

A consumer framework for addressing climate change

A toolkit for policymakers

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Contents

Acknowledgments	2
Key terminology	3
Executive Summary	4
Who we are	7
1. Introduction	8
2. A consumer framework for addressing climate change	11
3. A toolkit for policymakers for taking a consumer perspective on climate change	14
4. Consumer outcomes for addressing climate change	16
Endnotes	26

Acknowledgments

This consumer framework for addressing climate change is the result of collaborative work between Simon Gill of The Energy Landscape, and independent energy consultant, and Consumer Scotland staff. It is based on a range of evidence, including Consumer Scotland's growing evidence base, and reflects a shared understanding of consumers, the way consumers view climate change, and the challenges a changing climate pose for us all. To help Scotland remain resilient to future climate change risks, this document is intended to be a toolkit that policymakers can use to understand the consumer issues related to Scotland's transition to being a country that no longer negatively contributes to global climate change and adapts to the changing climate.

Key terminology

The language of climate change and the role of consumers in relation to it can appear complex. For the avoidance of doubt, this consumer framework for addressing climate change understands key terminology in the following ways:

Adaptation has been defined by [Adaptation Scotland](#) as “a process of on-going adjustments in response to observed and projected climate change impacts. This includes being prepared for increasing risks posed by climate change hazards, and identifying new opportunities our changing climate may bring, while considering how impacts may be felt differently across society”.¹

Climate emergency is the overall challenge of responding to large scale, global climate change. It is driven by the increase in the emissions of carbon dioxide and other greenhouse gases that humans have released into the atmosphere over the past century and a half. It is a crisis that demands a response to stop it getting worse and to respond to the changes to our climate that we are already experiencing.

Consumers are defined in the [Consumer Scotland Act 2020](#) as including individual consumers and small businesses that purchase, use or receive products or services.² In effect everyone in Scotland is a consumer and consumers are vital to the Scottish economy. Responding to climate change requires us to address issues around resource consumption by individuals, households, communities and small businesses. When we talk about consumers in this report, we are referring to consumers in all of these contexts.

Net Zero is the term often used to mean completely removing our contribution to climate change across the whole economy. Reaching net zero by 2045 is the formal, legally binding target that the Scottish Parliament has set. It is called net zero rather than just zero emissions, because we could continue to release a small number of emissions in the future if we develop processes that remove carbon dioxide from the atmosphere to compensate. The process of reducing our emissions is also sometimes called climate change mitigation. In this report, we do not use the term net zero except where it is necessary to refer to relevant legislation or quote others. Instead, this report talks about “reducing our climate change emissions”.

Sustainable products and services refer to any product or service that allows consumers to support a reduction in Scotland’s contribution to climate change, or to adapt to those unavoidable changes resulting from a changing climate.

Executive Summary

Background

This consumer framework for addressing climate change is the result of collaborative work between Simon Gill, of The Energy Landscape, and Consumer Scotland staff. It is based on a range of evidence, including Consumer Scotland’s growing evidence base, and reflects a shared understanding of consumers, the way consumers view climate change, and the challenges a changing climate pose for us all.

The framework is intended to be a toolkit that policymakers in government, regulators, and businesses can use to understand the consumer issues related to Scotland’s transition to being a country that no longer contributes to global climate change and adapts to unavoidable changes as a result of a changing climate.

A consumer framework for addressing climate change

A review of key evidence, including Consumer Scotland’s growing evidence base on consumers in relation to climate change and net zero legislation and policies, has identified **cost, convenience, clarity, and confidence** (the 4 Cs) as key issues for considering the role of consumers in progressing the transition to a more sustainable future (Figure 1).

Figure 1 – A Consumer framework for addressing climate change (the 4 Cs)



A policymaker’s toolkit for understanding the consumer perspective

Our consumer framework for addressing climate change also acts as a **policymaker’s toolkit**. This has been developed by Consumer Scotland for taking a consumer perspective on climate change action in relation to the 4 Cs (Table 1). For each perspective, a set of key questions, or tests, have

been identified that can be used to ensure that Scotland’s climate change mitigation and adaptation policy, regulation, and practice is consumer focused.

Table 1 – A policymaker’s toolkit for a consumer perspective on climate change

Perspective	Test 1	Test 2	Test 3	Test 4
Cost	Is there an upfront cost, and if so can it be made affordable, or spread over time?	Are ongoing costs similar to, or less than, carbon emitting options?	Are consumers on low incomes able to participate?	Are costs split fairly between current and future consumers?
Convenience	Is it simple for consumers to change behaviour?	Have barriers been removed from processes or markets?	Is special knowledge necessary to participate?	Can trustworthy products and installers be easily identified and found?
Clarity	Is it clear to consumers what they need to do?	Is trustworthy information and advice easy to find and provided proactively to consumers?	Is information and advice easy to understand?	Are there additional benefits or risks and have they been articulated?
Confidence	Do consumers understand why they need to act?	Are consumers able to see benefits from changing behaviours experienced by family, friends or neighbours?	Are consumers protected from rogue traders and exploitative business practices?	Are there prompt and effective redress mechanisms if things go wrong?

By asking these key questions, or tests, policymakers, regulators, businesses, and other key decision-makers can be more confident that the consumer perspective has been placed at the centre of the transition to a sustainable and resilient future. It also allows others to evaluate the extent to which the consumer perspective is genuinely being considered in relation to climate change mitigation and adaptation policy, regulation, and practice.

Consumer outcomes for addressing climate change

The approach outlined in this document will enable everyone to play their part and deliver the change required so that everyone can benefit from our collective efforts. In doing so 7 consumer outcomes can be realised (Figure 2). Ensuring consumer support and participation is at the centre of our national response to climate change will enable everyone to play their part and deliver the change required so that we all benefit from our collective efforts.

Figure 2: Consumer outcomes for placing consumer support and participation at the centre of our national response to climate change

Governments provide leadership that is ambitious but also realistic, consistent and inspires change
The transition is well planned, based on credible targets, delivery-focussed and consumer-orientated
Appropriate and sustainable choices are available for all, reflecting both the climate emergency and the needs of consumers
Consumers are empowered because they are enabled to engage with the transition
Decisions are fair because they share costs and benefits appropriately and work to reduce inequalities
High levels of consumer trust in the need for change, the impact of acting, and the protections available
Trade-offs are balanced honestly by acknowledging that we all face competing priorities

Who we are

Consumer Scotland is the statutory body for consumers in Scotland. Established by the Consumer Scotland Act 2020, we are accountable to the Scottish Parliament. The Act defines consumers as individuals and small businesses that purchase, use or receive in Scotland goods or services supplied by a business, profession, not for profit enterprise, or public body.

Our purpose is to improve outcomes for current and future consumers, and our strategic objectives are:

- to enhance understanding and awareness of consumer issues by strengthening the evidence base
- to serve the needs and aspirations of current and future consumers by inspiring and influencing the public, private and third sectors
- to enable the active participation of consumers in a fairer economy by improving access to information and support

Consumer Scotland uses data, research and analysis to inform our work on the key issues facing consumers in Scotland. In conjunction with that evidence base we seek a consumer perspective through the application of the consumer principles of access, choice, safety, information, fairness, representation, sustainability and redress.

1. Introduction

- 1.1 This document proposes a consumer framework for addressing climate change. Governments, regulators, and businesses can use it to better understand and engage consumers in reducing emissions and adapting to climate change. As a toolkit it is intended to address the central role of consumers in supporting Scotland's progress in reducing emissions and adapting to the unavoidable impacts of a changing climate. In doing so it aims to support Scotland being resilient to the climate change risks that we all face.
- 1.2 By drawing on a range of information, including Consumer Scotland's growing evidence base across multiple consumer markets and sectors, this framework identifies **cost, convenience, clarity, and confidence** as key issues for considering the role of consumers in progressing the transition to a more sustainable future.
- 1.3 In 2019, the Scottish Government declared a climate emergency and recommitted to taking urgent action.³ The same year the UK Parliament approved a motion declaring an "environment and climate emergency".⁴ There are two ways to respond to such declarations, but both are necessary if we are to collectively tackle climate change (see Box 1):

Box 1 – Potential responses to climate emergency declarations

Response 1 – Aim to reduce, or mitigate, climate change emissions

The Scottish Government has committed to completely removing Scotland's contribution to climate change by 2045. This is 5 years ahead of the UK Government's target of 2050 for the UK as a whole. These ambitions mean reducing the release of greenhouse gases from within Scotland and the UK which contribute to climate change by meeting formal targets of net zero over the next two decades.

Response 2 – Adapt and learn to live with the unavoidable climate change impacts

Even if we are successful, globally, at reducing emissions over the coming decades, the climate will still change. Across the rest of this century and beyond, Scotland is likely to be warmer, experience more extreme weather, and face rising sea levels. That means we will need to be more resilient as a country by undertaking adaptation measures to protect people, businesses, and key infrastructure.

- 1.4 Responding to the climate emergency through mitigation and adaptation measures requires everyone to contribute. The transition to a more sustainable future will mean changing the way we all go about our daily lives, for example, how we heat our homes, how we travel, what infrastructure we invest in, and how we do business. It must be a collective endeavour

where every individual and business has a part to play. Across government, the wider public sector, and private business, there needs to be a drive to make sure that all consumers have the confidence, support, and opportunity to participate so that everyone can benefit.

- 1.5 Without a vigorous response from consumers, it will be impossible to protect people from the consequences of further climate change. The UK Climate Change Committee's Seventh Carbon Budget has estimated that household low-carbon choices will contribute to one-third of emissions reductions in 2040.⁵ The most impactful decisions the majority of households will make are likely going to be purchasing an electric car and converting to a heat pump.
- 1.6 That said, it is clear that currently consumers can often be far from the centre of decision making. Plans to reduce climate change emissions often focus on technical change. For example, they talk about "heat networks", "electric vehicles", and "floating offshore windfarms". But they talk much less about the people who will use the heat, vehicles, and electricity. The same is true of Scotland's plans for adapting to the changing climate. Those often focus on abstract concepts like "blue-green infrastructure", "a landscape-scale approach", and "infrastructure resilience", but less about the changes that we will all have to make in our lives and the ways we do business.
- 1.7 Scotland has two decades to go through its climate transition. That is two decades to co-design and co-create a country that meets the 2045 target on emissions, and ensure Scotland is resilient to current and future climate related risks. Consumer Scotland's evidence shows that most consumers are aware of and concerned about climate change and the challenge the climate emergency presents. However, while climate change matters to them, so too do many other concerns. Ongoing cost-of-living pressures have heightened issues of poverty and means that affordability across a range of markets is a pressing concern for many households. Across our evidence base, participants tell us that with competing priorities to juggle they value the convenience of the products and services they buy or use.
- 1.8 Some of the choices which support the climate transition can have significant up-front costs and be inconvenient or difficult to navigate. This has to change because no matter what else the government does, if people cannot afford sustainable products and services, or integrate them easily into their lives, they will not be able to respond to the climate emergency in the way that governments require. Achieving this will require innovation and thinking from government, regulators and businesses beyond engrained ways of providing and using goods and services.
- 1.9 Responding to the climate emergency is also an intergenerational issue. A changing climate will affect future generations more than the current one. As a nation we need to make sure that the investments we need to make to be ready for that change are made today and delivered for tomorrow with the costs shared fairly between those generations.
- 1.10 For the transition to succeed we need a well-informed population if consumers are to respond to the climate emergency in a way that supports the ambition. We all need an understanding of the issues and awareness of the solutions. While there is lots of public information on climate change available today, the fast-paced flow of information in a digital age can lead to misinformation taking root and myths quickly spreading. In addition, where

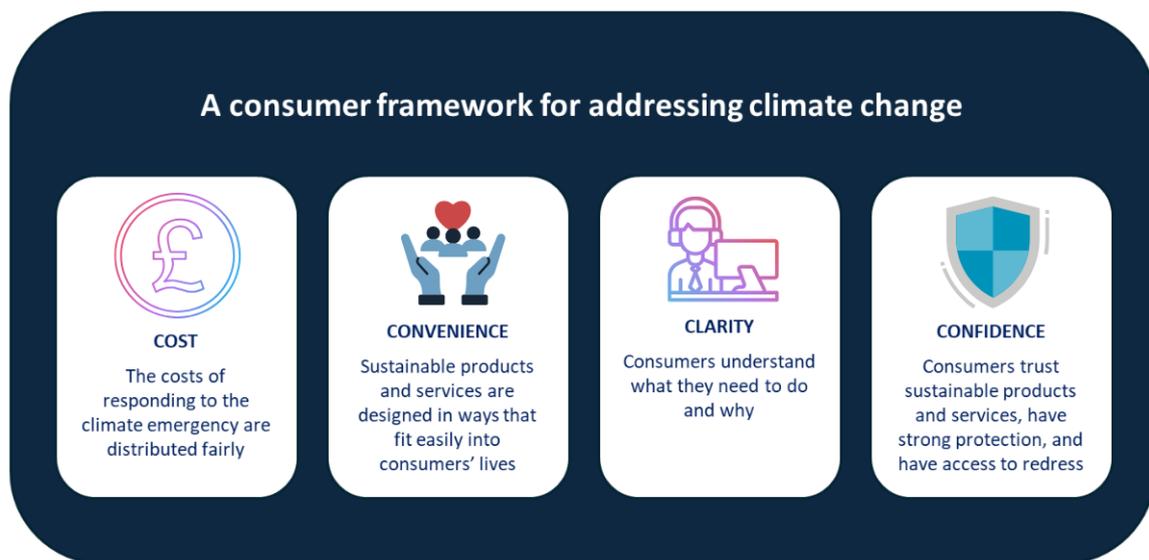
reliable and accurate information is available, it is often inaccessible or can fail to resonate with consumers.

1.11 In the next section a consumer framework for addressing climate change is proposed that identifies **cost, convenience, clarity, and confidence** (the 4 Cs) as key issues for consumers that decisions makers must address when proposing changes designed to ensure a more sustainable future. This is followed by a **policymakers' toolkit** that has been developed by Consumer Scotland for taking a consumer perspective on climate change action in relation to the 4 Cs. For each perspective, 4 key questions, or tests, have been identified that can be used to ensure that a consumer perspective is at the centre of climate change mitigation and adaptation policy and regulation. The final section proposes **7 consumer outcomes** that can be realised by placing consumers at the heart of the transition.

2. A consumer framework for addressing climate change

- 2.1 Responding to climate change must remain one of Scotland’s top priorities. Consumers must be central to plans for change and to the actions we take as a country. Governments must lead the way and place supporting consumers at the heart of our national response, enabling people to understand the issues, help deliver change, and benefit from success.
- 2.2 The evidence shows us that across multiple consumer sectors **cost**, **convenience**, **clarity**, and **confidence** (the 4 Cs) are key issues for consumers. Consumer Scotland proposes these can be understood as a consumer framework for addressing climate change (see Figure 1).

Figure 1 – A Consumer framework for addressing climate change (the 4 Cs)



Cost

- 2.3 The evidence indicates that we need to find ways to distribute the costs of responding to the climate emergency in a way that is fair. In planning our national response, the impacts across all groups of consumers need to be considered from the start and monitored throughout. Plans for tackling the climate emergency need to reflect how climate change is being experienced by different groups and ensure affordability for all consumers. That doesn't only mean thinking about overall costs, but also their type and timing and how consumers are exposed to the risk of rising costs in the future.

- 2.4 Where costs are prohibitive to particular groups, plans need to address how appropriate support will be provided so that rates of fuel poverty are not further exacerbated. It is essential that Scotland's overall climate plans are costed at a consumer level, as well as at a system level.

Convenience

- 2.5 It is essential that sustainable products and services are designed in ways that fit easily into consumers' lives. Governments, regulators, businesses, and the wider public sector need to work together to create policies, products and services which are convenient and understandable for those that will use them.
- 2.6 Where sustainable solutions are more complex than those consumers are used to, new ways may need to be found to make sure that the complexity sits with those most able to manage it, usually businesses, public or third sector organisations.

Clarity

- 2.7 It is equally important that consumers have clarity and understand what they will need to do, when, and why. Across society there is a need to build understanding of the need for change and acceptance of the reasons for acting. Building collective understanding will help consumers understand how they can contribute, which can be supported by government articulating a clear consumer-focused plan for action. Products and services should be designed, marketed and supplied in ways that highlight their environmental or climate impact or benefit.
- 2.8 People need meaningful and timely information and targeted support. Building the "climate literacy" of the population will grow consumers' understanding of climate change issues and solutions. By providing a framework which makes implementing changes to our daily lives more straightforward, consumers can be empowered to act and can be confident that they are doing the right thing, at the right time, and in the right way.

Confidence

- 2.9 Consumers need to have confidence and trust in sustainable products and services that may be less familiar to most people. Consumers should enjoy strong protection and have access to secure methods of redress when things go wrong. Mechanisms for consumer advice, protection and redress need to develop quickly to reflect the innovative characteristics of many sustainable products and services.
- 2.10 New technologies often make increased use of personal data. To work effectively, sustainable products and services will increasingly need to integrate into previously separate aspects of our lives. Consumers need to be supported in developing confidence in these new, more integrated, approaches. Businesses also need to make sure supply chains are in place to deliver the new products and ensure installation and maintenance can be delivered by skilled professionals.

2.11 The way advice is provided to consumers' needs to evolve, as do the protections offered and the frameworks put in place for putting things right when things go wrong.

3. A toolkit for policymakers for taking a consumer perspective on climate change

- 3.1 Consumers' needs and behaviours must be central to responding to the climate emergency if the transition is to be a success. This applies to both emissions reduction and adaption of unavoidable impacts. A focus on **cost, convenience, clarity, and confidence** (the 4 Cs) can help policymakers achieve a consumer perspective.
- 3.2 Consumer Scotland has developed (Table 1) as a toolkit for policymakers for taking a consumer perspective on climate change action in relation to the 4 Cs (as noted in Figure 1). For each of the 4 Cs a number of key questions, or tests, have been identified that policymakers, regulators, businesses, and other decision-makers can use to ensure that they are considering the role of consumers in their activities. In doing so they can be more confident that the consumer perspective has been placed at the centre of the transition to a sustainable and resilient future.

Table 1 – A policymaker’s toolkit for a consumer perspective on climate change

Perspective	Test 1	Test 2	Test 3	Test 4
Cost	Is there an upfront cost, and if so can it be made affordable, or spread over time?	Are ongoing costs similar to, or less than, carbon emitting options?	Are consumers on low incomes able to participate?	Are costs split fairly between current and future consumers?
Convenience	Is it simple for consumers to change behaviour?	Have barriers been removed from processes or markets?	Is special knowledge necessary to participate?	Can trustworthy products and installers be easily identified and found?
Clarity	Is it clear to consumers what they need to do?	Is trustworthy information and advice easy to find and provided proactively to consumers?	Is information and advice easy to understand?	Are there additional benefits or risks and have they been articulated?
Confidence	Do consumers understand why they need to act?	Are consumers able to see benefits from changing behaviours experienced by family, friends or neighbours?	Are consumers protected from rogue traders and exploitative business practices?	Are there prompt and effective redress mechanisms if things go wrong?

4. Consumer outcomes for addressing climate change

4.1 The consumer framework outlined above is based on Consumer Scotland’s assessment of key evidence, including our own growing evidence base, across multiple consumer sectors. It identifies **cost, convenience, clarity, and confidence** as key issues for placing consumers at the heart of the transition to a sustainable future. Ensuring consumer support and participation is at the centre of our national response to climate change will help everyone to play their part and deliver the change required so that we all benefit from our collective efforts. There are 7 consumer outcomes that can be realised (see Figure 2):

Figure 2: Consumer outcomes for placing consumer support and participation at the centre of our national response to climate change

Governments provide leadership that is ambitious but also realistic, consistent and inspires change
The transition is well planned, based on credible targets, delivery-focussed and consumer-orientated
Appropriate and sustainable choices are available for all, reflecting both the climate emergency and the needs of consumers
Consumers are empowered because they are enabled to engage with the transition
Decisions are fair because they share costs and benefits appropriately and work to reduce inequalities
High levels of consumer trust in the need for change, the impact of acting, and the protections available
Trade-offs are balanced honestly by acknowledging that we all face competing priorities

Consumer outcome 1 – Governments provide leadership that is ambitious but also realistic, consistent and inspires change

4.2 Responding to the climate emergency will require leadership that goes beyond setting targets, issuing calls for action, and proposing high-level pathways for delivery. It needs leadership that inspires everyone, builds consensus, and directs change. It is ultimately for government and parliament to set the ambition and, working closely with business and regulators, provide the leadership that consumers tell us in our research they seek.

- 4.3 Governments at all levels – UK, Scottish, and local – have been applauded for the early leadership they displayed in declaring a climate emergency and putting in place targets to reduce emissions and deliver early successes. For example, Scotland has led the UK in reducing climate change emissions from electricity generation by nearly 90%.⁶ However, more recently progress has been falling behind what is needed. The 2023 Climate Change Committee report to the Scottish Parliament highlighted that Scotland’s annual targets continue to be missed and the overall policy and plans fall far short of what is needed.⁷ Whilst at the UK level, the third National Adaptation Plan, published in 2023, was also deemed to fall far short of what the CCC has identified is going to be needed.⁸
- 4.4 Much of the initial climate action focused on structural changes. As we move into a phase of the response which requires greater consumer engagement, the nature of leadership must adapt to match that challenge. Good examples of this exist, such as the *Scottish National Adaptation Plan* which emphasises public engagement⁹ and the 2021 *Net Zero Nation: Scotland’s public engagement strategy for climate change*¹⁰, which gives Scottish Government a strategy with which to provide leadership to consumers. It is based on three objectives: (1) understand, (2) participate, and (3) act, and includes suggested approaches such as supporting trusted messengers, building partnerships, and empowering climate actions through communities and education.
- 4.5 How can we make sure governments provides leadership:
- **Governments need to** deliver consistent, insightful, and coordinated leadership. Leadership should be demonstrated through the practical delivery of change laid out in plans and strategies
 - **Governments need to** provide a compelling and consistent national narrative to public, private and third sector organisations, ensuring they understand their role and support government leadership throughout the economy
 - **Governments and regulators need to** work together to make sure that each regulated sector develops in line with national and local plans. They need to engage with consumers to make sure that the need for change is understood and accepted
 - **Businesses, public sector and third sector organisations need to** better understand and communicate their role in the transition in line with the national narrative from government

Consumer outcome 2 – The transition is well planned, based on credible targets, delivery-focused and consumer-orientated

- 4.6 To date most plans to reduce climate change emissions or adapt to unavoidable changes as a result of a changing climate have often focused on technological pathways and large-scale infrastructure change. Targets are increasingly perceived as unattainable and plans often fail to move from high-level strategy to detailed on-the-ground delivery.

- 4.7 The next stages of the transition will require consumer-centred planning that is focused on achieving outcomes. That means identifying what options are available, what the effects will be on all groups of consumers, and what support will be provided, including for those who will struggle to change. These considerations need to come first, alongside the modelling of technical change. Whilst some national plans provide a list of consumer actions and carry out impact assessments, these are often presented in annexes, and few provide the type of detailed timeline and option analyses that are typically provided for infrastructure change.
- 4.8 The UK Climate Change Committee has suggested that, now more than ever before, people need to be actively involved in reducing climate change emissions.¹¹ Delivering on that challenge means changing what people choose to buy and changing behaviours. For example, it could mean opting to install a heat pump instead of a gas boiler and adapting the way we travel for work and leisure.
- 4.9 The role of behaviour in relation to how we adapt to a changing climate was central to the 2022 report for the House of Lords Environment and Climate Change Committee on behaviour change.¹² The report identified 86 behaviours that people and businesses take to reduce the risks associated with an extreme climate event. It concluded that, alongside better communication of climate risks, government needs to plan frameworks to support behaviour change.
- 4.10 How to make sure the transition is well planned:

- **Governments need to** produce plans for the transition which focus on and enable consumers. Alongside high-level technological / economic modelling, the contribution needed from all groups of consumers, and how this will be supported by government, should be a central consideration to inform which options are taken forward
- **When developing plans government should** include an assessment of the financial implications for consumers, along with timelines detailing what changes people need to make and when, alongside the role that government and others will play in supporting people to make these changes. The Consumer Duty¹³ introduced by the Consumer Scotland Act 2020 may help by putting consumer interests at the heart of strategic decision-making across the public sector to deliver better policy outcomes for Scotland
- **Regulators and regulated companies need to** work with consumers to build up awareness of climate related risks to infrastructure in regulated sectors, explain the investment plans needed to manage those risks and build agreement for the levels of funding needed to deliver them
- **Governments and businesses** need to work together to ensure that products and services which can support behaviour change are delivered in line with the needs of the plan and in a manner that can ensure the transition helps support economic growth

- **Consumers should be** supported to understand the need for change, how their decisions contribute to delivering the plan, and the benefits of action

Consumer outcome 3 – Appropriate and sustainable choices are available for all, reflecting both the climate emergency and the needs of consumers

- 4.11 Choice is often regarded as central to ensuring good consumer outcomes, particularly in commercial sectors, because competition means people have been able to select the best product to meet their needs. However, increased choice isn't always an option, nor is it always desirable. For example, in Scotland, there is one public water supply and waste water company for domestic consumers and Scottish Water acts as the single wholesaler for the non-domestic sector. Similarly, households and businesses only have one option for connecting to the electricity network. Responding to the climate emergency could mean introducing new limitations on choice. In some circumstances, choice could be restricted to more sustainable options, or charges or taxation could be used to encourage appropriate behaviours, for example, as happened with the levy on plastic bags.
- 4.12 Consumer Scotland previously commissioned a review of existing evidence on consumer behaviors and attitudes in relation to water use¹⁴. It highlighted the need to improve information in order to support consumer choice. For example, it highlighted that labelling appliances based on how efficient they are at using water can enable consumers to make informed choices. However, where choice needs to be restricted, the remaining options need to include alternatives that are appropriate for everyone. That highlights the need for more effective consumer representation and finding new ways to ensure that consumers can feed into decisions that affect the choices that remain. It can also mean strengthening consumer protections and enhancing the power of regulators.
- 4.13 A further example where limiting consumer choice has been considered as part of the transition is the market for domestic heating. The Scottish Government has made it clear that it is unlikely that Scotland's legally binding 2045 net zero target will be met without changing the way the vast majority of Scotland's buildings are heated.¹⁵ To align with that, the Scottish Government consulted on a bill to remove the option for consumers to use fossil fuel heating over the next two decades. Though that specific proposal is currently being reviewed while the impact on the least well-off consumers is fully explored, the Acting Minister for Climate Action confirmed to the Scottish Parliament that a revised Heat in Buildings Bill will be introduced that will set a new target for decarbonising heating systems by 2045, alongside continuing work to reduce fuel poverty.¹⁶
- 4.14 In other areas, the level of choice available may need to be expanded in new directions. Transport Scotland, for example, included a commitment in its sustainable transport vision that in the future people will be able to make choices that minimise the long-term impact on the climate.¹⁷ In this context, consumer choice isn't just about which type of car to purchase, but about choosing between private cars, public transport, active travel, or, with coordinated investment in greater local provision of services, choosing

not to travel as often. These are only meaningful choices if there are affordable, reliable and safe options available. Particular attention needs to be placed on ensuring there are choices available for different groups in society, such as people living in rural areas and those with mobility issues.

4.15 How to make sure appropriate choices are available to all:

- **Governments need to** ensure that options exist for all consumers to choose products and services that support reducing emissions and adapting to a changing climate. High-level plans need to explain how consumer choice will change throughout the transition and why those changes are justified
- **Governments need to** ensure that where choice is reduced, there are commensurate increases in consumer representation, protection and mechanisms for redress
- **Businesses need to** develop a range of products and services that fit within the parameters that governments permit. That means working with governments, regulators, consumers and others to understand plans for policy and regulatory change and responding proactively with new and innovative ideas
- **Regulators and regulated companies need to** innovate to find ways of strengthening consumer representation during regulatory price control processes. This must come at appropriate points in the development of infrastructure
- **Regulators need to** have the powers to set minimum climate standards for products and services

Consumer outcome 4 – Consumers are empowered because they are enabled to engage with the transition

4.16 The UK Climate Change Committee has previously estimated that two-thirds of greenhouse gas emissions are related to individual or societal behaviour change.¹⁸ Without changes to the way we all live our lives, we will not meet our ambition of removing Scotland’s contribution to climate change by 2045. Across Consumer Scotland’s evidence base it is clear that many consumers want to act to reduce emissions but can often feel that they don’t know the best changes to make or feel insufficiently supported to make these changes. To be at the heart of the transition, consumers need to be meaningfully informed, motivated to change, and have access to affordable, trustworthy and convenient sustainable products and services.

4.17 Our research shows that three quarters of Scots are concerned about climate change, but less than a third said they know a lot about what they need to do.¹⁹ This suggests that the way we talk about the climate emergency may be too abstract and doesn’t feel relevant to people’s everyday lives. The research highlights that the two most pressing concerns among consumers when choosing what to buy are cost and convenience.

4.18 Consumers in Scotland are central to our effort to adapt to a changing climate. It is increasingly important that the products and services available to consumers are sustainable, and that they are supported to understand how their choices impact on the climate risks they could face. For example, people need to understand changing flood patterns when choosing to buy a house or considering investment in measures to make

their property more resilient to flooding. They also need to understand the emissions associated with the purchase, use and disposal of a range of household items, from clothing to food and textiles.

4.19 Our research has also found that consumers rarely consider net zero in their day-to-day lives or view their own behaviour through that lens. It shows that even those who are more engaged in these issues hesitate to act because of concerns over how realistic it is to achieve targets, and they are only likely to make larger investments if the benefits outweigh the risks for them personally. Driving changes in consumer behaviour will require more than just the provision of information. Changes must be underpinned by a thorough understanding of consumer needs and identification of the barriers to change. Importantly, however, not all consumers will make sustainable decisions all the time, but facilitating greater understanding allows consumers to prioritise action on areas that are most important to them.

4.20 How to make sure consumers are empowered:

- **Governments need to** place supporting consumers at the heart of planning for the climate emergency. Climate plans must focus on consumers from the start, helping us all to understand what the implications are for individuals, households, communities and small businesses. At present, this is largely missing from climate change plans, which tend to focus on technological and infrastructure level change
- **Governments, regulators and public sector organisations need to** improve how they engage with consumers. The debate needs to move away from technical jargon to focus on why the climate emergency is important to every one of us. This includes building literacy and other proactive ways to support consumers in making more sustainable purchasing decisions
- **Regulators and regulated companies**, particularly those that provide major national infrastructure such as electricity, gas and water networks need to work with consumers to help them understand how the changing climate will affect the way these services are provided
- **Businesses need to** develop sustainable products and services, ensuring that supply chains and end products support our climate transition. These products and services must be affordable, trustworthy and convenient for consumers to use.
- **Governments, regulators and businesses need to** work together on targeted, consistent and informative messaging with direct relevance to consumers

Consumer outcome 5 – Decisions are fair because they share costs and benefits appropriately and work to reduce inequalities

4.21 Solutions to the climate emergency need to be designed fairly from the outset. A fair transition means thinking about change from everyone’s perspective, identifying the barriers that each group faces and putting in place measures to provide accessible choice and appropriate support for every group in society.

- 4.22 Some sustainable consumer choices, such as investing in flood resilience measures for buildings, are often more expensive than choices which don't support the transition. Others, such as electric vehicle purchases, have the potential to deliver lower costs over the product's lifetime but only following significant up-front investment, investment which many do not have the savings or credit rating to make. Others, such as active travel, risk excluding those unable to ride a bike or walk significant distances.
- 4.23 If sustainable products and services are inaccessible to some groups of consumers there is a risk that the transition becomes unfair. For example, some services that rely on consumer data to generate better deals may not be able to be accessed by those who are digitally excluded. However, if fairness is a principle embedded in plans from the start, those risks can be mitigated.
- 4.24 In deciding what is fair, it is also important to consider the other costs and benefits that come with change. For example, by reducing our reliance on petrol and diesel cars, we improve health by reducing air pollution in Scotland's cities. A fair transition is also one that considers how costs and opportunities fall on different generations of consumers. Failing to act today will magnify the effects of climate change in the future. Fairness is also a legal responsibility on the Scottish Government under the Fairer Scotland Duty.²⁰
- 4.25 In response to a challenge laid down by the Just Transition Commission, the Scottish Government has developed a framework of eight National Just Transition Outcomes of which "a fair distribution of costs and benefits" is one.²¹ This is defined as addressing existing economic and social inequality by sharing the benefits of climate action widely, while ensuring that the costs are distributed based on the ability to pay. An example of a policy designed to deliver a fair transition is the commitment to eradicate fuel poverty by 2040, set out in law under the Fuel Poverty Act. The 2021 Fuel Poverty Strategy aims to take a holistic approach to achieving the target, with measures to deal with poor energy efficiency, low incomes, high energy prices, and how energy is used.²² However, it is worth noting that much progress on fuel poverty action in Scotland has stalled in recent years, with rates of fuel poverty increasing as a result of ongoing high energy costs.
- 4.26 How to make sure decisions are fair:
- **Governments need to** identify and embed fairness in climate planning. This means identifying the risks faced by different groups of consumers. Along with other principles, consumer fairness needs to be prominent in high-level strategies and in detailed planning
 - **Regulators need to** ensure that fairness is embedded in the way economic regulation is applied. For example, ensuring that regulated businesses are required to consider the impact their activities could have on consumers in vulnerable circumstances
 - **Governments, regulators, businesses and public bodies need to** engage regularly with a wide range of consumers, including those in vulnerable circumstances

Governments need to ensure that climate change plans take account of intergenerational fairness

Consumer outcome 6 – High levels of consumer trust in the need for change, the impact of acting, and the protections available

- 4.27 Solutions to the climate emergency ask for trust on several levels. Consumers need to trust the evidence demonstrating the need to change the way they act; trust that if they make sustainable choices this will deliver the outcomes that Scotland needs; trust that sustainable choices still meet their own personal needs; and trust that, if things go wrong, they are protected and can access appropriate redress.
- 4.28 Today, our plans to reduce climate change emissions and to adapt to a changing climate increasingly ask consumers to take up new, unfamiliar and sometimes untested technologies and to use them in innovative ways. New products often make increased use of personal data, for example, by learning about our daily routines in order to customise the way a service is delivered. And the benefits of these changes can sometimes depend on different products and services working together in increasingly complicated ways.
- 4.29 For example, reducing the costs and emissions associated with low-carbon electricity can involve coordinating the use of appliances, electric heating, electric vehicle charging, solar panel output and battery storage. Reduced emissions are dependent on the coordinated control of all these devices in line with periods of sunny or windy weather (when renewable electricity generation is available) and when electricity demand elsewhere in the country is low.
- 4.30 The risk of poor outcomes with novel and complicated systems is significant. It is important that consumers are confident they can access reputable and effective suppliers, that guarantees are meaningful, devices are compatible with each other, complaints are handled quickly and effectively, and that compensation is available where things go wrong. It is also important to counter misinformation through social media which can thrive in an environment where trust is low.
- 4.31 In Scotland, 1.1 homes are currently below a 'good' level of energy efficiency and 2.4 homes would need to convert to cleaner heating systems to meet the Scottish Government's target, as set out in the Scottish Government's Heat in Buildings consultation.²³ The Scottish Government has also committed to introducing a revised Heat in Buildings Bill that will set a new target for decarbonising heating systems by 2045 alongside continuing work to reduce fuel poverty.²⁴
- 4.32 Consumer Scotland has identified concerns with consumers' confidence and awareness, misleading claims, rogue traders and scams. In response, Consumer Scotland has launched an investigation into consumer protections in the green home heating market to identify if consumers have access to appropriate advice and information, protections, fair and affordable incentives and competitive and clear product choices.²⁵ During 2025 the report of the investigation will be sent to Scottish Ministers in accordance with the requirements of the Consumer Scotland Act 2020.

4.33 How to make sure we develop consumer trust:

- **Governments need to** strengthen consumer protection and redress mechanisms in areas where sustainable solutions rely significantly on new and innovative products and services, and where the delivery of good consumer and climate related outcomes depends on increased levels of coordination between different products and organisations
- **Businesses need to** work together with sector organisations, regulators and public bodies to develop new standards and accreditations which tackle key areas of consumer risk and concern
- **Regulators need to** emphasise consumer engagement and satisfaction within the settlements they reach with regulated companies. This includes incentives for companies that deliver demonstrably good consumer outcomes and penalties for those who don't. These mechanisms must be agile enough to deal with emerging technologies and solutions
- **Consumer organisations need to** have access to the appropriate skills and expertise needed to deal with increasingly complex and technologically advanced consumer products and the growing interaction between consumers and wider infrastructure development

Consumer outcome 7 – Trade-offs are balanced honestly by acknowledging that we all face competing priorities

- 4.34 The climate emergency also creates trade-offs. This means that sometimes governments might need to make tough decisions. Led by government, we need to be honest about those trade-offs, who they affect, and the costs and benefits to different individuals and groups.
- 4.35 Some sustainable solutions involve limiting choice, increasing costs or asking consumers to change the way they live, for example by imposing additional costs on the use of single use plastic items. Other outcomes in this report focus on how we plan and deliver the transition in a way that means those negative impacts are minimised or how change can deliver new and positive outcomes for consumers. However, even with the best possible approach, there will still be trade-offs, and there is a risk that these are ignored.
- 4.36 For example, when existing housing becomes increasingly susceptible to flooding because of rising sea-levels, we will need to be honest about the viability of protecting those houses. In some circumstances, we might choose to selectively abandon some housing. In others, government might choose significant spending on new strategic flood infrastructure, and in others, government might choose to support householders to implement flood mitigation measures to individual properties and help them with insurance costs. There may be cases where government mandates action and others where the choice is left to property owners.

4.37 Similarly, a 2022 report by Circle Economy and Zero Waste Scotland highlights the scale of Scotland's resource use.²⁶ It highlighted that around four-fifths of Scotland's carbon footprint comes from the products and materials we manufacture, use and throw away and that the average Scot consumes more than double the sustainable level of materials necessary for a high quality of life. One of its 4 calls to action is a recommendation to ensure actions are diverse and citizen centric and it notes the importance of people embracing more sustainable lifestyles, trading off the purchase of new products against environmental benefits.

4.38 Consumer Scotland's evidence on the role of consumers in a circular economy also highlights the importance of taking account of the impact on consumers when choosing to implement measures that may create trade-offs.²⁷ For example, whilst charges for single use products such as cups may be appropriate as part of the solution to reducing consumption levels, there must be accessible and affordable sustainable alternatives available to all consumers that fit their needs.

4.39 How to make sure decisions are balanced honestly:

- **Governments need to** make sure that trade-offs are highlighted and not hidden. This means acknowledging trade-offs where they exist and actively leading national conversations to agree appropriate decisions, informed by clear evidence of which groups will be affected in what ways, and how plans aim to balance trade-offs
- **Businesses need to** work to develop products and services which minimise trade-offs, for example looking for low-cost ways to reduce climate change emissions or plan contingencies to deal with storms or floods
- **Regulators and regulated companies** need to work closely with consumers, through consumer panels, stakeholder engagement processes, and engagement with consumer groups to identify trade-offs, for example, between early investment to reduce emissions or increase resilience and additional costs added to bills
- **Governments, working with consumer groups,** need to develop a strong evidence base which captures the trade-offs that consumers make today and better understands what influences their decision making

Endnotes

- ¹ <https://adaptation.scot/scotland-and-climate-change/what-is-adaptation/>
- ² <https://www.legislation.gov.uk/asp/2020/11/contents>
- ³ <https://www.gov.scot/publications/global-climate-emergency-scotlands-response-climate-change-secretary-roseanna-cunninghams-statement/>
- ⁴ <https://hansard.parliament.uk/commons/2019-05-01/debates/3C133E25-D670-4F2B-B245-33968D0228D2/EnvironmentAndClimateChange>
- ⁵ <https://www.theccc.org.uk/publication/the-seventh-carbon-budget/>
- ⁶ <https://www.gov.scot/publications/scottish-greenhouse-gas-statistics-2022/documents/>
- ⁷ <https://www.theccc.org.uk/wp-content/uploads/2024/03/Progress-in-reducing-emissions-in-Scotland-2023-Report-to-Parliament.pdf>
- ⁸ <https://www.theccc.org.uk/wp-content/uploads/2024/03/Independent-Assessment-of-the-Third-National-Adaptation-Programme-NAP3.pdf>
- ⁹ <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2024/09/scottish-national-adaptation-plan-2024-2029-2/documents/scottish-national-adaptation-plan-2024-2029/scottish-national-adaptation-plan-2024-2029/govscot%3Adocument/scottish-national-adaptation-plan-2024-2029.pdf>
- ¹⁰ <https://www.gov.scot/publications/net-zero-nation-public-engagement-strategy-climate-change/>
- ¹¹ <https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf>
- ¹² https://www.ukclimaterisk.org/wp-content/uploads/2020/07/Understanding-how-behaviours-can-influence-climate-change-risks-Main-Report_AECOM.pdf
- ¹³ <https://consumer.scot/publications/consumer-duty-guidance/>
- ¹⁴ <https://consumer.scot/media/wmbbixzt/consumer-scotland-water-efficiency-reportdocx.pdf>
- ¹⁵ <https://www.gov.scot/publications/new-build-heat-standard-consultation-part-ii/>
- ¹⁶ <https://www.gov.scot/news/decarbonising-homes-and-buildings/#:~:text=A%20revised%20Heat%20in%20Buildings%20Bill%20will%20set,2045%20alongside%20continuing%20work%20to%20reduce%20fuel%20poverty.>
- ¹⁷ <https://www.transport.gov.scot/media/47052/national-transport-strategy.pdf>
- ¹⁸ <https://www.theccc.org.uk/wp-content/uploads/2021/06/Progress-in-reducing-emissions-2021-Report-to-Parliament.pdf>
- ¹⁹ <https://consumer.scot/publications/consumer-perceptions-of-and-engagement-with-the-transition-to-net-zero/>
- ²⁰ <https://www.gov.scot/publications/fairer-scotland-duty-guidance-public-bodies/documents/>
- ²¹ <https://www.gov.scot/publications/transition-fairer-greener-scotland/>
- ²² <https://www.gov.scot/publications/tackling-fuel-poverty-scotland-strategic-approach/>

²³ <https://www.gov.scot/publications/delivering-net-zero-scotlands-buildings-consultation-proposals-heat-buildings-bill/>

²⁴ <https://www.gov.scot/news/decarbonising-homes-and-buildings/>

²⁵ <https://consumer.scot/news/consumer-protections-in-the-green-home-heating-market-to-be-investigated/>

²⁶ https://assets.website-files.com/5e185aa4d27bcf348400ed82/6399cc007f63ad41fae0b240_CGR%20Scotland.pdf

²⁷ <https://consumer.scot/publications/consumers-and-the-transition-to-a-circular-economy/>