lack of capacity in the electricity network to support new technologies, lack of confidence in the ability of renewables to provide enough energy, and lack of infrastructure such as electric vehicle charging points), the predominance of agriculture in the Northern Ireland economy, and the cost of new technologies. Most consumers describe net zero in pessimistic terms.

“You can't get down to zero, because the farmers alone, with the cows and producing methane and all the rest of it. If they quit, the food prices will go through the roof too”.

Male, 60+, ABC1, Newry/Armagh

A smaller number of consumers saw opportunities in net zero to make changes to energy consumption that would not only save them money in the long-term but would also have positive impacts on the environment and public health.

“I think there's a lot of hope for the future if we can get the balance right... They have to have everything in place to allow people to transition and to support them in the transition period for us to move forward but I think it gives great hope for the future, for health, for a cleaner lifestyle and I think change is exciting”.

Female, 35-59, ABC1, Derry/Londonderry

5.2 Views on low carbon and renewable technologies

Awareness and views of low carbon and renewable technologies was mixed across the energy consumer groups and it is clear that many have more experience with making energy efficient changes to their homes, which do not involve renewable or low carbon energies.

Awareness of renewable or low carbon technologies, for the most part, tends to centre on some of the more mainstream technologies such as solar panels, wind turbines and electric cars were spontaneously discussed. Technologies such as heat pumps are only known by a small number of consumers. Furthermore, some consumers have installed insulation, and upgraded boilers, but fewer consumers have had experience of renewable or low carbon technologies.

Stakeholders also perceive that many consumers are often not aware of many of the technologies and do not necessarily recognise the importance of heat in reducing carbon emissions. Across all groups, consumers are aware of savings that could be made from, for example, insulation. However, in many cases consumers did not link this to the net zero agenda or reducing carbon emissions.

“People are willing to make changes but fail to recognise that heating is one of the main contributors to carbon emissions”.

Stakeholder 6

Stakeholders also acknowledge that conversations around energy transition and net zero generally focus on technologies such as electric vehicles. This was also reflected by consumers, many of whom have explored purchasing electric cars and as a result had encountered a number of potential barriers such as a lack of charging infrastructure, lack of reliability in terms of battery life, and upfront costs of electric vehicles. However, consumers identified benefits of lower running costs and being more environmentally friendly, which seemed more realistic, in comparison to new technologies that could be installed in their homes.

Views on solar power varied widely, with some holding positive views and/or experiences such as family members being able to heat their water all summer using solar power or making considerable financial savings in the long-term. On the contrary, others have heard negative reports from friends and family such as not re-cooping cost quickly enough, and not liking the aesthetics of solar panels. A few of those participating in the research have installed solar panels in their property and were positive about their experiences in terms of reducing cost and having a more environmentally friendly energy source.

“I do know a wee bit about solar power because I had that many years ago in my first house and we had solar power from the sun and it was really beneficial”

Male, 60+, C2DE, Derry/Londonderry

There are also concerns about reliability of new technologies such as solar and wind and whether they would be able to match energy demands. Wind power is largely seen as unrealistic because of cost and lack of space across Northern Ireland. While solar power is considered something that individuals could install themselves, wind turbines are often viewed to be the responsibility of Government or energy providers.

“We can't put wind farms, that's the government... It's up to those people to invest in wind energy, wave energy, nuclear. That's not something that we can do.”

Male, 35-59, C2DE, Newry/Armagh

“We've heard of the wind, but you can't put a wind farm in your back garden.”

Male, 35-59, C2DE, Greater Belfast

Socio-economic background was a clear indicator regarding interest in different low carbon and renewable energy. While consumers from higher socio-economic groups had more exposure to different technologies, had explored and researched them, and in some cases had installed them, consumers from lower socio-economic groups tend to describe energy efficiency in terms of “switching off lights”, or “lowering the heat on the thermostat”. Changes such as putting in new doors or putting curtains over doors were described as simple measures taken to try and reduce heat loss and improve energy efficiency.

“Turning lights off whenever you're not in the rooms and stuff, as well, and unplugging TVs and kettles and stuff that you're not using as well”.

Female, 35-59, ABC1, Derry/Londonderry

5.3 Interest in energy efficiency and energy transition

Energy consumers claim they are interested in energy efficiency, and possible cost savings were described as the most significant motivator for any changes to their homes or lifestyles that they had made. As with conversations on net zero, consumers who expressed an interest in energy transition described this mainly in terms of making long-term savings, however environmental reasons were often described in secondary terms.

“We're only really reducing energy because of the cost”.

Male, 60+, ABC1, Newry/Armagh

Those in different demographic groups and regions across Northern Ireland have made changes to their homes and lifestyles to improve energy efficiency, such as installing loft insulation and installing more efficient boilers. A small number of consumers, predominantly in higher socio-economic groups, have installed a variety of low carbon or renewable technologies such as solar or heat pumps and/or have purchased electric or hybrid electric cars. Consumers in this group tend to have pursued renewable technologies largely due to financial reasons, although sustainability did also influence their decision-making.

“I recently changed over to a type of electric car (because of lower running) cost and environmental cost”.

Male, 35-59, C2DE, Greater Belfast

Given high energy costs and the cost-of-living crisis, energy efficiency was considered important in terms of saving on costs, rather than in terms of making environmentally conscientious or sustainable decisions. Household bills and competing consumer priorities and costs, for example between heating and food, have impacted consumers, particularly those in lower socio-economic groups, and reflected the context in which these groups were conducted. Across all groups, the concept of energy efficiency was thought of in terms of making savings, while net zero as a concept was associated in terms of costs for both individual consumers and wider society. This may have implications for how energy transition is framed to consumers.

“To be honest, I don't think people think about it. Its more people think of ways of saving money. It's not actually saving the energy side of things. I think it's the money side is what people is at the minute because everything's so high in price”.

Female, 18-34, C2DE, Ballymena/Antrim

Chapter Summary

Consumers across all groups are aware of energy efficiency and different renewable technologies, however knowledge and familiarity with the concept of net zero is generally poor.

As concepts, consumers tend to think of energy efficiency in terms of savings, while net zero is viewed in terms of costs. This may have implications for how energy transition is framed to consumers.

Consumers from lower socio-economic backgrounds have less awareness concerning different options to improve energy efficiency or transition to low carbon or renewable energy.

Perceptions of the term net zero are generally negative, with many consumers questioning its relevance to them, as they do not view themselves as big contributors to the climate change crisis and they also consider net zero targets to be unrealistic.

6 Motivators for energy transition

The chapter highlights the main motivators identified by both consumers and stakeholders regarding making changes to how energy is used, with specific focus on encouraging transition to low carbon and renewable energy. As with previous sections, different stimuli on ‘tipping points’ as well as presenting information from the Department of Economy’s Energy Strategy, were used (see Appendix Item 2) to focus and inform discussions.

6.1 Financial Incentives, Support and Grants

The lack of availability, and knowledge of, public finances to support energy transition was highlighted by both consumers and stakeholders. Grants, as well as different financing options such as low interest loans, would be universal motivators for consumers, and in some cases an essential driver without which many consumers will be unable to make changes towards low carbon or renewable technologies. This is vitally important given the current pressures on household budgets and challenging economic backdrop for many energy consumers in Northern Ireland at the present time.

“The big thing is grants. I’d try it if I see the advantage of what’s the grant for”.

Male, 35-59, ABC1, Derry/Londonderry

While all consumers feel that grants and other financial options (such as low interest loans) would encourage them to make energy changes, the majority are prepared to contribute towards costs and do not expect grants to cover the entirety of costs. Consumers described they would be more willing to pay towards low carbon and renewable technology if they were going to make a long-term saving, and if they understood the specifics of what the total savings may be expected. Some consumers suggested a principle of personally covering up to 50% of costs (depending on total costs), but those from lower socio-economic groups highlight that this would still likely make any changes beyond their ability to pay, and willingness to pay related strongly to the cost of new technologies. Generally, consumers had little awareness of the total costs of renewable technologies or the specific costs for their own circumstances. This made it difficult to have concrete conversations on willingness to pay, resulting in most consumers being unsure what they would be willing or able to contribute.

“If it was going to save you a lot, you would put money into it to save money at the end of it”.

Female, 35-59, C2DE, Greater Belfast

Stakeholders and experts also suggest that cost is likely to be the most significant barrier for many consumers, especially for those from lower income backgrounds. Consumers living in fuel poverty would need “complete” support to enable them to participate in energy transition, with many experts and stakeholders emphasising the importance of energy transition to be underpinned by ideas of equity and access. There is a sense that consumers needing most support will likely benefit most from cost-savings and therefore, support for those in lower-income households should be prioritised. Stakeholders also believe that up-front costs of transition are likely to be a significant barrier for most energy consumers, and that a range of green-finance options, both private and public, such as fully funded grants, partial funding, and low-interest loans should be explored by public organisations.

"In terms of the provision of grants and low interest loans, we saw that as the most direct solution for access to assets and equipment for low-income household who otherwise wouldn't be able to have access"

Stakeholder 4

6.2 Views on a One Stop Shop

The idea of a One Stop Shop, highlighted within the Energy Strategy, is positively received by most consumers. An extract of the Department of Economy's Energy Strategy detailing plans for a One Stop Shop was presented to consumers within each of the group discussions to capture views on this concept. However, it is important to note that many consumers had spontaneously suggested the idea of an all-encompassing service earlier in the discussions. Given the lack of trustworthy sources and general concern about the trustworthiness of suppliers, and given experience with other work conducted in their home in the past, consumers describe feeling positive about a service in which they can get all the information they need from one source and in one location.

"I think if somebody had it all set out where you could go into one forum and find out and make the pathway easy, so you don't have to do the searching yourself".

Female, 35-59, ABC1, Derry/Londonderry

Consumers are clear on a number of factors that would be important considerations for what a One Stop Shop should look like. They emphasise that a One Stop Shop should be trustworthy and independent. It should also be accessible and, bearing that in mind, it should have both a physical and online presence to ensure that it can cater for as many energy consumers as possible.

In order for a One Stop Shop to be perceived as trustworthy, the service should be provided by an organisation that is "independent", who "does not have a motive", or is "non-profit". During this discussion, consumers often spoke positively of independent consumer groups such as like Citizens Advice, which are seen to work for the consumer and are neutral. Whereas many express caution over private companies, "salespeople", and organisations too closely linked to Government, when establishing a service like this, as there is a view that these organisations would likely have an agenda, which ultimately would not benefit the consumer.

Consumers emphasise that the service must be accessible and easy-to-engage with. It needs to use language that is understandable, and provide information on complex things, such as grants, in ways that are easy to digest. Any materials or online information need to be designed in a manner that is accessible, easy to navigate, and easy to understand.

Views are split on whether a One Stop Shop would be best located online or to be a physical service, with most consumers agreeing that it should be a combination of both. Having a human-element to it and someone you could speak to about different options, was widely considered to be important and is likely to help foster trust in the service. Based on previous consumer experiences, many are negative about automated call systems and say they would only engage with such a service if it was grounded in real human interaction.

“If they're independent, the information you're being given is independent information, it's not biased one way or the other and you can take that information away and you know where you are, you know what it is you need to do to reduce your energy. So, yes, it would be good to speak to someone who knows”.

Female, 35-59, C2DE, Greater Belfast

An additional suggestion was that the One Stop Shop should operate distinct services for domestic and business energy consumer, as both audiences will have very different needs.

“Businesses and individuals are quite different. It says, 'A one-stop shop for information,' so I think it should be really clear that this is for business, and this is for the individual because the needs are so different”.

Female, 60+, ABC1, Newry/Armagh

Stakeholders also agreed with the need for a One Stop Shop service, and that it was important that information services are appropriate, tailored and connected to suppliers and installers. The need for the service to truly be a “wrap-around” service was similarly strongly emphasised by a number of stakeholders, as well as the need to take a holistic and individualised approach with consumers. This is considered crucial in terms of supporting consumers to feel confident and supporting them to make well-informed decisions. Having access to a ‘case worker’ that was a liaison and point of contact was raised by multiple stakeholders, with similar concepts echoed by consumers. Having a point of contact that provided individualised and specific support was seen as being a significant motivator and enabler for many consumers.

“If I could go somewhere to say, can you help me to do this, and what would the next step be, I would certainly do that. As an organisation, I would be encouraging homeowners to do that: you know get a home health check, especially as these prices increase it will become more attractive for people to do that”.

Stakeholder 9

Consumers have different preferences for public communication on energy transition, based on their background. Broadly, younger consumers are comfortable reading information online, and feel confident in where they can access information that they consider trustworthy. Older consumers express negativity about both being able to effectively navigate websites as well as trusting online information and are more positive about traditional methods of communication such as television advertisements, and leaflets through their door. Older consumers, and consumers from areas such as the Northwest, express interest in attending ‘roadshows’ where they will be able to see different options and speak to advisors about their own circumstances.

6.3 The importance of timing and windows of opportunity

Timing is an important factor in the decision-making process when opting for different energy sources. Generally, changes consumers have already made to improve energy efficiency within their lives resulted from of an immediate need or a window of opportunity. Consumers offered examples of time-relevant changes such as upgrading to a more efficient boiler because their existing boiler needed replaced or installing insulation when their house was being built.

“Oil to gas. The boiler that they took out to put the gas one in was 34 years old. I was coming up needing a new boiler, and I was also getting work done and it was just getting rid of the oil tank and the water”.

Female, 60+, ABC1, Newry/Armagh

Times when consumers were renovating or making other significant changes to their homes were also considered good times to explore and implement wider changes.

“I've just reinsulated everything. We renovated the house 10 years ago and we made sure that insulation was everywhere. That was a big thing for us. We put lots of insulation. We also put one of those switches, that you can control downstairs and upstairs separately”.

Female, 60+, ABC1, Newry/Armagh

6.4 The perceived need for visible leadership

A lack of leadership and co-ordination is seen as contributing to challenges in moving towards energy transition. Consumers direct criticism at the Northern Ireland Assembly and local politicians, who many believe do not provide strong leadership on issues related to cost-of-living and continued energy price crises.

Ineffective leadership is considered to affect both the energy sector in terms of failures of co-ordination and a lack of joined-up approach to deliver net-zero across Government and Statutory agencies. In addition, consumers express distrust in energy-related schemes given the lack of leadership and the legacy of programmes such as the Renewable Heat Incentive (RHI) scheme. Consumers persistent sense of frustration regarding the perceived failures of RHI, along with general frustration with perceived failures of the Northern Ireland Assembly, provided a wider context in which this research is based. The lack of appropriate controls in implementing RHI were raised by consumers as contributing to a lack of confidence in Government energy schemes.

An absence of public funding to make energy changes is also considered to demonstrate a lack of leadership and commitment to supporting people to transition. Consumers feel that the Government needs to demonstrate a positive example and forward direction to encourage energy transition, as well as initiate funding schemes to make such changes possible for normal consumers.

“I think the people are willing, but the government, maybe, and other powers that be are not helping and supporting us the way they should be. And they're not setting examples. In fact, they're setting bad examples, on many occasions”.

Female, 60+, ABC1, Ballymena/Antrim

Stakeholders suggested that there needs to be a co-ordinated response across statutory sectors, to address the myriad of complex and interconnected challenges that are preventing further progress towards opening energy transition opportunities for consumers. These include the need for long-term planning and vision related to areas such as investment, infrastructure strengthening, up-skilling the workforce, and providing financial support for consumers. The lack of support that is available in Northern Ireland, in comparison to other parts of the UK or the Republic of Ireland, was also consistently raised by stakeholders, as well as some consumers.

“Different projects are common in other parts of UK that are common and widespread. This is where consumers get information. They can see it. (This is) present in Scotland, England, but don’t see as much in NI”.

Stakeholder 2

There is a scepticism among consumers of deadlines or bans relating to fossil fuels, similar to what have been agreed regarding the sale of new petrol and diesel cars. There is concern from consumers regarding extending such instruments to other types of energy. Consumer’s concerns relate to a lack of trust that infrastructure in Northern Ireland will be able to cope with such changes, and that any changes may lead to increased costs for consumers in the future. Consumers worry that deadlines and bans will be implemented on existing energy supplies (rather than only on new installations) and that they will lose access to essential utilities such as heating. Some consumers fear no longer being able to use their existing oil or gas boilers after a ban comes into effect.

“Just it is a great thing to say, 'Right, okay. Set a target,' but what's the alternative? For example, if they were to turn around and say, 'Right, there's going to be no more coal fire, electricity or gas or whatever,' that's okay. So, what else are we going to get? What else is going to replace it? The windfarms? There are not enough of them... So, it's just the infrastructure's not there”.

Male, 35-59, C2DE, Newry/Armagh

Consumers were generally unable to envision what the future may look like, and how changes to energy would be possible without severe cost and disruption to their lives. This may impact on their levels of support and engagement and is discussed further in the Recommendations section of this report.

Chapter Summary

Financial incentives are essential to consumers in terms of making energy changes a realistic option that they may consider. The lack of incentives may contribute to consumers waiting for programmes to open, as they do not want to spend money now only to see financial support become available in the near future.

A One Stop Shop is universally considered a useful concept that should be developed. Consumers highlight the importance of it being delivered by an impartial and independent organisation, and that information is accessible and easy to understand. Individualised support, case workers, and a wraparound services were all mentioned as specific aspects and functions of a One Stop Shop. Trusted, accessible information is essential to supporting consumers and motivating them to make changes.

Windows of opportunity around other renovations should be further explored. Many consumers have made significant changes such as installing new boilers or insulation at point when they were either building their home, or when major renovations were taking place.

Consumers find it difficult to envision what a low carbon future may look like and how it will be relevant for them. A lack of leadership or communication of a vision may have contributed to this, alongside consumer's views that Government has not done enough to demonstrate the importance of this area alongside the legacy of previous schemes such as RHI.

7 Barriers to energy transition

This chapter outlines the findings of the stakeholder interviews and consumer focus groups on significant barriers experienced by consumers that prevent energy transition. It provides an overview of the key themes which emerged from the research.

Following initial discussions on energy transition and energy efficiency, participants were shown different options for different types of energy-efficient, low carbon and renewable technologies (see Appendix 2) to help inform wider discussions on barriers and motivators to making changes. Consumers were also shown stimuli to help encourage discussion on specific prompts, for example on what levels of disruption were acceptable for consumers (see Appendix 2)

7.1 Lack of knowledge and awareness of what is available

Knowledge and awareness of different energy options varied considerably across consumers, with the most significant variable being socio-economic background. While some differences are also seen related to age (younger consumers having more knowledge of different options), the most significant and recurring difference was that consumers in higher socio-economic groups had higher awareness of different options, with many having explored options themselves. As with wider awareness regarding energy efficiency and different options available, consumers in lower socio-economic groups had experience and knowledge regarding options such as boiler upgrades and insulation but had little awareness of options for low carbon and renewables, how much they costed, what options may be appropriate for their circumstances, and what long term benefits may be expected.

“Yes, like the actual cost of the set up, and the running of it, and what you're going to save per year. If you knew ahead of time what you're actually going to save, it might be worthwhile putting in the money to do the things”.

Female, 35-59, C2DE, Fermanagh/Tyrone

Certain options such as switching to electric cars, were frequently discussed across all groups. Electric vehicles were the option that people often gravitated towards and felt most comfortable discussing in comparison to e.g., solar, heat pumps etc. The possibilities, challenges, and costs of electric vehicles is largely better understood than other low carbon or renewable energy alternatives. Consumers were broadly more comfortable talking about this than other renewable or low carbon options, however some consumers did have direct experience with installing solar panels and other technologies such as heat pumps. Wind turbines were mentioned by a very small number of consumers, with conversation focusing on challenges connecting to the electric grid.

Stakeholders and experts perceive that there is a general lack of awareness among many groups about what options are available regarding making energy efficiency improvements and for transitioning to low carbon or renewable technologies. Beyond a lack of general awareness, there may also be an absence of specific knowledge on what options are available to individuals, and what options are most appropriate for individuals' different sets of circumstances. Experts described a lack of knowledge and capacity to estimate the specific cost/benefit of making energy changes for individual consumers.

“A lot of people just don't know where to start, what's going to be right for their home and what is the financial reward – I think that's the biggest thing”.

Stakeholder 6

Furthermore, the potential of smart technologies is under-utilised in Northern Ireland due to a combination of lack of roll-out and lack of literacy of understand and how to use them efficiently. Lack of confidence in long-term returns were also frequently mentioned across all consumer groups, and particularly within higher socio-economic groups who had explored options for energy transition but felt they could not find relevant or specific information.

7.2 Lack of trust in technology, suppliers, and regulation

Linked to a lack of understanding of different energy transition options was also a lack of trust in new technologies, suppliers and installers. Consumers across all socioeconomic backgrounds and stakeholders consistently highlighted that lack of trust was a major barrier to consumers making changes to their energy supply, particularly in relation to making changes towards low carbon or renewable energies. Trust was described as being multifaceted, across areas such as trust in technologies, trust in providers, and trust in regulation. Given high costs and perceived risks of new technologies, consumers need to trust the suppliers, installers, regulators, and technology, and need to feel confident that their investments are guaranteed.

Neighbours, friends and family are key influencers in the decision to adopt low carbon and/or renewable technologies, with many consumers stressing how this had impacted their decision to proceed with a new installation at their property. This was particularly an issue for older consumers. Neighbours who have had positive experiences are seen as essential and trusted sources of information. Consumers have compared friends and family's energy systems to their own and mentioned various benefits to making the changes such as the speed which others' houses are better heated using gas compared to their own house which has an oil-fuelled central heating system. Poor visibility of low carbon and renewable technologies is also a significant barrier for consumers in terms of increasing both awareness and interest in making changes towards new technologies.

“Yes. I think it would help if you were able to ask somebody their experience with it and how it's working for them, it would definitely help, in that sense”.

Female, 35-59, ABC1, Derry/Londonderry

Stakeholders suggested that consumers may need to be given a reason to trust through positive examples and reassurance. Stakeholders highlighted that demonstration projects that show the effectiveness of new technologies and case studies of where it has worked well, were raised as possible strategies and approaches to generate both interest and trust. Community and area-based projects trialled in England may provide positive examples for how to operationalise the strategy to net zero.

According to stakeholders, consumers also need trusted authorities to support them and 'hand-hold' to give tailored information on energy changes that they would benefit from. Stakeholders felt it was important to assess options such as the One Stop Shop, and importantly, to discuss how that may be established in a way to encourage people to trust the information it may provide. People were described as not wanting to get information about energy and energy transition from salespeople, but that instead they want a trusted intermediary who does not have a 'stake' in their decisions. Additional suggestions from stakeholders include that some groups of consumers may be worried about greenwashing and may have concerns about whether they can trust that the changes they are making will make the differences that they are intended to make. This view is echoed by consumers themselves.

“If it's someone like the Citizens Advice Bureau, I would trust them because they're doing that voluntarily. Anybody that's not sitting on the fence, they would tend to give you a good explanation of things without taking sides, I would trust”.

Male, 35-59, C2DE, Newry/Armagh

Trust in the energy sector is generally poor among energy consumers. During the group discussions, consumers were presented with exercises to ascertain levels of trust in a variety of groups and energy suppliers consistently performed poorly in comparison to other professions and sectors. Energy regulators are viewed in diverse terms, with some consumers considering them to be complicit in price rises, while others felt trust towards them as they are seen as independent. This was contextualised regarding increased costs that people were experiencing in relation to the cost of energy and the impact on their bills. Trust in installing new technologies and being able to properly maintain them was a concern cited across many consumers in Northern Ireland and this is generally linked to challenges and/or negative experiences they have encountered in the past with sourcing trusted suppliers and trades people to complete work on their homes.

“(A challenge is) getting a tradesman that you could trust to do the job and have the backup to come back if something wasn't working right, to sort it out for you without having to chase them”.

Male, 35-59, ABC1, Derry/Londonderry

Lack of suppliers and tradespeople was described in relation to all aspects of energy, utilities, and work on homes, and not only in relation to low carbon or renewable energies. This point was emphasised by stakeholders who believe that Northern Ireland does not have a workforce skilled in installing and maintaining new technologies, and this likely being a barrier to making widespread changes to how energy is used.

7.3 Upfront costs and delayed future savings

Substantial upfront costs are consistently described as the most significant barrier to making energy changes for many consumers, particularly regarding low carbon or renewable technologies. Terms such as “prohibitive” and “impossible” were used to describe ability to make significant energy changes particularly to the home.

Costs focused predominately on upfront cost to install new technologies into homes, or to purchase items such as electric cars. Costs were also contextualised with reference to increasing energy costs and the cost-of-living crisis, with many participants particularly from lower socio-economic backgrounds describing circumstances in which making significant changes such as installing new efficient, low carbon or renewable technologies would be impossible.

“The cost is just the main problem. And I know there's people in their house who must be sitting with nothing, who can't afford heat, who can't afford electric, because we know some of us can just get by but there must be people out there that can't get by. And it's not going down, it's definitely going to keep on rising”.

Male, 35-59, C2DE, Greater Belfast

Many consumers express interest in making changes to how they use energy, both in terms of within their homes and their lifestyles. However, costs are often considered prohibitively high and have prevented

people from making such changes. This was reflected across all groups regardless of socio-economic background.

“I would change the car. I'd go for the solar panels, I'd go for all the bells and whistles, you know. But it's the cost which puts everybody off”.

Male, 35-59, ABC1, Derry/Londonderry

Major barriers regarding willingness to pay included lack of trust in technology and a lack of confidence in the long-term benefits of making such a change. Consumers additionally highlight concerns around paying for energy changes when there is currently no financial support but may be in the future. Waiting for future support is likely a strong barrier and factor that prevent consumers from making changes.

“I'd hate to pay the money now and find out in 2 years' time there's going to be a grant for it, and you've shelled out £1500 if you don't have to”.

Male, 35-59, ABC1, Derry/Londonderry

7.4 Concerns around disruption and upheaval

Stakeholders and experts highlighted other barriers and emphasised that for some consumers cost and lack of knowledge may not be the most significant challenge. Constraints on time and ‘hassle’ may present significant barriers for consumers. This may have significant implications for strategies to support transition, highlighting the importance of having processes that are convenient, clear, and easy.

“It's a lot of work having builders around your house and the length of time to install things and so on. Maybe if there was more information about, 'It's a simple installation. It only takes a day.' I don't know, something like that. To me, it just seems like a big job but I don't know when to think about it”.

Male, 18-34, ABC1, Fermanagh/Tyrone

Consumers shared concerns about disruption involved in making changes to how they use energy, and in particular, disruption to the structure of their home. Consumers were particularly concerned about structural changes to the interior of their homes, particularly floors and walls, which is likely to be a major challenge for consumers when considering installing renewable or low carbon technologies around their property. Consumers were broadly accepting of making minor changes to their homes, even if this was over an extended time. The levels of disruptions consumers are prepared to make are strongly linked to the perceived long-term benefit of the change that is being made.

“I think, if it was disruption in your house, where, aesthetically, you had to redecorate or things like that, not only is that more disruption, it's more time, it's more hassle, it's more money, and it extends the process”.

Female, 35-59, C2DE, Newry/Armagh

7.5 Specific barriers faced by different groups

Consumers from lower socio-economic backgrounds

Socio-economic status is a significant indicator of ability to make energy changes in their lives. Upfront costs are the major barrier for this audience and the lack of financial support, combined with current

pressures experienced due to the rise in energy prices, result in those from this group view most low carbon and renewable technologies as unattainable.

“We just go from week to week, and month to month. I don't think of long-term value and such”.

Male, 35-59, C2DE, Newry/Armagh

Competing financial pressures with every day household bills, and immediate stresses in terms of paying for energy, result in consumers being unable to envision long-term benefits and cost savings of making changes, as these benefits are seen as being too far in the future, unlikely to ease any existing financial pressures for some time and too abstract. In some circumstances, consumers are relying on free credit gained from switching providers to pay for energy in their homes, demonstrating the degree to which making significant structural changes to install new technologies is unrealistic for them at this time. This also demonstrates how challenging some consumers from lower socio-economic groups find paying for energy in the current context.

“At the minute, it's a nightmare. I just take the free credit, to be fair. I change mine all the time. You get £50 free credit if you sign up. Then it runs out and I run to whoever else is offering me £50 credit”.

Male, 18-34, C2DE, Ballymena/Antrim

Socio-economic status is also correlated with degree of other barriers outlined within this chapter. Consumers from lower socioeconomic groups not only consider costs to be more prohibitive, but also less informed about different options, less trust in technologies, and have less power and control to make changes if they are renting their home.

Consumers who are private or social renters

Not owning the property in which they reside is the most important barrier to making significant energy changes within the home. Renters generally do not have the power to make considerable structural or aesthetic changes within their home, and given restrictions placed on renters by property owners, many assume that they would not be responsive to the installation of renewable or low carbon technologies.

“Not owning your home plays a very fundamental block to changing the fabric to that home”.

Stakeholder 4

According to consumers who rent their home, there is insufficient motivation for landlords to make changes. However, there is a suggestion, in line with what has been suggested within the Energy Strategy, that more should be done to ensure that landlords must provide more energy efficient properties, with safeguards in place for renters. Indeed there was a suggestion that living in an energy efficient property should be thought of in terms of a fundamental right for everyone, regardless of whether you own your home or whether you rent.

“If you are a tenant, you should have the right to an energy-efficient home. Contacting the landlord, I think is someone else's job really. But my point of view, I think everyone has the right to an energy-efficient home today because it's necessary really going forward.”.

Female, 60+, ABC1, Newry/Armagh

Even if renters did have the finances and/or sufficient motivation to make these changes to the home they live in, they also note that it would be a lost investment to them, as they often do not intend to remain in the property for the long-term. The investment made to the property would not ultimately benefit them, and instead the landlord would avail of the benefits and therefore, renters would be dissuaded from making major energy-related changes to the property. These challenges exist across the rental market, including for those living in Housing Executive accommodation.

“Yes, I'm in a housing executive property, so I'm not going to go and put my own money into making it more energy efficient when it's never going to be mine, do you know what I mean, unless I buy it. So, if they want to do it, I'd be happy enough, if they wanted to do whatever and use their money, it's fine”.

Male, 18-34, C2DE, Ballymena/Antrim

Stakeholders additionally suggest that specific groups such as landlords may require targeted approaches to encourage and enable energy changes, such as financial incentives or grants. Such changes may improve the rental housing stock and benefit renters over time through reduced bills. Minimum standards for rented properties may need reviewed, and any intervention, policy or programme must be tailored to individuals need, for example different needs for rural, elderly, digitally excluded. Stakeholders highlighted that fundamental reform is needed whereby renters can take control of their energy supply.

Consumers in rural communities

Rural consumers feel they do not have access to the same options to improve energy efficiency, which is generally attributed to homes being reliant on oil for central heating, and not being able to explore options such as gas-efficient boilers, particularly in the West of the country. Other options such as heat pumps are seen as abstract and not available to rural consumers and may reflect the lack of awareness and visibility regarding these technologies in rural areas.

“(We are) really relying on oil and open-fires for heating their houses. There's no gas available, and they don't seem to want to put the gas into the country areas, because it's probably not cost effective enough”.

Male, 35-59, C2DE, Fermanagh/Tyrone

An additional challenge facing rural communities is not having sufficient rural infrastructure in place specifically relating to electric charging points to enable electric vehicle use.

“We're the last to get any of these things. I know there's a few electric car stations and so on but really not that many, and if a lot of people get electric cars, there'll be no availability”.

Male, 18-34, ABC1, Fermanagh/Tyrone

A lack of wider public infrastructure, such as accessible public transport is another suggested barrier in terms of changing lifestyle and reduce reliance on personal vehicles. This particularly contrasted to changes made by consumers living in Belfast who have already been able to implement lifestyle changes such as walking to work or using public transport.

“We need to upgrade the infrastructure to allow us to use public transport more. On the train you could have 2 more hours productive working of your day rather than sitting behind a wheel in traffic the whole way to Belfast”.

Female, 35-59, ABC1, Derry/Londonderry

Stakeholders also highlight concerns in the lack of infrastructure to support widespread changes towards energy transition, particularly in relation to the capacity of the electricity network to support the move away from oil, particularly in rural areas.

“Some applications have been turned down for heat pumps. (There are) barriers in terms of infrastructure and network moving to electric use. All of that needs to be worked out before you incentivise”.

Stakeholder 10

Consumers in older age groups

Some older consumers, particularly from lower socio-economic backgrounds, experience challenges in terms of not understanding new technologies that are available, struggling with current energy prices and not being able to finance changes to their energy systems, and being unable to access information online. Older consumers also express reservations in making significant investments if they are not going to see a return on investment for a long time.

“I would like to see the proof that it has long-term benefit from somebody who's had it done and see some sort of evidence that it works for me before I would implement any of them. I would have to have some sort of knowledge of it and understanding of it more, and the financial long-term benefit, if it's going to take me 25 years, not sure, I may not even be around to see the benefit of it”.

Female, 60+, C2DE, Derry/Londonderry

Chapter Summary

Consumers lack information on different options available to transition how they use energy, most particularly in relation to what specific options are available and appropriate for their own individual circumstances.

Upfront costs of installing new technology are consistently described as the most significant barrier. Many consumers are interested in different options but are unable to make changes because of cost. The lack of financing options and grants may also contribute to delay in making changes, as consumers wait for anticipated future financial support.

Lack of trust in new technologies, in regulatory or quality checking mechanisms, and in suppliers and installers all contribute to discouraging consumers to make changes.

Specific groups, in particular those from lower socio-economic backgrounds, the elderly, renters, and consumers living in rural areas all experience additional barriers that make it difficult and, in many cases, impossible to engage in energy transition.

8 The Role of Behavioural Science in Energy Transition

As outlined in the previous chapters of this report, there are challenges identified by both stakeholders and consumers with regards to how consumers can be best supported to transition to low-carbon and renewable energy. Making such changes will require financial and material resources, motivation, effort, and knowledge and understanding of the benefits associated with energy transition. To better understand the mechanisms underlying consumers beliefs and motivations, utilising behavioural science theory may be effective in beginning to determine how to develop communications and potential interventions around energy transition.

Behavioural science is increasingly understood to have a valuable role to play to understand the intricate world we live in. It can be difficult to understand the complex systems shaping our lives – supporting people to navigate sustainability, live in an ethical, inclusive way as well as managing their work lives, financial well-being, and their personal health and wellness. These are all issues which are multi-faceted and create multiple challenges for policy makers who have to understand this context and determine how best to support positive outcomes.

8.1 The Behaviour Change Wheel

In a review of the academic and practitioner literature on behaviour change, we identified a possible model that offers a framework to address to the challenges highlighted within this report: The Behaviour Change Wheel (BCW)⁴⁶, developed by Professor Susan Michie and colleagues is comprehensive, theory-based, evidence-backed and links the problem to intervention design. At the heart of the BCW is the model of behaviour called “COM-B”. This means that for any behaviour change (B) to take place, people need to have Capability (ability to undertake the behaviour), Opportunity (environment facilitates it) and Motivation (wanting to enact the behaviour).

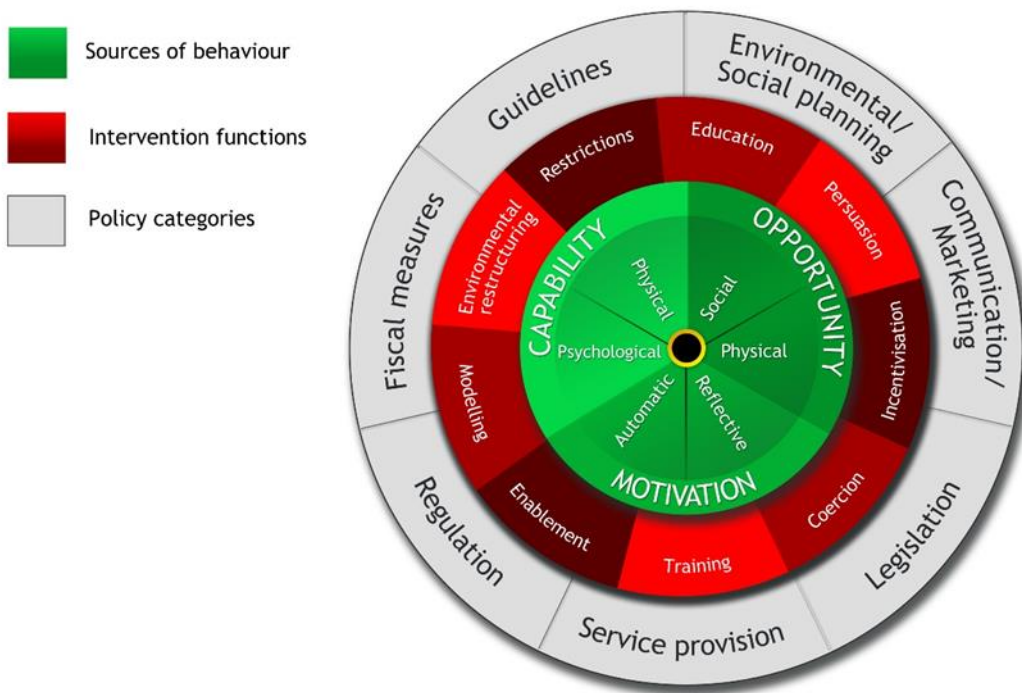
8.2 COM-B model

The COM-B model outlines three core components of behaviour change – Capability, Opportunity, and Motivation. Each component has two sub-components.

- Capability refers to the extent to which an individual has the knowledge, skills and abilities required to engage in a particular behaviour. Capability may be psychological (skills, knowledge or stamina) or physical (physical strength, skill or stamina).
- Opportunity refers to external factors which influence to extent to which a behaviour may be executed. This may be physical opportunity (e.g., time, location, resources, or opportunities provided by one’s environment) or social opportunity (opportunities which are a result of social or cultural norms).
- Motivation refers to the internal processes which influence decision-making and can be reflective (making plans or goal setting) or automatic (impulses, desires, decisions which are made quickly).

⁴⁶ Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science* : IS, 6, 42. <https://doi.org/10.1186/1748-5908-6-42>

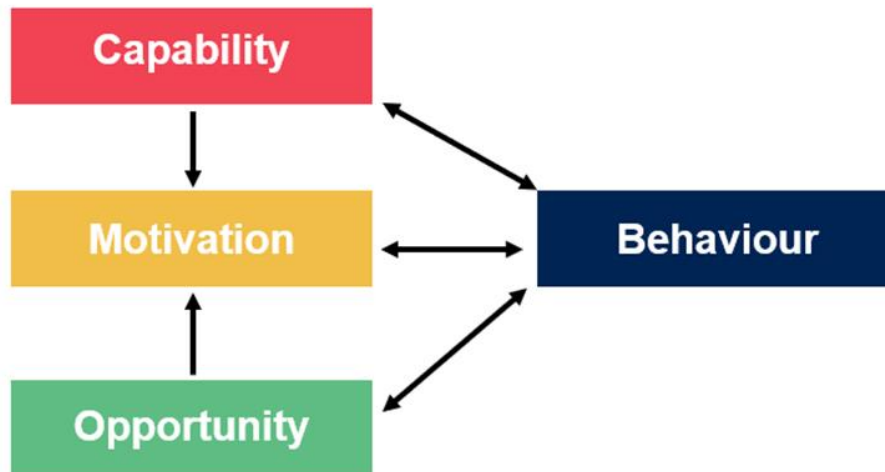
Figure 8.1: The Behaviour Change Wheel⁴⁷



The COM-B is an interactional model. Each element influences behaviour change, but the individual elements are also influenced by the behaviour change which occurs (see Figure 8.2 below). For example, the capability component may be targeted through information provision to encourage someone to purchase a low-carbon technology (such as an energy-efficient boiler). If the individual initially did not have the motivation to make this kind of change but were provided with the knowledge to empower them to do so, this may encourage motivation required to enact further behaviours around energy transition. Similarly, if the opportunity component is targeted e.g., providing financial resources, an individual who previously did not have the capability to enact a behaviour change (moving to LCT or renewable technology), may now have this capability as they were provided with the physical opportunity to engage in the behaviour change.

⁴⁷ behaviourchangewheel.com

Figure 8.2: Interaction between COM-B components



The COM-B model can be an appropriate and useful starting point when aiming to understand behaviour as it can provide key insights into the determinants of behaviour. The Behaviour Change Wheel framework can be effective when designing and evaluating behaviour change interventions. The BCW was developed from 19 frameworks of behaviour change. It consists of three layers (see Figure 8.1 above) – sources of behaviour in the centre (as explained by the COM-B model); nine intervention functions to choose depending on the particular COM-B analysis which has been determined; and the outer layer identifies seven types of policy categories that can be used to deliver the intervention functions.

To design an intervention to address any given problem, it is first necessary to start with a behavioural analysis of the problem, making a behavioural ‘diagnosis’ of what needs to change and then link that diagnosis to intervention functions to bring about change. This model provides a framework through which to design supportive interventions to encourage and enable energy transition for consumers. The specific implications of these models regarding energy transition are described in further detail in the following Chapter.

9 Conclusions and recommendations

Consumers experience significant barriers that prevent them from making significant changes to how they use energy, both in their homes and more broadly in their lives. There are, however, several different motivators and measures that may be considered in order to support consumers to participate in energy transition. There is a need for a holistic and multi-faceted approach that involves increasing awareness, knowledge and interest of different energy transition options; opens up financial measures to support consumers make changes; and provides trusted and accessible information to enable consumers to engage meaningfully in the process.

Five clear, evidence-based recommendations have emerged from this programme of research. These recommendations are to inform future strategies and decisions to support consumers to engage in energy transition. Our report concludes with a model for supporting consumers in energy transition, based off the COM-B model introduced in the previous Chapter.

9.1 Shift the debate and increase public awareness

As previously mentioned, energy efficiency tends to generate discussion about financial savings, while the concept of net zero invokes ideas of incurring additional cost. Net zero as a concept is consistently perceived to be irrelevant to the lives of many consumers, particularly those from lower socio-economic backgrounds. Net zero, decarbonisation, and energy transition, were all concepts that were poorly understood, often were misunderstood, were described as confusing, and were considered in broadly negative terms. Therefore, it is clear that there needs to be an increase in public awareness on energy transition to net zero, with the debate and public discourse on the subject focussing on the individual consumer and the relevance to their lives. Framing such changes in terms of benefits and investments may help encourage support from consumers, while also improving awareness about how some changes may be positive for consumers.

Public communication plans on net zero, what it is, and how new technologies may reduce costs for consumers in the future, would be helpful in increasing public awareness. Public communication needs to be engaging and appropriately pitched, given consumers' low levels of awareness regarding net zero and energy transition. While many consumers claim to care about the environment, framing the debate in terms of benefits and savings was consistently raised by both stakeholders and consumers as an important and necessary shift.

Awareness of the different renewable and low carbon technologies varies, with a great deal of familiarity and indeed interest in products such as electric vehicles. While consumers frequently discussed electric vehicles in terms of concerns around the limitations of charging infrastructure, this higher level of awareness and visibility should be a target for other new technologies, which are poorly understood. Consumers need to be supported to understand the range of different actions that need to be taken to support energy transition, broadening perspectives beyond a debate on electric vehicles. Services such as a One Stop Shop are considered useful and important by many consumers. That such a service be seen as trustworthy and impartial was also strongly emphasised.

While many consumers expressed interest and concern regarding climate change and energy transition, few could envision what the future of energy use may look like. This may represent a barrier to making changes to transition away from fossil fuels and towards low carbon and renewable energies and may require consistent communications to 'set the scene' for what the future may look like.

9.2 The need for financing options

Cost was consistently described as the most significant barrier to making energy changes such as installing a new technology or purchasing items such as electric vehicles. Consumers need to be supported with public financing to encourage them to explore and undertake such changes, especially given that such changes involve not only significant cost, but also disruption, risk, and uncertainty. The shift to the more complex products, such as low carbon and renewable energies, are entirely unrealistic given the upfront costs for energy consumers. The lack of available public funding makes consumers question the commitment of Government to support energy transition and question the importance of making such changes. Financial support or a grant would be a ‘tipping point’ which is likely to encourage them to invest their own money in making changes to energy in their homes and lifestyles.

9.3 A focus on accessibility, equity and just transition

Individuals in society who may stand to benefit most in relative terms from the cost-savings offered by different low carbon and renewable technologies are generally those least able to make changes to their energy use and/or energy systems that they use. Consumers from lower socio-economic groups have less financial ability to pay for up-front costs and less information and literacy regarding options available to them. Additionally, consumers in rural areas have fewer options for using or installing different types of energy systems and have poorer access to public transport infrastructure to allow them to make other changes in their life that may reduce carbon emissions.

Therefore, new services, whether they be in the form of information or finances, should be designed with these inequalities in mind and specifically targeted towards helping those least able to engage with energy transition. Specific information campaigns targeting this group and financial support designed for consumers from lower socio-economic backgrounds will be essential. The concept of Just Transition has been embedded in law in Northern Ireland through the recently passed climate legislation and should be a cornerstone of any policy going forward. Protection of consumers is also a key principle in the Energy Strategy – Path to Net Zero Energy, as well as ensuring that individuals “are informed, empowered, supported and protected to enable them to transition to decarbonised solutions for all their energy needs”.

9.4 Maximise changes around windows of opportunity

It is important to meet consumers where they are in their lives. In line with strategic objectives of making changes as easy as possible, programmes should be considered that provide consumers with support as they are making other changes to their home or energy supply. Many consumers have already made changes to their energy supply, for example upgrading to a more efficient boiler, when they were also making other renovations to their homes. Equally, windows of opportunity should be maximised concerning when energy systems become old and need to be replaced. Consumers mentioned schemes such as the car scrappage scheme and suggested that similar schemes may be developed regarding energy transition. Consumers must be aware of options and have information and suppliers easily and quickly accessible to make such changes should an unforeseen event occur. Given consumers aversion to disruption, it is important to work with consumers to maximise the changes that can be made when consumers are already undertaking significant work such as a refurbishment. This should also be further explored for new builds.

9.5 Support must be holistic

All these recommendations are interconnected and should be viewed as a complete wraparound package of support needed in order to support consumers. Information, suppliers, and financial support

are all essential to enable transition. Consumers need protections while new technologies and providers require regulation. None of these interventions are sufficient in isolation. Services such as the One Stop Shop were positively received by both consumers and stakeholders, and should be developed to provide trusted information, specific guidance to consumers that is relevant to their individual circumstances, as well as information on funding and grants. It is essential that this service is seen as accessible, has a human ‘face’ to it, and is resourced to provide individual assessments for consumers.

9.6 A model for encouraging and enabling energy transition

Considering the evidence-based recommendations which have been outlined in this chapter, certain factors influencing behaviours around energy transition may be aligned with the COM-B components of Capability and Opportunity (see below table). The literature suggests that in order to facilitate effective behaviour change, one or more of the elements of the COM-B (sources of behaviour) should be targeted. For example, if perceived capabilities and opportunities are targeted, an individual may have increased motivation for enacting a particular behaviour such as installing low-carbon or renewable energy sources. This model helps illustrate the holistic and interconnected nature (section 9.5) of interventions required to support consumers engage in energy transition.

Table 9.1: COM-B Components for Energy Transition

Recommendation	COM-B element	Source of behaviour to be targeted
Increase public awareness	Capability (psychological)	Increasing knowledge around LCTs and renewable technologies; increasing knowledge on energy transition to net zero.
The need for financing options	Opportunity (physical)	Provision of financial resources to overcome barriers to energy transition behaviours.
Focus on accessibility, equity and just transition	Opportunity (physical + social)	Increasing opportunities which are accessible to all.
Maximise changes around windows of opportunity	Opportunity (physical)	Maximise physical opportunity to overcome perceptions around barriers such as time, resources and disruption to the physical environment.

10 Appendix

Appendix 1. Discussion Guide

Utility Regulator Energy Research Consumer Group Discussion Guide

5 mins	<p><u>Introduction to session</u></p>	
	<p><u>Introduction and overview</u></p> <p>Moderator to Introduce self and colleagues and explain the role of Ipsos– we are an independent research agency, aiming to help you share your views. For this project, Ipsos MORI have been commissioned by The Utility Regulator. The research aims to explore views among the general public on the transition away from fossil fuels to net zero and low carbon energy. More specifically, the research is aiming to develop an understanding of the different barriers consumers face to make energy related changes, and the forms of support and protections they will require to make such changes.</p> <p>Confidentiality: I want to reassure you today that everything you tell us is completely confidential. We will be audio recording the session today (no video recording), and this is to help us fairly reflect your views in the final report. The recordings are securely stored and then securely deleted once the project is complete. All findings will be reported anonymously - we may use quotes but no detailed attribution. There is more information about how we securely handle your personal data in the privacy notice you received with your session invitation.</p> <p>Your participation today is entirely voluntary and based on your consent to take part. You are free to end your participation at any time, without giving a reason.</p> <p>The session will last up to 2 hours.</p> <p>Housekeeping/ground rules:</p> <ol style="list-style-type: none"> 1. Please be reassured that you do not have to answer any questions you are not comfortable to. Please note that you do not have to share any personal experiences if you do not feel comfortable doing so. 2. There are no right or wrong answers. There may be times during our discussions that people disagree with each other and that is absolutely fine. What is important is to be respectful of each other and disagree with ideas rather than individuals. 3. Please keep your videos on throughout the group. If your Wi-Fi stops working/you disconnect from the call, please try your best to re-join. If the moderator’s Wi-Fi breaks/they are disconnected, they will try and re-join. 	

<p>18.50</p>	<ul style="list-style-type: none"> • Is this something that you think is important to you personally? Why/Why not (motivators for change)? • Do you think reducing energy use is important for people in wider society? Why/ Why not? <p>Can you think of any disadvantages or barriers to reducing the energy you use day-to-day? PROBE FULLY</p> <p>SHOW SLIDE IN STIMULUS PACK MODERATOR NOTE: Explain the slide and the terminology to ensure all participants understand the terms we will be discussing.</p> <p>What does energy transition to net zero mean to you? PROBE FULLY: WHAT DOES IT MEAN TO YOU PERSONALLY IN RELATION TO YOUR LIFE</p> <p>What different types of energy, if any, do you think of when you think of the transition to net zero</p> <p>PROBE FULLY USING STIMULUS SLIDE – DO PEOPLE UNDERSTAND THE DIFFERENT DEFINITIONS AND TERMS Compare against - fossil-fuel based alternatives: coal, oil, gas. PROVIDE SPACE FOR QUESTIONS.</p> <p>Have you made any changes to how you use energy within your every day life? PROBE TO FULLY UNDERSTAND ACROSS HEATING, ELECTRICITY, TRAVEL. PROBE: Energy Efficiency measures</p>	
<p>18.55</p>	<p>What have you done/implemented/installed?</p> <ul style="list-style-type: none"> • Why did you decide to do that? • How did they go about it? • Were there any positives/negatives encountered in journey? • Have you explored making changes, but not gone through with it (CROSS-REF SCREENER / PARTICIPANT PROFILES) • For anyone who explored but didn't proceed, why did this not go ahead? What might make you change your mind? <p>SHOW SLIDE IN STIMULUS PACK MODERATOR NOTE: Highlight the different ways in which people can change their use of energy within their lives and the variety of options available.</p> <p>Are there any of these options that you have explored? PROBE USING SLIDES EE Measures</p> <ul style="list-style-type: none"> • Upgraded to a more efficient gas boiler • Installed insulation in their home (cavity wall or loft insulation) 	

	<ul style="list-style-type: none"> • Installed a high energy efficiency boiler • Converted from oil to gas central heating <p>LCT Measures</p> <ul style="list-style-type: none"> • Purchased an electric vehicle • Installed solar technology • Installed a heat pump • Installed a wind turbine system • Installed a biomass system 	
	Motivators to make changes to energy use	
19.10	<p>Let's think about these different mechanisms of energy transition.</p> <ul style="list-style-type: none"> • Energy Efficiency measures • Low Carbon Technologies <p>What, if any, would be the motivators to adopt either of these?</p> <ul style="list-style-type: none"> • Why is that? <p>PROBE FULLY TO TEASE OUT SPECIFIC MOTIVATORS FOR EACH OPTION</p> <p>We'd like you now to further think about the factors that may <u>help</u> you to change the way you use energy in your everyday life.</p>	
19.15	<p>What, if anything, would encourage or motivate you to change the way you use energy?</p> <p>PROBE WITH:</p> <ul style="list-style-type: none"> • INFORMATION / ADVICE SERVICES • DEMONSTRATION PROJECTS • FULL SERVICE AGENCY I.E. ORGANISATION THAT WILL SUPPORT CONSUMERS TO CHANGE THEIR BEHAVIOUR • GRANTS/FUNDING/SUBSIDATION 	
	Barriers that would prevent changes to energy use	
19.20	<p>We'd now like you to specifically think about the factors that may <u>prevent</u> you changing the way you use energy in your everyday life.</p> <p>What barriers, if any, are there to transitioning the way you use energy in your life? PROBE WITH:</p> <ul style="list-style-type: none"> • TENURE OF PROPERTY <ul style="list-style-type: none"> ○ Provide space to explore specific challenging associated with renting (3 or 4 mins) • GEOGRAPHICAL LOCATION • COST • LACK OF PROVIDERS • LACK OF UNDERSTANDING OF HOW TO/TERMINOLOGY • LACK OF TRUST IN OPTIONS/ PROVIDERS/ INSTALLERS/ WARRANTIES/ REGULATION 	

19.40	<ul style="list-style-type: none"> • FACE-TO-FACE HOUSE VISITS • FACE-TO-FACE “SHOP” (FOR INTERVIEWER: ONE STOP SHOP CONCEPT) • WEB-BASED • HELPLINE • INFORMATION BOOKLETS; CASE STUDIES ETC <p>SHOW SLIDE IN STIMULUS PACK</p> <p>MODERATOR READ OUT FROM SLIDE: <i>“The Energy Strategy Path to Net Zero has highlighted that a one stop shop for information on energy transition is to be developed. This one stop shop will support people and businesses through each step of their journey towards net zero in heat, power, transport and energy efficiency, with local solutions that fit their needs and budget. The services offered could include initial assessments; guidance on decarbonisation options and costs; advice on access to finance; support during the implementation phase; quality assurance; and monitoring of performance.”</i></p> <p>What are your thoughts on this type of service?</p> <p>To what extent would it be useful?</p> <p>What should it look like to make it most valuable to you?</p> <p>To what extent would you trust information from a source such as this?</p> <p>Would you have any concerns using a service like this</p> <p>How could those be overcome?</p>	
	Personal responsibility versus Government responsibility	
19.50	<p>I’d now like us to think about where the responsibility lies for energy transition.</p> <p>To what extent do you believe the area of energy transition is your responsibility?</p> <ul style="list-style-type: none"> • What kind of role do you think you and other citizens can play? • How far do they think they can go with their role? <p>To what extent do you believe the area of transition is the Government’s responsibility?</p> <ul style="list-style-type: none"> • Why is this? • What should the Government be doing? • What do they need to do to motivate citizens to be more personally responsible for energy transition? 	
	Views on the cost of energy transition	
19.55	<p>Imagine you were making changes to improve your energy efficiency, or transitioning to using low-carbon or renewable energy, to what extent would you be willing to bear costs to make these changes? This could be changes to any aspect of the way you use energy in and outside of your home.</p>	

	<ul style="list-style-type: none"> • What extent of costs would you be willing to cover? Does it depend on the overall cost of the changes? • Is contribution dependant on type of energy/renewable? Why? • Does it depend on any perceived future financial savings? • How could paying for any energy transition be made more appealing? • Is there anything else that would encourage you to pay to make changes to your energy efficiency or to transition to low carbon or renewable energy? • PROBE FULLY: Why? 	
<p>Views on the extent of disruption of energy transition</p>		
<p>20.00</p>	<p>Again, imagine you were making changes to improve your energy efficiency, or transitioning to using low-carbon or renewable energy, would you be prepared for some disruption to your life in order to make those changes? Again, this could be changes to any aspect of the way you use energy in and outside of your home.</p> <ul style="list-style-type: none"> • What level of disruption would you be willing to accept? • Does it depend on the type of disruption e.g. changing some pipes/wiring to major works in the home? • Does it depend on the length of the disruption e.g a few hours to a few days? • What could help overcome this? <p>SHOW SLIDE IN STIMULUS PACK MODERATOR NOTE: Present a range of scenarios of different types of disruption that may be required depending on the change.</p> <ul style="list-style-type: none"> • What do you think of this? • IS THERE AGREEMENT / CONSENSUS – WHAT DO PEOPLE CONSIDER MINOR OR MAJOR DISRUPTION ETC. 	
<p>Trade off/tipping point exercise</p>		
<p>20.10</p>	<p>SHOW SLIDE IN STIMULUS PACK</p> <p>In every decision we make, we look at all the facts before we make a decision, with some elements of the decision more important or hold more weight in the decision-making process than others. We are now going to do an exercise that explores the factors that would be most important in your decision-making process on installing some alternative energy sources in your home.</p> <ul style="list-style-type: none"> • Ask the group to look at a number of different pre-defined factors (to be agreed) which we will show on screen that may come into the decision to transition some energy sources within their home. We want to explore the trade-offs and red lines, so what is most important, and what could people live with but what would they not be happy with. 	<p>The discussion around this exercise is more important than the actual exercise. Encourage participants to discuss what is important and why</p>

	<ul style="list-style-type: none"> • The discussion on this, is more important than the actual exercise. • Follow-up questions to be asked to the group to explore most important factors in the decision-making process, the ‘tipping point’ in the decision making process to proceed – what factor ultimately sways the individual, and any major red lines. 	
Views on deadlines and bans		
<p>20.15</p>	<p>Would a ‘deadline’ or a ‘ban’ on fossil-fuel based energy, similar to what will happen with petrol and diesel cars, be something that would be necessary for you to make changes to transitioning to using low-carbon or renewable energy, or not?</p> <ul style="list-style-type: none"> • Why do you think this would be necessary or not? • What are your views on this type of ‘nudge’? • What may be the positives in doing this versus the negatives? • How could any negatives on this be overcome? 	
Summing up/closing		
<p>20.20</p>	<p>If you were wanting to make changes to improve your energy efficiency, or transitioning to using low-carbon or renewable energy, what do you think would be the most significant barrier that would prevent you from doing so?</p> <ul style="list-style-type: none"> • Apart from finances or costs, what would the most significant barrier? • How, if at all, do you think these barriers could be removed/overcome? <p>Reflecting on the conversations we have had this evening, what would be your one key takeaway from the discussion?</p> <p>And what would be the most important one or two issues/items that you’d like to point out to those responsible for this policy area in Government</p>	

Appendix 2. Stimulus Presentation Slides

Energy consumer research

Stimulus materials

February 2022

© Ipsos | 21-094555 Utility Regulator Energy Strategy | February 2022 | Version 1 | Internal/Client Use Only

Ipsos MORI Ipsos

Definitions of energy terms

What do some of the terms mean?

Term	Definition
Energy Transition	The transformation of the energy sector from fossil-based to net zero.
Net-Zero	When the amount of carbon we add to the atmosphere is no more than the amount removed.
Fossil-fuel	A natural non-renewable fuel such as coal or gas used for things such as heating, travel and generating electricity
Energy Efficiency	Using less energy to get the same job done – and in the process, cutting energy bills and reducing pollution.
Renewable Energy	Energy from a source that is not depleted when used, such as wind or solar power.
Low-Carbon	Energy that is generated using lower amounts of carbon emissions such as, wind, solar, hydro or nuclear power.

Various energy options

Examples of the methods of energy efficiency and low carbon technologies



Various energy options

Examples of the methods of energy efficiency and low carbon technologies



Trust exercise

Ranking of trust in various groups and organisations

- On the next slide you'll see a list of different professions and industries.
- Can you discuss and rank which groups you consider to have the most trust in, and which you have the least?

5

© Ipsos | 21-094555 Utility Regulator Energy Research | February 2022 | Version 1 | Internal/Client Use Only

Trust exercise

Ranking of trust in various groups and organisations



6

© Ipsos | 21-094555 Utility Regulator Energy Research | February 2022 | Version 1 | Internal/Client Use Only

One-stop-shop for energy transition

Overview of what this service could look like

- “The Energy Strategy Path to Net Zero has highlighted that a one stop shop for information on energy transition is to be developed. This one stop shop will support people and businesses through each step of their journey towards net zero in heat, power, transport and energy efficiency, with local solutions that fit their needs and budget. The services offered could include **initial assessments; guidance on decarbonisation options and costs; advice on access to finance; support during the implementation phase; quality assurance; and monitoring of performance.**”

Disruption exercise

What level of disruption would you be willing to accept?

Structural changes to your home – walls and floors temporarily changed

Structural changes to your home – permanent aesthetic changes, e.g. solar panels on your roof

Having to learn how to use new technologies

Minor disruption for an extended period of time (1 week or more)

Major disruption for a short period of time (1 day or less)

Having to work with energy companies to organisation installation and set-up

Disruption to your Travel and routine

Tipping point exercise

Factors that may influence decisions on proceeding with changing energy source

Confidence in technology

Cost – financial support

Cost – Financial long-term benefit

Comfort

Timing, e.g. needing to replace a boiler or a car

Seeing examples of changes working for close family or friends

Values

Convenience e.g. car versus public transport or walking

Ease of process

Our standards and accreditations

Ipsos' standards and accreditations provide our clients with the peace of mind that they can always depend on us to deliver reliable, sustainable findings. Our focus on quality and continuous improvement means we have embedded a "right first time" approach throughout our organisation.



ISO 20252

This is the international market research specific standard that supersedes BS 7911/MRQSA and incorporates IQCS (Interviewer Quality Control Scheme). It covers the five stages of a Market Research project. Ipsos was the first company in the world to gain this accreditation.



Market Research Society (MRS) Company Partnership

By being an MRS Company Partner, Ipsos endorses and supports the core MRS brand values of professionalism, research excellence and business effectiveness, and commits to comply with the MRS Code of Conduct throughout the organisation. We were the first company to sign up to the requirements and self-regulation of the MRS Code. More than 350 companies have followed our lead.



ISO 9001

This is the international general company standard with a focus on continual improvement through quality management systems. In 1994, we became one of the early adopters of the ISO 9001 business standard.



ISO 27001

This is the international standard for information security, designed to ensure the selection of adequate and proportionate security controls. Ipsos was the first research company in the UK to be awarded this in August 2008.



The UK General Data Protection Regulation (GDPR) and the UK Data Protection Act (DPA) 2018

Ipsos is required to comply with the UK GDPR and the UK DPA. It covers the processing of personal data and the protection of privacy.



HMG Cyber Essentials

This is a government-backed scheme and a key deliverable of the UK's National Cyber Security Programme. Ipsos was assessment-validated for Cyber Essentials certification in 2016. Cyber Essentials defines a set of controls which, when properly implemented, provide organisations with basic protection from the most prevalent forms of threat coming from the internet.



Fair Data

Ipsos is signed up as a "Fair Data" company, agreeing to adhere to 10 core principles. The principles support and complement other standards such as ISOs, and the requirements of Data Protection legislation.

For more information

3 Thomas More Square
London
E1W 1YW

t: +44 (0)20 3059 5000

www.ipsos.com/en-uk
<http://twitter.com/IpsosUK>

About Ipsos Public Affairs

Ipsos Public Affairs works closely with national governments, local public services and the not-for-profit sector. Its c.200 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. Combined with our methods and communications expertise, this helps ensure that our research makes a difference for decision makers and communities.

