

Consumer views on climate change, water and Scotland's future: Follow up research

Policy implications and recommendations

Contents

Executive Summary1. Introduction2. Methodology	2 4 7		
		3. Findings	8
		Research Process and Participant Experience	8
Views, Attitudes and Behaviours	10		
Barriers to Action	11		
What are the broader challenges for engaging the public?	12		
4. Recommendations	13		
Future Water Challenges Understood	13		
Accessible Information	13		
Support Behaviour Change	14		
Call to Action	14		

Executive Summary

This report presents findings from follow-up qualitative research conducted by Ipsos on behalf of Consumer Scotland. The research revisited 24 participants from a previous study, 'Climate Change, Water, and Scotland's Future',¹ which explored how climate change might impact Scotland's water system and what this means for consumers. The follow-up study focused on two core areas: to understand which, if any, messages from the original research particularly resonated with participants and whether these had remained with them one year on, and how participants experienced the deliberative process.

The findings demonstrate that messages from the original deliberative engagement continued to resonate with participants one year on. Participants generally reported a deeper understanding of the challenges facing Scotland's water system, greater awareness of their own behaviours, and an increased willingness to act. Participants described practical behaviour changes, such as reducing water waste, installing water butts, and avoiding harmful substances, such as wet wipes and oil, in drainage systems. There were also those who became informal advocates, sharing information with others and encouraging behaviour change among others within their communities.

Key messages that resonated with participants most were those that impacted emotionally, had local relevance, or practical applicability. Particularly memorable topics included: the impact of climate change on Scotland's water resources, such as the risk of future water shortages; the rapid projected pace of change for Scotland's water resources; the extent of household water waste; and actions individuals could take to minimise water waste. Participants generally appreciated being given the opportunity to explore these issues in depth and in dialogue with others which had given rise to a heightened sense of responsibility among participants, although this was caveated with a strong view that Scottish Water, the Scottish Government and businesses should also be doing more.

While most participants described making meaningful changes, some reported barriers to action, such as the age or nature of their property, living in rented accommodation, lack of outdoor space, financial constraints, or having a disability or health condition. These findings emphasise the importance of designing climate change adaptation policies that are inclusive and flexible to individual household circumstances.

Feedback on the research process was overall positive. Participants found the format accessible, the information engaging, and the structure supportive of reflection and discussion. Recommendations for future engagement include providing clearer summaries, more time for questions and discussions, and continued use of online formats to ensure broader accessibility.

The follow up research underscores the importance of meaningful engagement with the public if we wish to secure value and behavioural changes that support climate change outcomes. It highlights the potential of public dialogue to build water related knowledge and behaviours. However, it also highlights a significant challenge: while in-depth research methods and engagement over a longer period of time can drive real change, how can the water sector scale up the benefits of deeper engagement and bring the wider public on a journey to a climate-resilient water future?

Consumer Scotland believes the insights from this report offer a strong contribution to support the development of an inclusive, informed, and collaborative approach to public education and engagement. Building water literacy is central to this effort, as it equips consumers with the knowledge and confidence to value water as a finite resource. Effective and consistent engagement methods are essential to empower consumers, influence values and change behaviours to meet the challenges of a changing climate within the water sector.

1. Introduction

- 1.1 Climate change is one of the defining challenges of our time, and its impact on water systems, globally and in Scotland, is becoming increasingly evident². Changing rainfall patterns, rising sea levels, more frequent extreme weather events, and shifting demand from population growth and urbanisation are already placing considerable pressure on the infrastructure that supplies and manages Scotland's water³. As these pressures intensify, so too will the need for adaptation and resilience in water and wastewater systems.
- 1.2 For consumers, the supply of water is a vital public service. While Scotland is often perceived as a "water-rich" country, this perception can obscure the real risks to consumers posed by climate change, such as water scarcity, flooding, pollution, and service disruption. Addressing these risks demands action from the water sector and the wider public. For meaningful change to occur, consumers must not only be informed but also supported and enabled to take the right actions. And for this to take place, consumers need to be engaged in a way that achieves lasting change.
- 1.3 In recognition of the need to understand consumer perspectives and deepen public engagement on these issues, Consumer Scotland commissioned Ipsos to undertake a major public deliberative research study in 2023, titled Climate Change, Water and Scotland's Future⁴. The research brought together 41 members of the public in a public dialogue in October and November 2023 to explore how Scotland's water sector should respond to climate change, the challenges this may involve, and the role that consumers themselves can and should play. The dialogue aimed to facilitate informed discussion, expose diverse views, test how people respond to the provision of information, and develop consumer understanding about climate risks and potential solutions within Scotland's water sector.
- 1.4 Subsequently, Consumer Scotland commissioned Ipsos to conduct a follow-up study in November 2024 to reconnect with participants and explore the extent to which the initial research had had a lasting impact. The objectives were twofold:
 - To explore the extent to which key messages from the original dialogue had been remembered by participants, influenced their attitudes, or shaped their behaviour over the year following the research; and
 - To assess the quality of the participant experience, including what participants found valuable about the process and how future deliberative research might be improved.

- 1.5 Participants were asked to reflect on:
 - what they remembered from the public dialogue
 - how it had influenced their understanding of the challenges that Scotland's water sector faces
 - and whether the research process had affected how they used water or discussed environmental issues in their communities
- 1.6 The results provide rich insight into what works, and what is less effective, when engaging the public on complex water infrastructure and climate challenges.
- 1.7 Crucially, the research illustrates that well-designed public engagement can equip consumers with the knowledge, confidence, and motivation to act. It shows that meaningful dialogue, when grounded in accessible information and personal relevance, can build public understanding and may lead to enduring behavioural change.
- 1.8 It also highlights significant barriers that can prevent consumers from engaging more fully, such as those related to cost, accessibility, tenancy, and personal circumstances. This points to the need for policy and industry responses that are inclusive, flexible and consumer focused.
- 1.9 From a policy perspective, this follow-up research and the deliberative research that preceded it offer several important contributions:
 - It provides evidence on the types of messages and formats that resonate most with consumers, and offers guidance to inform future communication strategies by the water sector
 - It highlights the practical and emotional factors that shape consumer attitudes and behaviours, including trust in public institutions, perceptions of fairness and responsibility, and the visibility of water services in everyday life
 - It identifies the actions consumers are willing and able to take, as well as where
 policy and regulation can better enable those actions, such as by promoting waterefficient technologies, incentivising sustainable drainage, or ensuring landlord
 cooperation in rental properties
 - It underscores the importance of systemic change to achieve lasting outcomes, recognising that while consumers have a role to play, they expect leadership from industry and government, especially in areas such as infrastructure investment, pollution prevention, and the rollout of nature-based solutions
- 1.10 This paper sets out a summary of the findings from the follow-up research. It draws on participants' reflections to explore:
 - climate-related messages that are more likely to "stick" with the public,
 - what motivates behavioural change
 - what challenges consumers face in contributing to climate adaptation.

1.11 It then reflects on the broader implications for water policy, including:

- how to communicate effectively
- how to enable consumers to contribute to climate change adaptation goals
- and how to build consumer trust in a period of growing environmental uncertainty.
- 1.12 Insights from this follow-up research will inform wider regulatory and policy debates. The Scottish Government has committed to a <u>just transition</u>⁵ to net zero by 2045, including climate-resilient infrastructure and services that are accessible and fair for all. Scottish Water's 25-year strategic vision, <u>A Flourishing Scotland</u>⁶, also identifies the need for new approaches to infrastructure, including more circular and nature-based systems, underpinned by deeper engagement with communities.
- 1.13 Consumer Scotland's statutory role is to represent the needs of current and future consumers in Scotland, ensuring that public services respond to changing needs, and that policy decisions are informed by evidence. As such, this research contributes directly to our understanding of the consumer dimension of climate adaptation, helping to ensure that no one is left behind in the transition to a more sustainable water sector.

2. Methodology

- 2.1 Ipsos re-contacted all those who had participated in the original public dialogue and given consent to be re-contacted and successfully completed 24 interviews with participants. Individual interviews were conducted by members of the original Ipsos research team and took place in December 2024 via telephone or video call.
- 2.2 Each participant received a £15 incentive for their time. As this was a self-selecting sample, it is important to acknowledge the limitations in representation, notably, there were no participants ages 18-24, and those who agreed to participate may have had a stronger interest in the subject matter than the wider public. The research was qualitative in nature and is not intended to be representative or statistically generalisable.

3. Findings

3.1 The follow-up research explored how participants from the original Climate Change, Water and Scotland's Future public dialogue reflected on the experience and whether key messages had a lasting impact one year on. The findings are organised into three main areas: research process and participant experience; views, attitudes and behaviours; and barriers to action.

Research Process and Participant Experience

- 3.2 Deep, deliberative engagement can leave a lasting impression on the public's understanding of water challenges, which can motivate tangible behaviour change.
- 3.3 Clear and engaging information, pitched at the right level, will more successfully educate and generate lasting change in how consumers engage with water and wastewater services. The original research demonstrates that spending time with consumers and clearly explaining the issues and allowing time to discuss them can generate informed individuals who understand not just what is important but why.
- 3.4 Encouraging consumers to engage with each other to discuss sector related issues enables a diversity of perspectives to be heard and improves understanding of how water issues affect different people.
- 3.5 Specifically, what had aided participants' understanding and information retention was:
 - Visual elements such as graphs, diagrams and images, and particularly the visual summaries, by artist Skye McCool, which displayed information and summarised discussions from workshops.
 - Case studies, for example climate change impacts on water and other countries'
 ways of dealing with this, or local case studies of draining solutions.
 - Statistics, facts and overall trends e.g. that a low number of Combined Sewer Overflows (CSOs) are currently being monitored.
 - Opportunity for discussion with facilitators and other participants.
 - The "online community" forum which acted as a space for participants to further discuss their learnings and views between sessions, access previous workshop materials, and complete short tasks, supporting engagement and benefiting some of those with different processing needs.

- 3.6 Online engagement offers convenience and accessibility, especially for those working, with childcare responsibilities, or those living long distances apart or from the location of research events, and for those who prefer virtual participation rather than in-person events.
- 3.7 Successful engagement may include:
 - Short written pieces of information setting out the important points
 - Recapping important points within general information
 - Opportunity for consumers to ask questions and test their understanding
 - Time to discuss issues and consolidate learning
- 3.8 The most memorable information was typically:
 - Emotionally impactful (e.g. the risk of future water shortages)
 - Locally relevant (e.g. mentions of flooding or drainage issues in their own area)
 - Actionable (practical and can be implemented into their lives, e.g. case studies of local drainage solutions to reduce runoff)
 - Personal interest (personally engaging or meaningful e.g. Scotland's Victorian era infrastructure resonated with those interested in history).
- 3.9 Climate related messages that had 'stuck' with participants one year on from taking part in the original deliberative research, and may also have a greater likelihood of 'sticking' with the wider public, included:
 - Scotland's vulnerability to water shortages and flooding
 - The impact on water and wastewater infrastructure from population shifts from west to east
 - The need for more preparedness to mitigate climate change impact on water and wastewater services
- 3.10 Those who participated in the deliberative research were able to recall a range of information and messages from the original dialogue, particularly messages about the impact of climate change on Scotland's water supply.
- 3.11 Exposure to Scotland's potential vulnerability to water shortages despite high rainfall, were surprising to participants and generated concern that more was needed to address this. Information on the pressure on water and wastewater services resulting from population shifts, outdated Victorian-era infrastructure, low monitoring of sewer overflows, and the impacts of flooding on water quality elicited the same response.

Views, Attitudes and Behaviours

- 3.12 Information retained by participants has subsequently shaped their attitudes. Participants reported a stronger appreciation of Scotland's water and wastewater systems, a better understanding of how water services are funded, and a belief that climate change impacts were being taken seriously, though some were frustrated by the slower pace of change on some issues and felt there was too much focus on individual citizen responsibility. Engaging with consumers over a longer period of time elicited more informed views.
- 3.13 Participants reported that their behaviour had changed as a result of taking part in the research. These included:
 - Reducing water waste (e.g. shorter shower times, not leaving the tap running, only washing full loads in appliances)
 - Increasing rainwater capture through using water butts
 - Preserving green spaces in gardens to improve drainage
 - Avoiding flushing wipes and other unsuitable items, and using eco-friendly cleaning products
- 3.14 The research methodology applied in the original research study has generated informal advocates who report that they have shared what they have learned with friends, family, and community members, sometimes online, and have encouraged others to take similar steps. This approach has also fostered local champions who advocate for change within their own areas, helping amplify the impact beyond individual behaviour.

Barriers to Action

3.15 Participants highlighted constraints in changing how they engage with water or wastewater services. These align closely with Consumer Scotland's <u>A consumer</u> framework for addressing climate change⁷, which sets out the 4 Cs.



- 3.16 Confidence: some participants felt they were already operating water-efficiently, suggesting a lack of confidence that further action would be impactful or necessary. In addition, some consumers cited personal circumstances, such as being unable to avoid high water usage due to health conditions, disability, or occupational needs.
- 3.17 Clarity: Others were unsure what additional actions they could take, indicating a need for clearer guidance and communication.
- 3.18 Convenience: structural and situational barriers, such as property constraints and adaptation difficulties, may constrain those wishing to take action:
 - Those who rent their home often require landlord permission for changes such as installing a water butt
 - Physical limitations where they live and a lack of outdoor space may restrict options
- 1.14 Cost: financial and logistical challenges, especially in remote or rural areas, can limit the uptake of water-saving infrastructure, such as water butts.
- 3.19 These findings highlight that consumer motivation alone is not sufficient to achieving behaviour change. Convenience, cost, clarity and confidence are key to enabling sustainable change.

What are the broader challenges for engaging the public?

- 3.20 There are recognised challenges for the water sector in taking lessons learned from the deliberative research process and 'scaling up' or adapting these for the general public. It would be impractical and unaffordable to attempt to replicate a deliberative exercise on a nationwide scale. However, a number of principles have emerged, which will support a more generic as well as targeted approach to engaging people in more sustainable climate change adaptation.
 - Clear, accessible, and locally relevant communication
 - Practical, inclusive solutions that address structural barriers
 - Public engagement approaches that are flexible, inclusive, interactive, and build trust
- 3.21 For engagement to achieve lasting change with the wider public, methods of engagement must be designed around the needs of those being asked to make those changes. Additionally, public engagement needs to be adequately resourced and prioritised and messaging made accessible, convenient, engaging and inclusive.
- 3.22 To achieve lasting change, engagement methods must be designed around the needs and realities of those being asked to act. Aligning with the Climate Change framework, this includes:
 - Cost: Ensuring engagement is adequately resourced and affordable for both implementers and participants
 - Convenience: Making messaging and participation easy and accessible
 - Clarity: Providing straightforward, plain English information
 - Confidence: Creating inclusive spaces that foster trust and empower individuals to take meaningful action

4. Recommendations

4.1 The following recommendations are grouped under four themes: future water challenges understood, accessible information, behaviour change, and call to action.

Future Water Challenges Understood

4.2 **Recommendation 1:**

- 4.3 Public engagement strategies undertaken by the Scottish Government and Scottish Water must aim to:
 - Educate consumers on the issues facing the water sector in Scotland as a result of
 climate change, and support understanding of how this relates to them, the
 importance of their role in tackling such challenges. These messages should
 highlight the role for consumers in 'partnering' with the water sector to address
 these challenges. Consumer Scotland has developed a consumer framework for
 addressing climate change with a toolkit which may support public engagement
 strategy⁸.
 - Provide consistent information on how consumers should respond to climate change challenges, what this looks like, and how the proposed actions will help to protect water service provision and the environment. Consumer Scotland has previously recommended water industry stakeholders should coordinate consistent public messaging around 'common sense' water saving behaviours⁹.
 - Focus on local issues where possible to generate consumer engagement and interest, particularly related to water scarcity or flooding. Some messages, such as the need to waste less water and appropriate disposal of household waste, will apply universally.
 - Promote water-saving messages all year round- even when it's raining- so people
 don't only think about saving water during dry weather, or only associate the need
 to do so when it is dry.

Accessible Information

4.4 Recommendation 2:

4.5 The water sector in Scotland should **provide messaging and information in varied,** accessible formats (e.g. media visuals, case studies, statistics, and clear narrative) to

address different learning styles and improve retention. Consideration should also be given to developing multiple communication channels.

Support Behaviour Change

4.6 Recommendation 3:

4.7 **Simple, low-cost, and visible water-saving solutions** that consumers can adopt with minimal barriers should be promoted by water sector organisations such as Scottish Water. This includes shorter shower times, using water efficient appliances, rainwater harvesting methods and preserving green space to support natural water drainage).

Scottish Water should monitor behaviour change to assess how effective engagement methods are and to guide further actions that support climate change goals.

4.8 Recommendation 4:

4.9 Scottish Government and Scottish Water should explore ways **to remove barriers to participation by consumers** who are motivated to act but face challenges – such as
limited finance, living in rented properties living in rural or remote rural areas, or having
long term health conditions or disabilities, or restricted outdoor space.

Call to Action

4.10 Recommendation 5:

- 4.11 A public call for behaviour change should be coordinated, consistent and sustained, out with weather events, by Scottish Water, the Scottish Government, and businesses to increase engagement, education and subsequent action. It should focus on a longer-term change in how consumers engage with water and wastewater service, otherwise there is a risk that weather related engagement only achieves action on a short-term basis. Consumer Scotland has previously acknowledged cross-sector stakeholder collaboration as being a path to success¹⁰.
- 4.12 Institutional leadership and investment are needed from the Scottish Government and Scottish Water to support meaningful and sustained individual and collective public participation.

4.13 Recommendation 6:

4.14 Scottish Water should help develop **local climate change advocates** through the provision of resources and messages that empower community level action and peer-to-

peer influence. Consumer Scotland has previously recommended working in partnership with consumers and communities in decision making and action 11 .

References

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