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Mapping public engagement on the heat transition in Scotland

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1 Executive summary

This report sets out key findings from an exercise that mapped public engagement activities on the heat transition in Scotland.

The aim of the research was to help inform the delivery of the Heat in Buildings Public Engagement Strategy by addressing questions related to who delivers engagement activities and to whom, the type of activities and messages, and gaps in engagement.

We conducted a web search, interviews with experts from organisations involved in the heat transition and an online survey of organisations delivering public engagement activity.

1.1 Findings

Overview of ongoing activities:

- A **wide range of organisations** across the public, private and charitable sectors have been delivering public engagement activities on the heat transition in Scotland.
- The **types of public engagement have also been varied**, with the most common being advice services, workshops and information sharing online.

Target audience, messaging and accessibility as discussed by **experts and organisations:**

- Engagement activities were mostly **open to the general public**. There were also some specific target groups identified, including residents within a specific geographic area, homeowners, people in fuel poverty, low-income households and energy sector professionals.
- Despite attempts to engage a broad range of audiences, **those actually engaged in the activities were typically more climate aware than the general public overall**.
- Messaging that was focused on **home energy efficiency** and **reducing energy bills**, rather than the adoption of clean heating systems, resonated better with wider audiences in the context of the cost of living.

- Engagement on **"simple fixes"** (e.g. turning boiler temperature down) was therefore more widespread than messaging around bigger steps (e.g. installing a heat pump).
- Activities delivered through **trusted messengers and existing local channels** were accessible forms of engagement.
- **Tailoring messages** to the specific target audience was an effective approach to accessible engagement as it helped to improve understanding.

Gaps in public engagement identified by experts and organisations**:**

- **Audiences under-engaged** on the heat transition included private landlords, renters, professionals in the energy sector, young people and the digitally excluded.
- **Lack of regulatory clarity** on clean heat and energy efficiency was a key reason for the engagement gap among landlords and the energy sector.
- The **upfront costs** of transitioning were a barrier to widening reach among the general public, especially in the context of the cost of living crisis.
- **Key messaging gaps** in public engagement included:
    - A lack of public understanding of heating systems.
    - Insufficient practical and transparent advice on installing and operating clean heating systems.
        - Interviewees thought that certain aspects of the transition, such as what clean heating systems are and how to install them, were not successfully communicated to the wider public due to their perceived complexity.
        - They felt that communication about the efficacy of clean heating systems, based on real use cases, was lacking.
- There was a **shortage of trusted messengers** providing reliable, impartial advice, as well as a lack of tradespeople able to provide technical support on the practical aspects of the transition.

1.2 Conclusions

To ensure that public engagement on the heat transition builds on what has been done before and is effective in prompting action, consider:

- **Prioritising** the private rented sector, professionals in the energy sector and those who are digitally excluded:
    - **Firstly, engage with the energy and private rented sectors** to drive engagement and action forward, for example by sharing information and practical advice among the wider public.
    - **Secondly, engage with the general public**, emphasising the experiences of early adopters to build trust in the efficacy of clean heating systems.
- **Tailoring messages** to the audience:
    - For industry professionals, provide clarity on the changes required and reassurance on the support available.
    - For the general public, make it easier for those who are more highly motivated by the climate crisis to take action, so that there are more operational examples to encourage those who may be more hesitant to take action.
    - Highlight the financial benefits and availability of grants and loans.

- **Building trust**:
    - Improve the baseline public understanding of clean heating systems.
    - Communicate transparently around the needs, benefits and risks of transitioning to a clean heating system.
    - Use trusted messengers who are already embedded in local communities.
- **Providing regulatory clarity,** as organisations feel they cannot deliver effective public engagement activities without knowing if and when clean heat and energy efficiency regulations will come into force, and what specific changes will be required.

Contents

2 Introduction

This report presents the findings from research conducted by Ipsos on behalf of ClimateXChange and the Scottish Government, mapping public engagement on the heat transition in Scotland.

2.1 Background

Scotland's climate change legislation sets a target date for net zero emissions of all greenhouse gases by 2045. The Scottish Government reports that domestic buildings account for around 12% of Scotland's greenhouse gas emissions, and non-domestic buildings contribute another 7%. Urgently reducing emissions from Scotland's buildings is therefore a crucial part of achieving net zero, and will require the majority of households in Scotland to change their heating systems. Plans for this are set out in the Scottish Government's Heat in Buildings Strategy (HiBS). The process of transitioning heating from using fossil fuels to using clean heating systems, is often referred to as the 'heat transition'.

To ensure success in decarbonising Scotland's home heating, public engagement is key. Existing research by Consumer Scotland highlights a general lack of awareness among the Scottish public about the heat transition, clean heating systems, and low-carbon technology. Building on this, research conducted for ClimateXChange included recommendations about the ways in which messages around the heat transition should be communicated to the public, including making a positive case for change in a highly visible way, harnessing the influence of existing trusted messengers to deliver information consistently, and giving plenty notice in advance of any legislation being announce. The Existing Homes Alliance Scotland published a report in July 2023 which highlighted the need for clear and tailored messaging, backed up with accessible resources, to encourage action at the scale and pace required to reach net zero.

In this context, the Scottish Government published its Heat Transition Public Engagement Strategic Framework in December 2023 to guide its engagement work around clean heat and energy efficiency. The Framework aims to ensure the Scottish public are aware of and understand the changes required in the heat transition, know how to access support, can actively participate in shaping policy, legislation and delivery schemes, and importantly can take action in decarbonising their homes.

2.2 Research aims

ClimateXChange and the Scottish Government commissioned Ipsos Scotland to map existing public engagement on the heat transition in Scotland to help inform the delivery of the Heat in Buildings Public Engagement Strategy.

This public engagement mapping aimed to address the following research questions:

1. Who is delivering engagement activities?
2. What types of activities are being delivered?
3. Which audiences are being targeted?
4. What types of messages are being communicated?
5. How accessible are messages and activities?
6. Where are the gaps in engagement?

2.3 Method

The research involved three strands:

1. **A web search** to identify public engagement activities.
2. **Interviews with 10 experts** representing a range of organisations involved in the heat transition.
3. **An online survey** of organisations delivering public engagement activity.

A brief overview of each strand is provided below, and a more detailed methodology can be found in Appendix A.

2.3.1 Web search

First, a web search was conducted using defined search parameters and search strings (see Appendix B) in May 2024. The web search included a traditional search using Google and Google Scholar, and Ipsos's proprietary social media listening tool, Synthesio.[1]

Over 2,500 references to public engagement across social media channels were reviewed and, from those initial results, 62 instances of engagement matched the inclusion criteria and were included in the analysis. The results from the web search also informed the sample development for the expert interviews and online survey, and the design of the interview topic guide and questionnaire.

2.3.2 Expert interviews

Interviews were conducted with 10 organisations involved in the Scottish heat transition from 30 May to 7 Aug 2024 (identified via web search and recommendations from the Scottish Government and ClimateXChange). The profile of expert organisations included a

[1] Synthesio is an Ipsos proprietary tool that trawls the social web and mainstream media to monitor online presence and identify posts, re-posts and tags on a given topic (in this case, public engagement on the heat transition in Scotland).

mix of charities/advice services, climate hubs, private companies, non-government organisations and industry bodies.

This strand of the research explored the different types of public engagement activities currently being delivered in Scotland in more detail. A topic guide was developed by the Ipsos research team and reviewed by ClimateXChange and the Scottish Government (see Appendix C). Interviews also helped to identify potential organisations for inclusion in the online survey sample.

2.3.3 Online survey

The third strand of the research involved a five-minute online survey with organisations delivering public engagement activities in Scotland to explore the purpose and nature of these activities. The questions were designed by Ipsos and reviewed by ClimateXChange and the Scottish Government (see Appendix D).

An initial sample of 78 contacts was generated by Ipsos through the web search and interviews, and the survey link was also shared by ClimateXChange and the Scottish Government, through various email networks and communications channels, to broaden participation.

The survey was live for five weeks, from 19 June to 24 July 2024, and 34 completed responses were received. Of these, 25 organisations reported that they had delivered some form of public engagement in the last three years.

2.3.4 Analysis

The data generated from the web search, interviews and online survey was used to map the range of activities (including details such as the type of activity, who delivered it, when it happened, who it was aimed at, and the topics covered). More reflective themes relating to impact, challenges and possible gaps in engagement were drawn from online survey results and the interviews.

2.4 Scope and limitations

The web search identified a wide range of public engagement activities across Scotland over a number of years. However, this search was not exhaustive, as it was limited to what was available online, and provided varying levels of detail depending on what was published. Data collected from interviews with experts provided more in-depth and reflective insights from a range of perspectives, but on a much smaller range of activities than that of the web search. Meanwhile the online survey provided insights on activities across a wider range of activities, but not in as great a depth, as those gathered from the interviews.

Using multiple data sources has enabled a more comprehensive understanding of public engagement activity in Scotland than any one source would be able to provide. However, it is important to acknowledge that the research parameters may have overlooked some forms of public engagement (particularly those at a small community level or those not promoted online). Furthermore, not all perspectives on the heat transition (such as those of the intended target audiences) have been captured.

The online survey was an open link and responses were gathered anonymously. This means that the data may contain multiple responses from the same organisation and duplication of responses between the survey and web searches. Interviews were also conducted confidentially, and so their views have been reported anonymously. Any examples or organisations mentioned in the report are taken from publicly available information and it should not be assumed that they correlate with organisations taking part in either the depth interviews or online survey. Where more detailed case studies are provided (e.g. in relation to Impacts), these have been shared with the permission of the main delivery organisation responsible.

Lastly, online survey results are based on a small sample and so should be read and interpreted with this in mind. Where percentage figures don't sum to 100, this is due to computer rounding. Where counts do not sum to the base, this is due to questions allowing multiple responses.

3 Public engagement on the heat transition

This chapter provides an overview of the types of public engagement that have taken place in Scotland between October 2021 and May 2024 and the organisations delivering them. It addresses the following research questions:

- Who is delivering current heat transition-related engagement activities and messaging in Scotland?
- What types of activities are being delivered?

This chapter also explores awareness of the Scottish Government's Heat in Buildings Strategy among the organisations delivering public engagement.

Key findings

- A wide range of organisations from across the public, private and charitable sectors, have been delivering public engagement activities on the heat transition in Scotland.
- The types of public engagement have also been varied, with the most common being advice services, workshops and information sharing online.
- Awareness of the HiBS is high among those delivering public engagement.

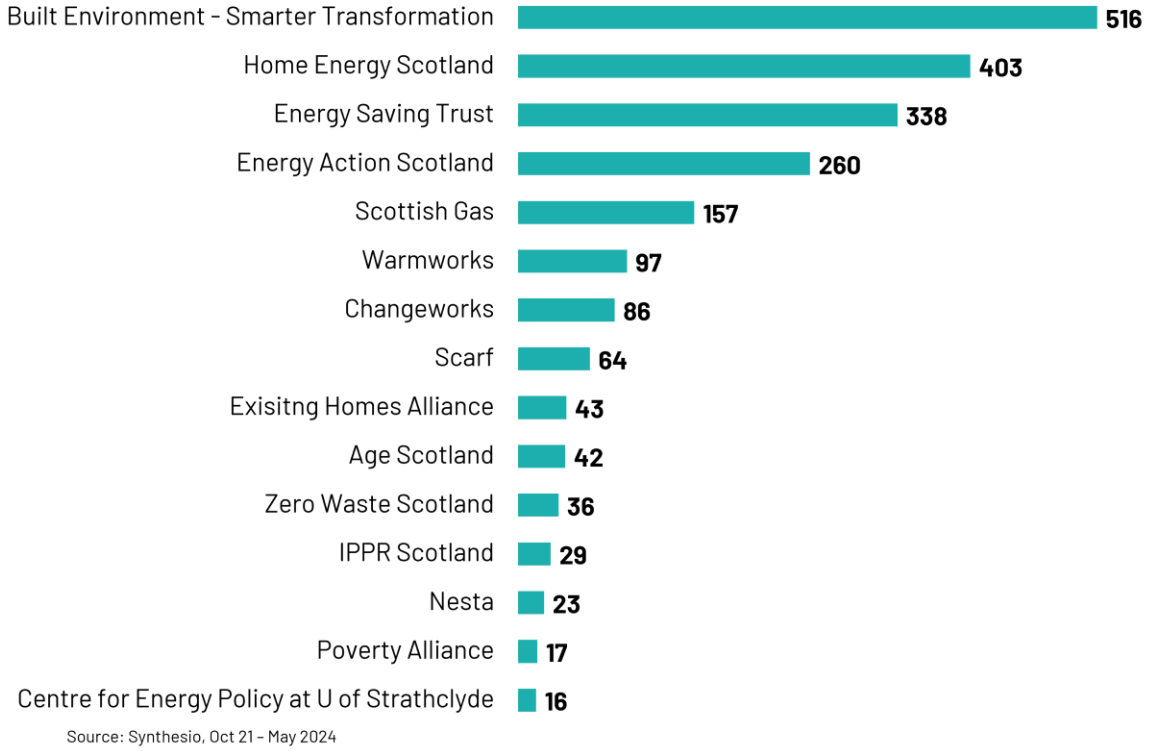
3.1 Who is delivering current heat transition-related engagement activities and messaging in Scotland?

The web search, survey and expert interviews identified a range of organisations delivering public engagement activities in relation to the heat transition since October 2021, including:

- **Charities**, such as One Parent Families Scotland, Age Scotland, Under One Roof, and Community Energy Scotland.
- **Non-profit organisations and social enterprises**, such as Nesta, Scarf and Energy Action Scotland.
- **Community groups,** such as climate hubs and local interest groups.
- **Private sector organisations,** such as UK energy companies.
- **Advice and support bodies,** such as Energy Savings Trust (who administer the Scottish Government's Home Energy Scotland service).
- **Collectives, consortiums, networks or member groups** that include organisations representing a range of sectors (e.g. Built Environment-Smarter Transformation and the Poverty Alliance).
- **Local authorities.**
- **Education and research institutes**, such as the University of Strathclyde and the Energy Training Academy.

The Synthesio (social media listening) search provided an indication of the extent of activity and messaging from particular organisations, based on volume of online mentions (see Figure 1). This does not necessarily mean that these organisations have delivered more engagement, but rather reflects higher levels of posts on the heat transition by organisations directly or by other actors citing them.

Figure 1. Organisations delivering public engagement by volume of online mentions



3.2 What types of activities are being delivered?

The types of activities being delivered were broad, and included advice services, workshops and various types of information and knowledge sharing. The online survey data and Synthesio search provided a snapshot of this range (see Figure 2), which was also reflected in the interviews.

Figure 2. Types of public engagement activities

Source: Online survey (base: 25 participants whose organisations had carried out public engagement activities in the last three years) and Synthesio, Oct 2021 – May 2024 (base: 62 activities reviewed)

Among the most common types of public engagement activity were **advice and support services**, which have been delivered by a range of organisations (including non-profits, non-government bodies, charities and community groups). This was a broad category encompassing free impartial advice on energy saving measures and keeping homes warm, through to practical advice on installing renewable technologies and verifying providers of retrofitting work. A range of advice and support services were accessible online, in-person and via telephone.

Advice and support services example

energy saving trust

Energy Saving Trust is an independent organisation supporting households and businesses towards decarbonisation, and is one of the Scottish Government's main partners in addressing the climate emergency.

Their **Green Homes Network** connects those interested in low carbon heating with householders who have installed clean heating systems through a database. Households give permission to post case studies so others can find out about their journeys and contact them for further advice. Households may also be invited to speak at webinars or to the press about their conversion to a new heating system.

Workshops were delivered by a range of actors (including local authorities, charities, non-government organisations, social enterprises and community groups). Some were one-off events while others were run as a series of workshops. The aims of the workshops included: to generally increase knowledge and understanding around the Scottish Government's heat policy, to help community groups and individuals reduce costs, and to inform individuals on the availability of grant funding for heat transition projects and energy efficiency improvements.

Workshop example

Transition Black Isle is a community group that aims to help Black Isle communities respond to the climate emergency and to encourage non-car travel, local food production and energy saving measures. The group organised a series of workshops in March 2022 on **low carbon home heating** which involved expert speakers and group discussions:

- Session 1 explored ways to make houses warmer and cheaper to heat without compromising air quality or risking damage to building fabric.
- Session 2 identified various low carbon methods of home heating and circumstances which suit each approach.
- Session 3 covered managing these changes, including financial support, choosing contractors and incorporated advice from those who had already been through the process.

Lectures and talks were delivered by organisations of all types. Some events were open to the public, either as stand-alone events or pop-ups as part of other events or festivals, and provided opportunities to learn about opportunities and risks in making properties more energy efficient. Others engaged industry professionals specifically and provided information on the Scottish Government's energy policy, availability of funding, best practice for retrofitting schemes and challenges in heat pump deployment. There was also evidence of employee engagement, with organisations being invited to give talks to advise employees on ways to save energy at home.

Training and knowledge sharing were typically targeted at industry and policy makers. These took the form of panel discussions and events, as well as online networks/hubs to facilitate knowledge exchange and practical training modules on aspects of the heat transition.

Training and knowledge sharing example

HeatSource is a programme funded by Scottish Enterprise that aims to better equip companies involved in manufacturing, installation, training and the wider supply chain to deliver clean heating systems.

The programme seeks to support the decarbonisation of Scotland's built environment through the creation of an online information hub to help industry maximise the opportunities around new zero carbon heating.

Various organisations have provided **information online and delivered public information campaigns** aimed at the general public, including:

- **Get a Heat Pump** - a website that provides information on what a heat pump is, how to get one installed and the associated costs (Nesta).
- **Heat pump heroes** - an annual awareness-raising campaign to promote conversion to heat pumps (Home Energy Scotland).
- **Money-saving boiler challenge** - a public-facing campaign which aimed to raise awareness about how to use energy more efficiently and save on bills (set in the context of the cost of living crisis) (Nesta).

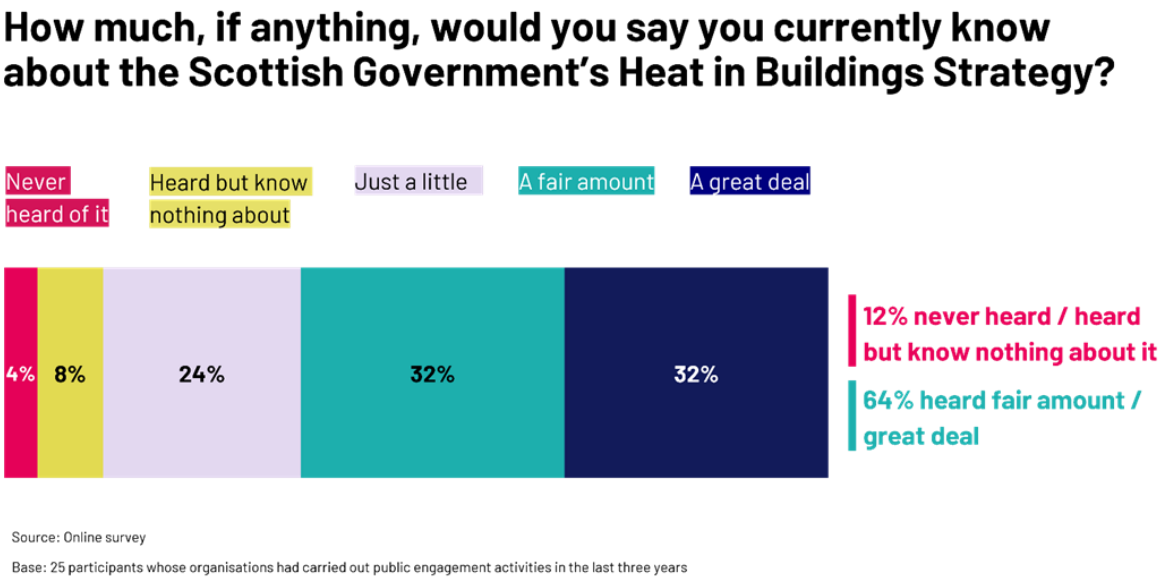
Other public engagement activities included:

- **Showcases**, including live demonstrations and trial installations of heat pumps in different types of homes to gather user feedback.
- **Consultations**, typically delivered by community groups to gather responses to the Heat in Buildings (HiBs) proposal and the Scottish Local Heat and Energy Efficiency Strategies (LHEES).
- **Advocacy work**, such as speaking up for consumers who have had issues with clean heating systems (e.g. increased energy costs) and opinion pieces published in media outlets to raise awareness and tackle myths around the heat transition.

3.3 Awareness of Heat in Buildings Strategy

Among organisations that have delivered public engagement activity and responded to the online survey, the majority (88%) reported knowledge of the HiBS, of which just under two-thirds (64%) said they knew a fair amount or great deal about it. Just over one in ten (12%) had either heard of the strategy but knew nothing about it, or had never heard of it (see Figure 3).

Figure 3. Awareness of the HiB strategy among survey participants



Experts interviewed for the research also reported that their organisations had high levels of awareness and understanding of the HiBS. This was based on their existing relationships with the relevant policy teams in Scottish Government, involvement in the initial consultation process, and/or providing responses to it. Other ways in which experts mentioned becoming familiar with the strategy included through the introduction of new build heat standards and working with local authorities.

4 Target audiences and messaging

This chapter provides an overview of the types of public engagement that have taken place between October 2021 and May 2024 and the organisations delivering them. It addresses the following research questions:

- Who is the target audience of these activities?
- What types of messages are being communicated?
- How accessible are the activities being delivered?

Key findings

- **Activities were mostly open to the general public**, however, there were some target groups identified (e.g. residents within a specific geographic area, homeowners, people in fuel poverty, low-income households and energy sector professionals).
- **Messaging focused on home energy efficiency and reducing energy bills,** rather than the adoption of clean heating systems, was felt to resonate more with wider audiences.

- **Engagement on "simple fixes"** (e.g. turning boiler temperature down) was therefore more widespread than practical messaging around bigger steps (e.g. installing a heat pump).
- Activities delivered through **trusted messengers and existing local channels** were felt to be more accessible forms of engagement. **Tailoring messages** to the specific target audience was also a key consideration.
- **However, there was a clear distinction between intended target audiences and those actually being engaged**, who typically were those who were already more climate aware in any case.

4.1 Who is the target audience of these activities and messaging?

Public engagement activities were mostly targeted at a broad, general public audience. Evidence gathered from the Synthesio search, interviews and survey showed that activities were often advertised as open to all, rather than targeting a specific demographic. This was driven by the understanding that there are high levels of concern about climate change among the general public (an assertion supported by public opinion research), and that the environmental impact of energy use affects everyone, which requires a wide reaching approach to engagement.

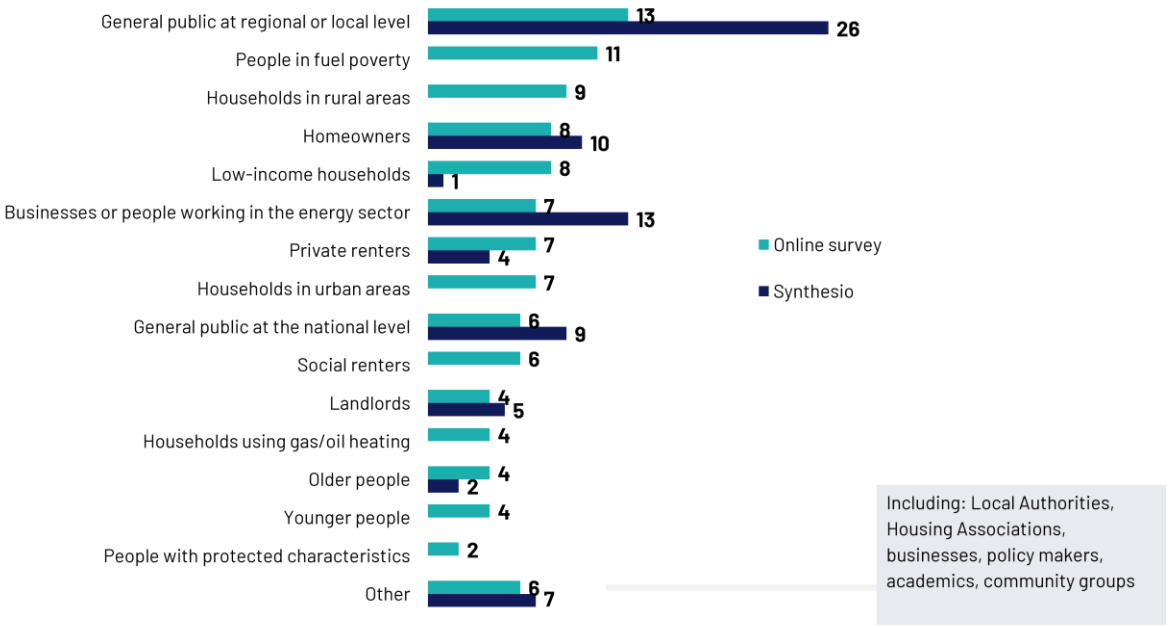
However, the research highlighted a clear distinction between audiences being targeted and audiences actually being engaged.

4.1.1 Intended target audiences

While most engagement activities were targeted at the general public, the research also found evidence of some activities targeted at specific groups, including local residents of a specific geographic area, people in fuel poverty and low-income households, homeowners, and energy sector professionals (see Figure 4).

However, it should be noted that delivery organisations responding to the online survey often mentioned targeting multiple different groups rather than one group in particular.

Figure 4. Target audiences (number of mentions by organisations delivering public engagement activities)



Source: Online survey (base: 25 participants whose organisations had carried out public engagement activities in the last three years) and Synthesio, Oct 2021 – May 2024 (base: 62 activities reviewed)

Public engagement at regional or local levels was found to be happening across Scotland, with most events concentrated in Edinburgh and Glasgow and a smaller number of activities being delivered in East Lothian, Falkirk, Perth and Kinross, Dundee, West of Scotland, Fife, Aberdeen and Aberdeenshire, and Highlands. There was some evidence of public engagement activities happening on the islands, highlighted by experts, however this was more limited (which could reflect the fact that engagement was more localised and less promoted online).

People in fuel poverty and low-income households were frequently identified as a key target group for engagement activities. However, evidence from the Synthesio search and from the interviews indicated that the primary focus of those activities was encouraging simple energy efficiency changes that would lead to lower energy bills rather than promoting a transition to clean heating systems.

There was also some evidence of engagement targeting **energy sector professionals** (e.g. through conferences, knowledge-sharing and training). However, there was a broad view among experts that this group had not been sufficiently engaged (see Gaps).

4.1.2 Audiences actually being engaged

While activities were advertised as open to all (with some targeting), experts observed that they tended to draw interest from those who were typically more climate aware, highly engaged on the topic of sustainable home energy solutions, and more involved in their community anyway. This is consistent with earlier research conducted for ClimateXChange which found that early adopters tend to have higher than average knowledge of, and interest in, climate change as well as time and willingness to research energy alternatives.

In line with this research, the demographic profile of those who experts perceived to be more engaged was described as homeowners over the age of 40 with disposable income. It was also suggested that men were more likely to be interested in installing low-carbon heating technology than women. Experts cited lower attendance rates among other groups as a particular challenge to widening reach (see challenges).

4.2 What types of messages are being communicated?

Messaging around the heat transition mainly focused on energy efficiency rather than the adoption of clean heating systems, according to both the survey (see Figure 5) and Synthesio findings.

The focus on energy efficiency measures was seen to be driven by the cost of living crisis and rising energy prices. Experts highlighted energy efficiencies and reducing energy bills as messaging that had resonated most with the public and led to greater engagement. Some examples of this type of messaging included:

- **"Warmer Homes, Cheaper Bills, Greener Lives"** (an event organised by Sustaining Musselburgh and advertised on Eventbrite).
- **"How to save cash with a single change to your boiler settings"** (from Nesta's Money-saving boiler challenge).
- **"To help you lower your energy bills and have more energy efficient homes, whilst also reducing your carbon footprint"** (from Thurso Community Development Trust's home energy advice webpage).

Organisations that had delivered engagement activities with more of a focus on retrofit and the installation of heat pumps reported using the benefit of cheaper bills as a "pitch" to increase engagement among the wider public. This type of messaging was considered to resonate more with the public than messaging around heating systems.

There was also a perception among experts that the public have a limited understanding of their current heating systems. Experts felt that this, coupled with existing financial pressures, was contributing to a lack of curiosity about installing greener alternative

systems. As highlighted in the examples above, some delivery organisations have focused on smaller, easier steps to address this and encourage engagement.

Organisations reported that they had found messaging focused on easy steps and "simple fixes", such as turning down the flow temperature of a boiler, to be more effective than discussions around new heating systems. This reflects other recent research findings on heat transition communication, which suggested that messaging should be breaking down behaviour into small steps. Experts also felt that ensuring a basic understanding of how existing heating solutions affect bills would be an essential first step to engaging households about further decarbonisation measures beyond energy efficiency.

The web search and online survey found more limited evidence of practical messaging around bigger steps such as how to install and operate clean heating systems like a heat pump. Experts felt that this type of messaging was primarily engaging people who were already motivated to change their heating system.

4.3 How accessible are messages and activities being delivered?

Delivering engagement through **trusted messengers** was highlighted by experts as one of the more effective approaches in terms of accessibility. For example, engaging the public through existing community networks was a way in which some organisations had engaged hard-to-reach demographics, such as older people, people in poverty and vulnerable groups.

> "That type of engagement [with vulnerable demographics] has to come from local trusted messengers – it's about building that relationship. It's not going to come from anywhere else for the most vulnerable. I think that is where there's a role for community organisations to play."
> Climate Hub (interview)

Experts also highlighted local community events that are already well-attended by local residents as an effective way of promoting transition messaging to the broader public and extending the reach of engagement beyond the climate aware audiences. For example, one organisation had delivered entertainment for children at family-friendly local events to engage parents.

Synthesio search findings suggest that most activities had been held either **online or in hybrid** form and experts felt that this had promoted greater accessibility across Scotland. **Social media** was also used as a method of advertising and delivering engagement, particularly to reach younger demographics more effectively. Nevertheless, while the value of online activity for promoting wider reach was acknowledged, face-to-face engagement was still widely considered by experts to be the most effective.

Among the activities delivered, there was also evidence of public awareness campaigns utilising TV and printed media to reach a broad audience, including Nesta's "Money Saving Boiler Challenge", Citizens Advice Scotland's "Big Energy Saving Winter" and Smart Energy GB's "Smart Energy Heroes". According to experts, wider public campaigns (in combination with simple and accessible messaging) have been most accessible for members of the public not already aware of, or engaged on, energy and climate issues.

Delivery organisations also reported the use of **simple and clear messages** to improve the accessibility of their public engagement activities. Experts felt that emphasising the energy efficient changes that individuals could easily adopt in their homes and outlining the financial benefits of making them was most effective in improving understanding of the impact of heating systems on the climate. In particular, the importance of clearly presenting the financial case for change was highlighted, recognising the challenges people face currently with their energy bills.

> "The challenge is making sure the information is really simple and easy to access and reflects the fact that people are in crisis at the time - just transition terminology, for example, doesn't work."
> Charity (interview)

Using **informal ("chatty") language** in communication with the wider public on energy advice was felt to have promoted both accessibility and trust. The importance of positive, hopeful and uplifting rhetoric was highlighted, such as an emphasis on the short-term benefits (e.g. immediate decrease in energy bills). This was seen as particularly effective for effectively reaching low-income households and those in fuel poverty.

> "The scale of the transition is immense and the potential opposition to some of what's needed is also significant, so there's a need to make sure that there are as many positive and supportive voices as possible to counter the noisy negativity." Charitable organisation (interview)

Experts also emphasised the importance of tailoring messages to the specific target audience as a way to improve accessibility and understanding of information. For example, one expert described how their organisation changed the focus and language of any transition-focused activity depending on who they were aiming to reach. When speaking to tenants, they would highlight the links between climate change and heating and assert the case for the need for transition, while when addressing flat owners, they would discuss the specific challenges this group faces and focus on heat networks rather than heat pumps as a solution.

Some experts reported offering advice and information services in different languages and providing materials accessible to people with different reading abilities. However, among

those delivering engagement, evidence of organisations making these accessibility considerations was limited.

Despite these considerations for delivering accessible engagement, our interviews identified accessibility as a challenge. This related primarily to the complexity of the topic and the highly technical language of certain aspects of the heat transition which was widely considered to be inaccessible and, therefore, limiting the reach of engagement beyond those who are already engaged on climate issues. Some examples that were recognised as particularly difficult for the wider public to understand included EPC ratings and the practicalities of choosing and installing clean heating systems. This is discussed in more detail in the following chapter.

5 Reflections on the effectiveness of public engagement

This chapter reflects on the perceived impact of public engagement activity and the challenges that delivery organisations have experienced, before summarising any future public engagement being considered or planned by delivery organisations who participated in this research.

Key findings

Impacts

- **Simple messaging** that focuses on easy energy efficiency actions and outlines financial benefits were felt to be the most effective forms of public engagement, building trust through the use of **trusted messengers**.
- Building **trust** with the audience was identified as one of the most important aspects of delivering successful engagement. Community-level engagement was seen as an effective way to foster that trust and reach hard-to-reach groups.

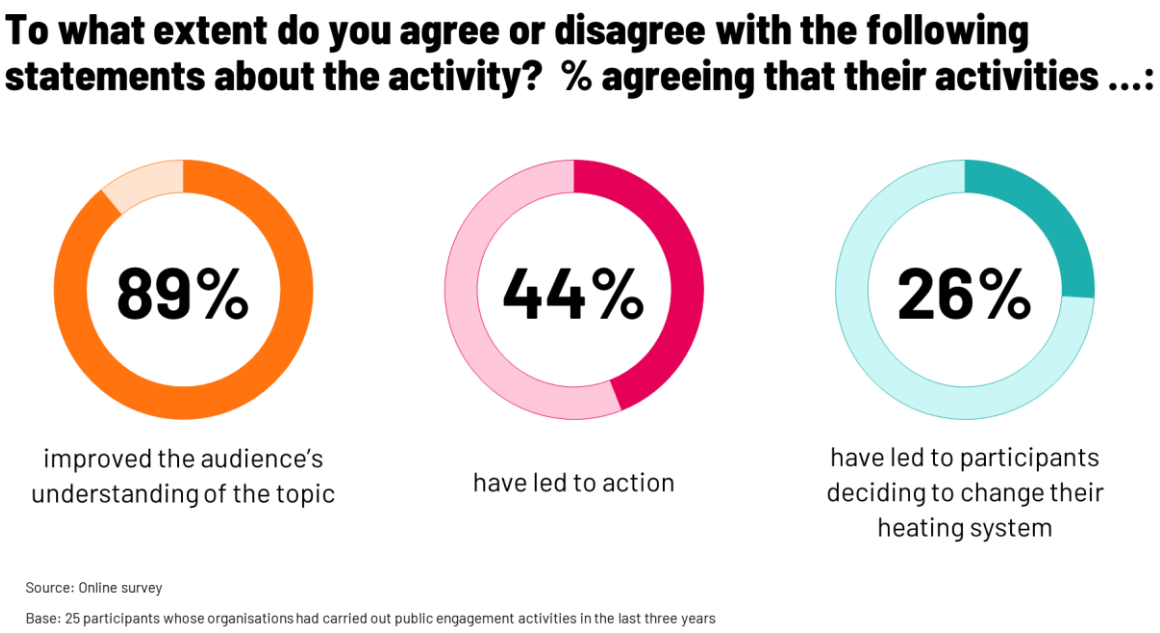
Challenges

- **Lack of regulatory clarity** on clean heat and energy efficiency was identified as the main barrier to delivering effective engagement.
- **Misconceptions and lack of public awareness** around sustainable heating solutions was also seen as a challenge.
- The **cost of living crisis** was recognised as a barrier to widening the reach of engagement. In this context, the **general public was seen as unwilling to accept the upfront cost of transitioning**.
- Certain aspects of the transition, such as installation of clean heating systems, were not seen to have been successfully communicated to the wider public due to **topic complexity and specialised language** that is not widely understood.

5.1 Impacts

Those delivering public engagement largely felt that their activities had had a positive impact on people's understanding of issues relating to the heat transition in Scotland (see Figure 5). Among those taking part in the online survey, 89% reported that their audience's understanding of the topic had improved as a result of engagement. There was less certainty over the extent to which public engagement had led to action, with fewer than half of organisations (44%) reporting that those activities had led to action and 26% reporting that individuals had decided to switch to a clean heating system as a result of the engagement.

Figure 5. Perceptions of impact



Both the interviews and the Synthesio search also identified a number of impactful initiatives centred around **simple energy efficiency actions** that organisations felt had been effective at reaching the broader public and prompting people to action small changes, often framed around saving money as well as reducing carbon emissions (see Figure 6).

> "The stuff that lands better with people, unsurprisingly, is – there's a pretty quick fix that you can organise yourself and it saves you money."
> Charity (interview)

Community-driven engagement was also highlighted by sector experts as a success factor in terms of reaching certain demographic groups, such as older people, families in in-work and fuel poverty and vulnerable groups (see figure 6). This was felt to be important because of

the perception that community organisations enjoy high levels of trust from members of the community. Building trust was identified as one of the most important aspects of delivering effective engagement.

Figure 6. Evidence of impact

Money Saving Boiler Challenge Campaign

The campaign was delivered by Nesta, in partnership with energy providers and other organisations in the energy industry, which focused on providing basic and simple energy efficiency advice. The activity aimed to reach the general public and convince people to turn down flow temperature on their boiler, thus reducing carbon emissions and energy costs.

The campaign also aimed to promote better understanding of existing heating systems and their environmental impact among the general public. This activity was part of a wider campaign on decarbonisation.

Following the campaign, close to 240,000 households turned their boiler flow temperature down, resulting in savings of £112 per year for an average household and a reduction of carbon emissions by 37,000 tonnes.[2]

Success factors:

- Simple and straightforward messaging that resonated with people in the context of the cost of living crisis.
- Promoted small and easy changes.
- Partnership with trusted voices – public-facing organisations offering energy advice and energy providers.
- Clearly communicated individual financial benefits of making the changes.
- A wide public campaign that was advertised on TV and mainstream media.

[2] https://moneysavingboilerchallenge.com/

Home Energy Advice Portal

The web portal was developed by Thurso Community Development Trust together with the Highlands and Islands Climate Hub.[3] The website aims to improve pathways to support and uptake of grants by providing energy advice and a comprehensive overview of the energy support services available to residents in Scotland. The portal is accessible to all but is aimed primarily at local community organisations. It provides training to staff and volunteers in offering energy advice, recognise struggling households most in need of energy support, how to approach them and signpost residents to local energy service providers and financial support.

As of May 2024, 435 community groups in the region had been trained on the portal, which has led to improved knowledge and confidence among staff on the topic of energy. The portal has been actively used, with an average of 3,000 hits per month and approximately 5,000 people supported through it to date. It has also reached some hard-to-reach and vulnerable groups, including older people and low-income families.

Success factors:

- Clear and accessible messaging.
- Community-based engagement.
- Use of trusted voices in the community.

5.2 Challenges

The research identified a range of challenges in delivering engagement that were perceived to have negatively impacted attendance rates and limited overall effectiveness.

A perceived lack of clarity around clean heat and energy efficiency regulations was one of the key challenges identified in the interviews. There was a shared sense that public engagement activities would be limited in their effectiveness until the legislative requirements are known. Experts felt there had been frequent changes in proposed legislation in the past and that there is currently a lack of clarity around the requirements for properties, which has created confusion among some groups and limited the reach and

[3] https://www.thursocdt.co.uk/helpandsupport

effectiveness of some engagement activities. Landlords in particular were identified as a group at risk of disengaging on the topic until there is clarity on what they will be required to do. The perceived frequency of changes in proposals was felt to have made it difficult for organisations to deliver effective public engagement because they feel they are unable to provide straightforward advice.

> "Until there's clarity on what the requirements are going to be, it's difficult to go out there with firm messaging. You always have to caveat your messaging with "it's just a proposal and it might change."
> Private company (interview)

It was also suggested in the interviews that the concern over further changes in requirements has caused hesitation among organisations to engage with the public until the legislation is finalised.

> "[When] things can still change, that's a disincentive to people actually doing works in their properties. Because they don't know if the money they're going to spend and the improvements they're going to make are going to be beneficial when it comes to complying with possible future standards because we still don't know what those possible future standards are going to be." Private company (interview)

Representatives of the homebuilding sector highlighted that while homebuilders "are ready, understand and are committed to what needs done in supporting the transition", there are concerns within the sector regarding limited communication from the Scottish Government about availability of the technology required to support the transition.

At the same time, interviewees stressed that there are still **misconceptions, misinformation and lack of public awareness** around sustainable heating solutions. It was suggested that the general public is still widely uninformed about the costs associated with the transition and whether low-carbon technology would be an effective heating solution for their home. Moreover, some stakeholders suggested that there is confusion around the different regulations in England and Scotland.

> "…There're still too many barriers to retrofitting – heat pumps are still considered pretty unusual and there's a lot of myths, misinformation and misconceptions around how effective low-carbon tech is, which highlights the need for the public engagement strategy." Membership organisation (interview)

The wider socio-economic context of **the cost of living crisis** was highlighted by experts as the key structural barrier to engaging the general public in the conversation about the heat transition and decarbonisation, particularly given the upfront costs of retrofitting and

installing clean heating systems. They felt that, for most people, the kinds of interventions that will be required for the transition would be unaffordable.

> "There is certainly a general gap in terms of people wanting to decarbonise their homes because of cost." Private company (interview)

It was suggested that the public would be largely unprepared and unwilling to accept the cost of transitioning upfront based on a promise of future energy savings.

> "We're considering how we can get that messaging out to the public to make the public aware of the changes that will be required of them – yes, it might cost them more upfront but it should create longer- term benefits – but I don't think the public is ready to make that connection yet and I don't think any government messaging that I've seen to date has been explicit about that." Private company (interview)

The complexity of the changes required and language accessibility around those changes was also identified by experts as a significant challenge. It was suggested that the language around the heat transition (e.g. clean heating systems) is specialised and requires a certain level of knowledge on the subject. It was therefore felt to be less accessible to people who don't already have awareness on the topic.

> "The challenge is making sure the information is really simple and easy to access and reflects the fact people are in crisis at the time - just transition terminology, for example, doesn't work." Statutory body (interview)

Despite attempts by organisations delivering engagement to address this challenge, such as by delivering energy advice through simple messaging, it was felt that other aspects of the transition such as installation of new heating systems have not been successfully communicated in a way that can be more widely understood. One expert, reflecting on their own experience installing a clean heating system, commented that even they found it difficult to navigate existing advice despite being highly engaged and knowledgeable on the topic.

> "The challenge is that we were asking people to do the absolute low-hanging fruit thing in terms of decarbonisation of heating. So, it's not as simple to take that framing – do this simple thing and save money – to almost any other part of the heat transition. The rest of the message is much harder." Charity (interview)

Notwithstanding these challenges, over half of organisations who completed the survey (59%) and several of the interviewees said their organisations planned to deliver public engagement activities on the heat transition in Scotland in the future. These were mainly charities, but also included a range of other organisation types mentioned in Chapter 3. The types of activities planned included a continuation of existing advice and support services

and information sharing campaigns, as well as further workshops or knowledge sharing events and new pilot schemes (such as for retrofitting).

Delivery organisations mentioned that these future activities would be open to all, but some specific target groups included homeowners, the social rented sector (landlords and tenants), those in fuel poverty, those living in flats, people with protected characteristics, and small businesses. It was felt that schemes like the Green Homes Network and Heat Pump Heroes should be promoted more widely to encourage further uptake of clean heating systems.

However, there was also reluctance among delivery organisations to carry out further public engagement until more is known about Scottish Government policy on the heat transition and the specific requirements needed for the different target groups.

> "It is not worth individuals investing in bespoke renewables or low carbon heating systems. We need to know more about when the heat networks will be coming." Charity (online survey)

Overall, while public engagement efforts have made good progress in raising awareness of the heat transition, substantial challenges remain in translating understanding into widespread action.

6 Gaps in public engagement

This chapter addresses the final research question: where are the gaps in engagement?

While the research has identified a range of different engagement activities that are reaching the broader public as well as targeted demographic groups, it has also identified some clear gaps in engagement. The identified gaps broadly relate to target audiences and messaging, but also relate to potential messengers (i.e. those who could have a role in supporting public engagement on the heat transition).

Key findings

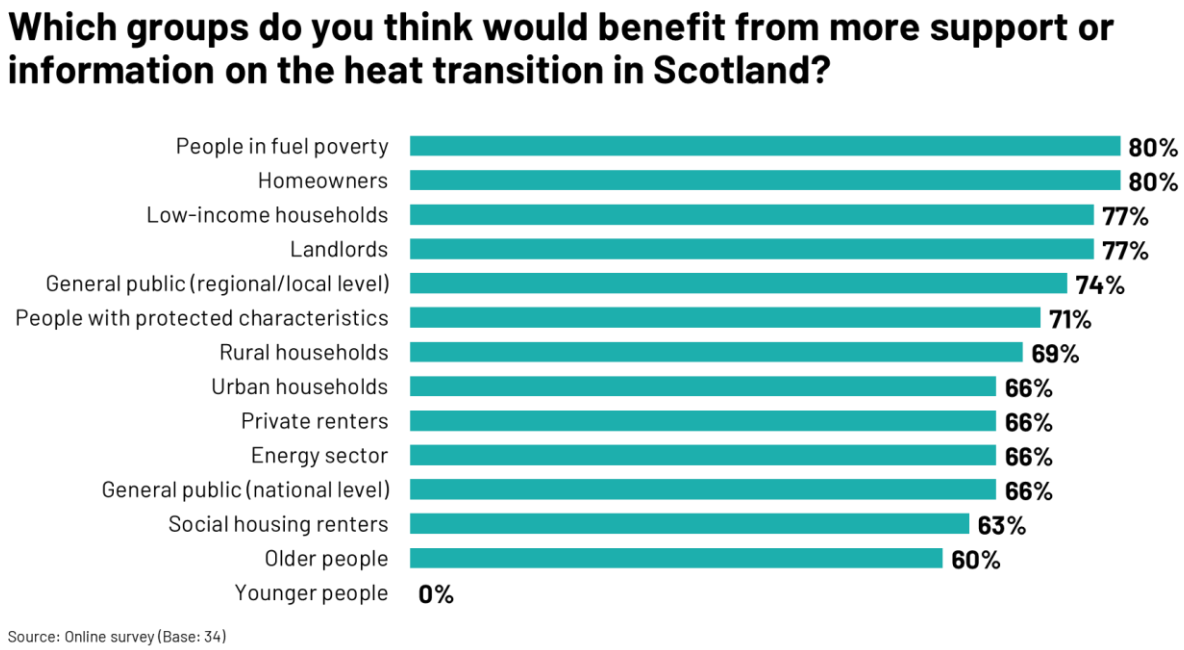
- **Audiences** identified as having been under-engaged on the heat transition included private landlords, renters, professionals in the energy sector, young people and the digitally excluded.
- **The key messaging gaps** in public engagement include addressing the general lack of understanding among the public about current heating systems, as well as insufficient practical and transparent advice on installing and operating clean heating systems.
- **Using existing case studies was also felt to be lacking**, but could provide an opportunity to show how the technologies have been implemented in Scotland and elsewhere.

- **A general lack of trusted messengers** providing reliable and impartial advice was also identified, as well as those able to provide technical support on the practical aspects of the transition.

6.1 Target audience

Delivery organisations responding to the online survey felt that most groups of people would benefit from support or information on the heat transition in Scotland, with young people being a notable exception (Figure 7). Experts interviewed suggested that, although public engagement activities have largely been open to all because the transition is seen as an issue that will affect everyone, there were some groups who should be prioritised. The top four groups who would benefit from more information on the topic, as identified in the survey, were people in fuel poverty, homeowners, low-income households and landlords (see Figure 7).

Figure 7. Groups who would benefit from support



As highlighted in the previous chapter, experts suggested that there had been **limited engagement with private landlords**. This was reflected in the survey results too, with 77% of participants highlighting landlords as one of the groups who would benefit from support or information on the heat transition. This was seen as an important gap to address, since private landlords are expected to play an essential role in driving the heat transition forward and to be directly affected by the upcoming regulations around clean heat and energy efficiency under the current HiBS.

Experts perceived that the benefits of making the transition were not clear to landlords who would be bearing the costs of retrofit, leading to a reluctance to engage on the subject. Stakeholders who had conducted activities aimed at this group said that engaging with them had proven particularly difficult because of the sector's resistance to being regulated, with both individual landlords (and some organisations representing them) pushing back and advocating against the legislation.

However, it was also acknowledged that responses to the HiBS have varied across this group. Some landlords, particularly the more climate conscious, were described as "very keen" to make sustainable improvements, but it was felt that a lack of clear and consistent information on the extent of upcoming regulations has held them back from taking action.

> "It's such a shame because people will phone us up – they have the money and the inclination to do the work and I have to tell them – actually, you're better off not doing the work and spending the money just now because we don't know what the requirements are going to be."
> Membership organisation (interview)

Lack of information and means to take action were felt to be even more of an issue in relation to **renters**. Out of all 62 public engagement activities identified through the Synthesio search, only two were targeted directly at tenants. Moreover, 66% of survey participants believed that private renters would benefit from more advice on the heat transition and 63% said the same in relation to social housing renters. Experts interviewed for this research felt that renters have been widely disengaged from the topic because they feel very limited in their power to make any changes in a rented home and the resources advising them are sparse. Moreover, it was suggested that renters were largely apprehensive about discussing the transition with their landlords due to concerns about losing housing in a competitive rental market.

> "Those in rented accommodation often don't know who to turn to - you may know that certain property standards exist but are not necessarily able to enforce them. In a rental market where renters are under pressure and aware that there is competition to rent, it doesn't encourage you to speak to your landlord about these additional measures, for fear of losing housing." Charity (interview)

Experts therefore perceived that those renting from private landlords would benefit from more sources offering practical advice on what changes they can make and how to discuss these with their landlords. In relation to social housing tenants, experts suggested that messaging should focus on building a stronger case for the need for transition. They felt that it was important to ensure that social housing tenants understood why retrofitting works were being carried out in their homes and what the benefits would be, and that they did not feel like the changes were being imposed on them. This echoes findings from the 2024 research on social housing decarbonisation conducted for ClimateXChange which

highlighted the importance of tenant engagement and agreement prior to conducting decarbonisation works.

Limited engagement with professionals working in the energy sector was highlighted as a substantial gap in engagement on the heat transition. The Synthesio search and expert interviews identified some activities targeted at industry professionals being delivered, including professional conferences, training and workshops. However, it was widely felt by experts that this group has not been sufficiently engaged.

Industry-level engagement was described as a missed opportunity by experts who considered industry professionals and energy service providers as trusted messengers. It was felt they could provide technical and tailored advice to the public to mitigate the challenge highlighted earlier of poor understanding of clean heat technologies (see Challenges).

Beyond being a potential engagement opportunity, this gap was also seen by some experts as a risk; for example, if heat engineers do not understand clean heating systems themselves, they may provide incorrect advice to consumers. A comprehensive nationwide effort was deemed necessary to address the gap, and a particular focus on addressing any training or skills gap in rural areas.

Across the interviews, there is a widely shared sentiment that **young people** were one of the groups who have been least engaged on the heat transition. Experts suggested this related to the cost of living and the availability of affordable housing being more prevalent and pressing challenges for this group. It was also partly explained by young people in the rented market having limited agency to make any energy saving changes to their homes (with that responsibility resting upon the landlord) and therefore considering the heat transition as having limited personal relevance.

> "Young people are not thinking about how they heat a home because they're just trying to find a home in the first place. […] There're so many issues in terms of housing for young people – particularly, if they are in the rented sector, they usually have no control over how that home may be heated." Climate Hub (interview)

Despite these reflections expressed during the interviews, survey findings suggest that organisations involved in delivering engagement did not consider young people as a group that would benefit from more advice on the heat transition, with no participants identifying this as a priority group.

While it was felt that activities being delivered online have enabled broader participation (see Accessibility), it was also acknowledged by experts that those who are **digitally excluded** are potentially being left out of the conversation. Although organisations such as

Scarf and HES do provide multimodal advice (via telephone, in-person, or online), these are often promoted online which experts felt could be limiting reach.

6.2 Messaging

One of the main perceived messaging gaps was addressing the **lack of understanding among the general public about their existing heating systems**. It was felt that this lack of awareness could act as an obstacle to the success of the longer-term strategy for decarbonisation, as people are unlikely to take action on changing their boiler to a different heating system if they do not fully understand the current one. Experts highlighted that energy efficiency advice promoting better understanding of how heating systems work and their impact on the climate should be a pre-requisite for any required action on the transition.

Interviewees also widely felt across interview that **insufficient practical advice** had been offered to the wider public around how to install and operate clean heating systems. This gap was closely linked to the limited engagement with the energy sector professionals who are seen as the key actors who would be able to offer such advice. Experts contrasted the availability of sources offering grant and funding support - which was felt to be plentiful - with the lack of reliable sources offering tailored practical advice.

> "If you've got a property and you have absolutely no idea whether it has a wall that can be insulated, there are few sources that you can go to for advice – some of them are great and some of them aren't so great. So, it's very difficult when it comes to actually making changes." Membership organisation (interview)

It was also stressed by some experts that there needs to be **transparency** in the practical advice about the things that can go wrong and any potential risks around the transition to ensure that consumers are making an informed choice and are equipped with the practical knowledge of what to do if issues arise. For example, some experts reported engaging with members of the public who had transitioned to clean heating systems and had experienced issues such as an increase in energy bills but did not know how to deal with those issues and could not find information about them. It was suggested that the lack of transparency around potential risks, coupled with negative experiences such as these, could limit progress on the heat transition.

> "Once something has been installed, people need to be clearly shown how to use this system and that they're not left with something that they don't know how to work. […] we risk putting people into more expensive systems when they've been told they'll be able to save money […] We're sitting on quite a lot of evidence around where things aren't working particularly well or where they can act against the just transition, e.g. increasing costs."
> Statutory body (interview)

However, experts also emphasised the importance of demonstrating the efficacy of these heating systems, by showing how they have been implemented in homes across Scotland and in other countries. It was also felt that the experiences of those adopting low-carbon heating technologies could be amplified. By drawing on and learning from real-life experiences, whether positive or negative, it was felt that this could help to build trust in the systems and encourage more widespread uptake over time.

One expert also suggested that public engagement on the heat transition should focus more on heat networks. This was felt to be lacking in current discussions but a likely solution for lots of people, particularly those living in flats.

6.3 Messengers

When it comes to those delivering engagement and communicating these messages, despite sharing some examples of engagement activities delivered through trusted messengers, experts shared a view that there is a general **lack of impartial and reliable sources** offering tailored practical advice on managing clean heating systems. This was seen as significant given the importance of building trust in, and understanding of, clean heating systems for effective engagement (see Section 5.2).

Experts defined trusted messengers in different ways. Some considered private energy providers and installers of clean heating systems to be trusted voices given their technical expertise on the matter and consumer-facing branding. Others felt that local community organisations trained in providing energy advice should play that role as they are embedded in communities already and seen as trusted sources.

Another suggestion was that there should be a separate group of messengers who are impartial (i.e. not private contractors) and able to provide technical and tailored advice to people depending on their property, location, and circumstances. This group was seen as a missing link in the process which could help connect people with verified installers.

> "If someone approached us asking if we could recommend someone they could speak to about insulating their property, I honestly don't know where the best place for them to go to would be. It would be nice if somebody could tell us where we can signpost them to. You don't necessarily want a contractor, you want someone who could give you independent advice on what you best options are, what the likely cost would be and ideally signpost you to some reliable contractors. It feels like there is a missing stage in the process." Membership organisation (interview)

Reflecting on the gaps in audiences, messages, and messengers, there was a dominant perspective that more needed to be done to drive effective public communication and engagement activity on the heat transition in Scotland. One expert suggested that they would benefit from more guidance and insight into the effectiveness of the Scottish Government's own engagement on the topic, as this would help organisations when developing their own engagement strategies.

7 Conclusions

This research has identified several considerations for ensuring future public engagement on the heat transition builds on what has be done before and is effective in prompting action.

7.1 Prioritising groups

Delivery organisations felt that public engagement activities should be open to all on the basis that the heat transition will affect everyone some way. However, certain priority groups were identified, including:

- **The private rented sector**, as landlords will be expected to play an essential role in driving the heat transition forward under the current HiBs proposals, which would require landlords to make energy efficiency improvements by 2028, and tenants will be affected by the changes.
- **Professionals in the energy sector**, including energy providers and engineers who can be trained in clean heating systems, amplifying messaging around the transition, and providing tailored technical advice to households.
- Those who are **digitally excluded**, who may not be accessing the full range of engagement activities given so much of it is being promoted online.

It was suggested that there should first be a focus on engaging professionals in the energy sector (e.g. providers and engineers) and housing sector (e.g. landlords and housing associations). This was based on the view that they represent groups who have been under-engaged but who will be key to driving the transition forward. It was also felt that engagement with industry professionals first would present an opportunity to harness their

influence among wider groups, to encourage action by sharing information and practical advice, and helping to tackle the spread of misinformation.

With the support of these sectors, **focus should then be given to engaging the general public.** There was a view among experts that focusing on early adopters first could help to encourage action among other more hesitant groups by building up a larger body of evidence of successful examples across different types of properties. This was seen as key to building trust in the efficacy of clean heating systems.

7.2 Tailoring messages

For **engaging with industry professionals,** it was felt that messages should provide clarity on the changes required and reassurance on the support available, as well as addressing any issues or hesitations that might be prevalent among these groups. An in-person approach to engagement with this group was considered necessary for this, to ensure any barriers are addressed directly.

For **engaging the general public** it was recognised that framing activities around the climate benefits would engage those who are already highly motivated by the climate crisis and more likely to be early adopters. It was felt that making it easier for them to take action (with clear and consistent messaging and practical advice) would in turn make it even easier for those less motivated by the climate crisis to take action as they could benefit from the experiences and knowledge of those who have already done it.

Highlighting the financial benefits and availability of grants and loans was identified as a key message that could be amplified more. This was seen to be particularly important for engaging members of the public for whom the upfront costs would be off-putting or those who are struggling with their energy bills already.

It was also felt that messages should be tailored, based on an understanding that different solutions will be needed for different groups and that the benefits/challenges associated will also be different depending on people's circumstances (e.g. for those in houses compared to those in flats, and for those living in urban areas compared to those living in rural areas).

Overall, experts were in favour of more national-level campaigning - coordinated between the Scottish Government and key stakeholders - to raise awareness around the HiBs proposal and emphasise positive messaging around the heat transition. It was also felt that this would need to be supported by local-level public engagement that is tailored to, and addresses, the needs of different groups.

7.3 Building trust

There was a broad sense that any public engagement activity on the heat transition needs to first build a **baseline understanding of heating systems**, before engaging on transitioning between current and future systems. It was felt that priority should be given to improving basic understanding among general public about how boilers operate and start with simple changes they can make their homes more energy efficient.

Building on this, it was felt that public engagement should emphasise the **needs and benefits** of the transition to clean heating systems. At the same time, the importance of **transparency** in communicating the potential risks was also highlighted. Ensuring the availability of practical advice on how to navigate these risks and deal with challenges (particularly around installation and unforeseen costs), was felt to be missing from engagement currently.

Using **trusted messengers** – whether organisations already embedded in communities, those with technical knowledge (e.g. industry professionals), or a new group of independent advisers from a range of backgrounds – was seen as an effective vehicle for communicating these aspects of the transition. Experts interpreted trusted messengers in a range of ways, and further research would be beneficial to determine who the public would trust to deliver messages.

7.4 Regulatory clarity

Organisations delivering public engagement reported feeling limited in what they can deliver until it is clearer when the regulations will come into force, and what the regulations will include (i.e. the changes that people will be required to make in relation to clean heat and energy efficiency). There was a general understanding of the direction of travel, but it was felt that a lack of detailed information was limiting the effectiveness of communication and engagement on the heat transition in Scotland.

Regulatory clarity was therefore widely called for, although it was recognised that this would be difficult to provide until the legislation is finalised. Nevertheless, it was strongly suggested that regulatory and financial decisions need to be made first. Organisations delivering public engagement activities felt they needed clarity on what the regulations will be, when they will come into force, and what financial support will be available, so that they can be equipped to support their members, service users and the general public through the transition.

8 Appendices

8.1 Appendix A – detailed methodology

The research involved three strands:

1) A web search to identify public engagement activities.
2) Interviews with 10 experts representing a range of organisations involved in the heat transition.
3) An online survey of organisations delivering public engagement activity.

8.1.1 Web search

The web search was initially conducted using a traditional online search method, whereby "Boolean search strings" were used in Google and Google Scholar. Search strings were created beforehand and then refined throughout the search process where necessary, to improve the relevance of results (see Appendix B for the full list of search strings used).

Ultimately, the traditional online search results were limited, and the majority of public engagement examples analysed were identified through using Ipsos' proprietary social listening software, Synthesio. The software works by identifying mentions of specified terms (in a similar way as search strings) across the web, including platforms such as X (formerly Twitter), Facebook, YouTube, Instagram and Facebook.

The initial Synthesio search (using the search string listed in Appendix B) produced around 2,500 references to public engagement across these social media channels, which were reviewed by the research team. Through search refinement using key word filtering and further manual review, most mentions were ultimately excluded due to duplication or being out of scope.

An analysis of 62 instances of engagement that matched the inclusion criteria (as specified below). Details of these engagement examples were recorded in a mapping spreadsheet in Excel, by the research team. Examples from a previous, brief web search by the Scottish Government that did not appear in Ipsos' web search were also included in the spreadsheet, along with a very small number of activities that Ipsos were already aware of.

8.1.2 Expert interviews

A longlist of potential organisations was generated by Ipsos following an initial web search and initial recommendations from the Scottish Government and ClimateXChange, and was reviewed by ClimateXChange and the Scottish Government. Organisations were selected on the basis that they could comment on public engagement on the heat transition (either from direct delivery experience or from involvement on the heat transition in other ways)

and that they represented a range of perspectives. Experts were invited to take part via email and the profile of expert organisations included a mix of charities/advice services, climate hubs,[4] private companies, non-government organisations and industry bodies.

This strand of the research explored the different types of public engagement activities in more detail. A topic guide was developed by the Ipsos research team and reviewed by ClimateXChange and the Scottish Government (see Appendix C). Interviews lasted around 45 minutes each, and covered public engagement activities/communications recently delivered or known about, target audiences, perceived impact of engagement, any future activities planned, and views on current gaps in engagement.

Interviews also helped to identify potential organisations for inclusion in the online survey sample. Interviews were originally planned to be completed before the online survey fieldwork began. However, the decision was made to hold four interviews back until the online survey was underway. This decision was partly practical to be flexible around participants' availability, but also to allow for survey responses to inform discussions and identify potential organisations to interview for a broader range of perspectives.

8.1.3 Online survey

The third strand of the research involved a five-minute online survey with organisations delivering public engagement activities in Scotland to explore the purpose and nature of these activities (e.g. key topics, target audience and impact). The questions were designed by Ipsos and reviewed by ClimateXChange and the Scottish Government (see Appendix D).

An initial sample of 78 contacts was generated by Ipsos through the web search and interviews, and the survey link was also shared by ClimateXChange and the Scottish Government through various email networks and communications channels, such as X (formerly Twitter) and the CXC newsletter, to broaden participation.

Two reminder emails were sent to the sample during the fieldwork period to boost response rates. The survey was live for five weeks, from 19 June to 24 July, and 34 completed responses were received. Of these, 25 organisations reported that they had delivered some form of public engagement in the last three years.

8.2 Appendix B – overview of web search

8.2.1 Web search strings

[4] Climate hubs are volunteer-led networks that supports community-led action across Scotland's regions: https://www.gov.scot/policies/climate-change/community-led-climate-action/

The following strings were placed into Google or Google Scholar:

- 'Public engagement' AND 'Scotland' AND [heat transition/ heat decarbonisation/ clean heating/ energy efficiency/ net zero heating/ green heating/ zero emission heating/ zero direct emission heating/ fabric first] OR

- 'Public participation' AND 'Scotland' AND [heat transition/ heat decarbonisation/ clean heating/ energy efficiency/ net zero heating/ green heating/ zero emission heating/ zero direct emission heating/ fabric first] OR

- 'Deliberative/deliberation' AND 'Scotland' AND [heat transition/ heat decarbonisation/ clean heating/ energy efficiency/ net zero heating/ green heating/ zero emission heating/ zero direct emission heating/ fabric first] OR

- 'Public consultation' AND 'Scotland' AND [heat transition/ heat decarbonisation/ clean heating/ energy efficiency/ net zero heating/ green heating/ zero emission heating/ zero direct emission heating/ fabric first] OR

- 'Public dialogue' AND 'Scotland' AND [heat transition/ heat decarbonisation/ clean heating/ energy efficiency/ net zero heating/ green heating/ zero emission heating/ zero direct emission heating/ fabric first] OR

- 'Citizen engagement' AND 'Scotland' AND [heat transition/ heat decarbonisation/ clean heating/ energy efficiency/ net zero heating/ green heating/ zero emission heating/ zero direct emission heating/ fabric first] OR

The following string was placed into Synthesio

(Scotland OR Edinburgh OR Glasgow OR Aberdeen OR Aberdeenshire OR Dundee OR Inverness OR Isles OR Isle OR Ayrshire OR Arran OR Islands OR Lothian OR Fife OR Highlands OR Perth OR "Outer Hebrides" OR Shetland OR Orkney OR Stirling OR Angus OR Dumfries OR Galloway OR Argyll) NEAR/5 (advice* OR consultation* OR discussion* OR event* OR conference* OR talk* OR "public service" OR report* OR session* OR lecture* OR conversation* OR public OR forum* OR seminar* OR workshop* OR outreach OR community OR engagement OR dialogue OR meeting* OR briefing* OR presentation* OR program* OR survey* OR roadshow* OR "public outreach")) AND ("heat transition" OR "heat decarbonisation" OR "clean heating" OR "energy efficiency" OR "net zero heating" OR "green heating" OR "zero emission heating" OR "zero direct emission heating" OR "fabric first" OR "#EnergyEfficiency")

8.2.2 Parameters

Across both searches, the following inclusion criteria were used:

a) **Topic:** Public engagement related to heat transition/ energy efficiency. The research team included public engagement that is wider than just the Heat in Buildings

agenda, but focused on engagement that is exclusively focused on the heat transition. (The relative focus on the heat transition in general climate change engagement was also mapped where relevant).

- **Date:** From October 2021 onwards (introduction of the Heat in Buildings Strategy in Scotland). This was reviewed during initial stages of searching and was deemed to be appropriate based on the volume of material available. The final eligible date for inclusion was 20th May 2024, corresponding with when the web review strand of the research ended.

- **Methodology:** "For the purposes of this research, "Public engagement" was understood as including various forms (e.g. public participation, public consultation, public dialogue) and methods.

- **Geographical coverage:** Scotland.

- **Level:** National- and potentially regional-level public engagement was initially prioritised for this project, rather than community-level. However, much of the engagement examples identified were at the more local, community-level and so relevant examples of these were also reviewed and included in the mapping.

- **Language:** English language (it was agreed that the research team would also record any search results in Gaelic, but this was not called for).

8.3 Appendix C – Topic guide for expert interviews

Introduction (3 mins)

Ipsos has been commissioned by ClimateXChange and the Scottish Government to conduct research into public engagement on the heat transition in Scotland.

As part of the research, we are conducting interviews with organisations across Scotland who have carried out, been involved in, or have a good awareness of, engagement activities with the public on the heat transition. This includes engagement on topics like clean heating and energy efficiency, low carbon technology and zero direct emissions heating systems. These interviews will help us obtain a fuller understanding about the types of activities that have been carried out so far.

The research will inform the delivery of the Scottish Government's Heat in Buildings Public Engagement Strategy.

The interview should last about 45 minutes and everything you say will be treated in the strictest confidence. No identifying information about individuals will be included in the report, for example, if we would like to quote you, we will do it anonymously. ClimateXChange and the Scottish Government will not receive notes from individual interviews or attributable comments.

Participation is voluntary and you can change your mind at any time, up until the report is published.

We would like to record the discussion for analysis purposes. It will not be provided to anyone outside of the Ipsos research team. The recordings will be securely stored and will be destroyed three months after we have completed the evaluation.

Do I have your permission to record?

Turn on the recorder and record consent to take part and for the discussion to be recorded.

Do you have any questions before we begin? Are you happy to proceed?

Background (3-5 mins)
To start with, can you tell me a bit about yourself and your role at [organisation].
What, if anything, do you know about the Scottish Government's Heat in Buildings Strategy?

IF NECESSARY: The strategy was published in October 2021, and sets out how the Scottish Government will achieve warmer, greener and more energy efficient heating in domestic and non-domestic buildings in Scotland. It established a target of decarbonising all properties in Scotland by 2045, including the approximately 2 million homes that currently use mains gas as their primary heating fuel.

And what, if anything, do you know about the Scottish Government's Heat in Buildings Public Engagement Strategy?

IF NECESSARY: The Heat in Buildings Public Engagement Strategy provides an overview of how Scottish Government will work with other stakeholders to deliver a programme of public awareness raising, education and participation around clean heat and energy efficiency, in order to meet targets set out in the Heat in Buildings Strategy.

PROBE:

- General views on strategy – any positives, negatives
- Does organisation have a specific strategy / business plans in relation to this?

Overview of activities (10-15 mins)
We are interested in finding out about the different types of activities organisations may have carried out over the last three years to engage members of the public in relation to the heat transition to net zero emissions in Scotland. Can you tell me about any activities that your organisation has…

A) Carried out over the last three years to engage the public on this topic?
B) Contributed to or supported in some way?
C) Been aware of (but not been involved in)?

Interviewer: note down examples initially raised by stakeholder, then gather information about each one in relevant section (apportioning time on each section depending on the number of examples relavant to each).

At this stage probe for brief details about each activity (explain you will ask for more detail after you've heard about all the different types of activities carried out):

- what was it about?
- what did it involve / how was it carried out?
- who was it carried out with? target audience?
- was anything published / any information available online?
    - (if yes – interviewer does not need to spend time collecting factual information that will likely be in the report - focus on key questions instead).

Note to interviewer: if there are lots of activities to discuss and the stakeholder is not able to stay on the call, **ask if they would be willing to share details of the remaining examples by email**.

A - Information about activities the organisation delivered themselves (10-15 mins)

I'd now like to ask you a bit more about the [activity/activities] you mentioned.

It would be useful to know more about what took place, and your thoughts on how well you think this method of engagement worked and any impact it may have had.

You might not have all the answers, which is absolutely fine.

Interviewer: ask about each (relevant) activity mentioned in turn with remaining time. ask or adapt questions depending on the type and format of engagement activity being described. if short on time or if there are lots of examples, prioritise those that are newly uncovered, unpublished or that we have not collected details about already.

ensure that you leave five minutes at end to ask the future engagement section.

- What was the purpose or overall aim of the activity?

- Who was the activity aimed at? General public or specific groups?

  Probe on groups such as:
  - Particular geographical areas;
  - Socio-economic groups;
  - People living in particular types of properties
  - Homeowners/landlords/renters
  - Based on protected characteristics – disability, ethnicity
  - other groups

- Why were you interested in engaging with [this group / these groups] in particular? Why was this important?
  PROBE IF NECESSARY:
  - How did you identify there was a need to engage with this group?

I'd now like to ask about the topics that were covered and the way those topics were communicated to the public…

- What areas / topics did the activity cover?
  PROBE:
  - What were the main / key messages being communicated / delivered by the activity?
  - Why were these particular messages chosen?

- And were any steps taken to make it easier for people to take part or engage with the activity?
  PROBE:
  - Design of materials
  - Language (e.g. use of plain English; terminology used; Gaelic)
  - Location of activity (any considerations for urban/rural audiences)
  - How engaged / method of engagement

- Why did you do this? Were there any groups of people you thought may have struggled to understand/engage with the activity otherwise?

- What is your understanding of the impact this activity has had? Did it achieve its goals/aims?
    - If yes - In what ways would you say the activity was successful?
    - If too early to tell / not sure:
        - Why is that? (clarify whether activity was too recent, or if the impact is expected to be over longer term e.g. it will take a while for people to install heat pumps)
        - What do you hope that the impact of the activity will be?
    - PROBE: Was the impact or success of the activity measured in any way?
    - Why do you think it was successful / unsuccessful?

- If not previously mentioned: And do you think it was it successful at reaching the target audience?
    - Were there any groups of people missing?
    - IF YES: What were the reasons for that?

- Does your organisation have any future plans to further engage the public on the heat transition to net zero emissions?
    - IF YES:
    - What? When?
    - Who is the target audience (and why)?
- Are these plans based on learnings from any previous engagement?

B – Information about activities the organisation contributed to in some way (5-10 mins)
Thinking now about the other [activity], which you mentioned being involved in.

- If not covered already - What was involved in the activity?
- What was the purpose or overall goal of the activity?
- If not covered already - What was your organisation's involvement?
- What were the main / key messages being communicated / delivered by the activity?
- Who was the activity aimed at? General public or specific groups? Probe on reasons for this (if known)
- Do you know if the target audience was reached successfully?
    - Any groups not reached successfully?
- Do you think it was it easy or difficult for people to take part and engage with the information provided [or to attend the activity]?
- What is your understanding of the impact the activity had? Probe on what went well, any challenges, what could be improved

C – Information about activities that the organisation is aware of (5-10 mins)

Moving onto [activity], which you said you were aware of.

- If not covered already - What was involved in the activity?
- If not covered already - Who delivered the activity?
- What were the main / key messages being communicated / delivered by the activity?
- Who was the activity aimed at? General public or specific groups? Probe on reasons for this (if known)
- Do you know if the target audience was reached successfully?
    - Any groups not reached successfully?

- Do you think it was it easy or difficult for people to take part and engage with the information provided [or to attend the activity]?
- What is your understanding of the impact the activity had? Probe on what thought went well, any challenges, what could be improved

Engagement gaps (5 minute)
Interviewer: ask all

Finally, I'd like to ask if you think there are any gaps in the engagement activities that have been carried out so far on the heat transition. For example, in terms of the groups of people being targeted or the types of activities being carried out.

- First of all, as far as you are aware, are there any groups of people you think are missing from the activities that have been carried out the heat transition in Scotland so far?
  Probe:
  - Why do you think this is?
  - Are there any groups of people that your organisation would have liked to have engaged but have been unable to so far?

- And are there any particular types of public engagement activities not currently happening that you think should be?
  - If yes: What? When? Who should the target audience be (and why)?

- Do you think you would benefit from any advice or support on public engagement in relation to the heat transition in Scotland?
  - If yes: What would you find useful?

Close (3 mins)
That's all the questions I wanted to ask you today, unless you think there is anything else we might have missed which would be useful for us to know?

Thanks. In the next few weeks, we will be conducting follow up research among organisations across Scotland responsible for delivering public engagement activities on the heat transition. This will comprise a short, 5-minute online survey asking about activities or communications being delivered. Would you, or someone else from your organisation, be willing to take part in the survey?

If yes: take contact details (name, email)

We are keen to invite as many organisations as possible to take part in the survey. Can I check, are there any other organisations or people you are aware of who are delivering public engagement activities on the heat transition that you think we should invite to take part in the survey?

Finally, the ClimateXChange and Scottish Government research teams may wish to conduct follow up research about this topic within the next 2 years. Are you willing to have your name and contact details passed on to the ClimateXChange and Scottish Government teams for this purpose?

Thank you so much for taking the time to speak to me today, it's been really helpful.

8.4 Appendix D – online survey questionnaire

ASK ALL.
QWORK: First of all, which of the following best describes who you work for?

1. Charitable organisation
2. Community group
3. Education or research institute
4. Local authority
5. Non-Governmental organisation
6. Non-profit organisation
7. Private sector organisation
8. Scottish Government department
9. Social enterprise
10. Other – please specify:
11. Don't know

ASK ALL.

How much, if anything, would you say you currently know about the Scottish Government's Heat in Buildings Strategy?

1. A great deal
2. A fair amount
3. Just a little
4. Heard of it but know nothing about it
5. Never heard of it

ASK ALL.
Q1. As you may know, the Scottish Government's Heat in Buildings Strategy aims to transform Scotland's buildings and the systems that supply their heat, as part of the transition to net zero emissions by 2045. This includes working to support the rapid adoption of zero emissions systems for home heating, such as heat pumps and district heat networks.
Have you, or your organisation, carried out any activities over the last three years to engage members of the public about changing their home heating systems?

1. Yes
2. No
3. Don't know

IF YES AT Q1.
Q2. Which of the following categories would those activities most closely fall under?
MULTICODE

1. Workshops
2. Public information campaigns
3. Open days or showcases
4. Lectures / talks
5. Training or knowledge-sharing sessions
6. Providing information online
7. Consultations
8. Citizens Panel
9. Advice service (in person)
10. Advice service (online)

11. Advice service (telephone)
12. Other – please specify:

ASK IF YES AT Q1
Thinking about the most recent activity that you / your organisation carried out…
Q3. Which of the following topics, if any, were covered by the activity? MULTICODE

1. General provision of energy efficiency advice/information
2. Information about Scottish Government's Climate Change Plan / net zero targets
3. Improving the energy efficiency of households (such as through improving home insulation)
4. Installing air source or ground source heat pumps
5. District heating networks
6. Other types of clean heating systems*
7. Provision of information about grants / loans
8. Other - please specify:
9. Don't know

ASK IF YES AT Q1
Q4. Which groups, if any, was the activity targeted at? MULTICODE

1. General public (no specific target groups) at national level
2. General public (no specific target groups) at regional or local level
3. Businesses or people working in the energy sector
4. Homeowners
5. Private renters
6. Those renting their home from a local authority or housing association
7. Landlords
8. Low-income households
9. Households in urban areas
10. Households in rural areas
11. Households using gas/oil heating
12. People with protected characteristics (e.g. disabled people, minority ethnic groups)
13. People in fuel poverty
14. Older people
15. Younger people
16. Other - please specify:
17. Don't know

Q5. What was the main reason or reasons for focusing the activity on those groups in particular?

- OPEN TEXT
- Don't know / not sure

ASK IF CODE 1 AT Q1.
Q6. To what extent do you agree or disagree with the following statements about the activity?

- The activity was effective at reaching its target audience.

- The activity was effective at improving the target audience's awareness / understanding of the issue.
- Members of the public took action as a result of engaging with the activity.
- Members of the public decided to change their home heating system to a zero direct emissions heating system as a result of engaging with the activity.
- It was easy for members of the public to take part and engage with the activity / the information provided.

ANSWER OPTIONS

1. Strongly agree
2. Tend to agree
3. Neither agree nor disagree
4. Tend to disagree
5. Strongly disagree
6. Too early to tell
7. Not relevant
8. Don't know

ASK IF YES AT Q1.
Q7a Has your organisation carried out an evaluation of any of its public engagement activities?

1. Yes
2. No
3. Don't know

ASK IF YES AT Q7a.
Q7b. Would you be willing to share this information with the ClimateXChange and Scottish Government research team, to allow them to understand more about the impact of public engagement activities on this topic? SINGLE CODE

1. Yes
2. No
3. Don't know

SHOW IF CODE 1 AT Q7b
Thank you, please send this information to UK-PA-HeatTransition@ipsos.com and let us know if there is anything you would not like to be shared with the ClimateXChange and Scottish Government research team.
Select 'Next' to move on to the next question.

ASK ALL.
Q8. Do you or your organisation have any plans to deliver public engagement activities on the heat transition in Scotland in the future?

1. Yes
2. No
3. Don't know

ASK IF CODE 1 AT Q8

Q9. Could you tell us more about your future plans, including what the activities will involve and who they will be targeted at?

- OPEN TEXT
- Don't know / not sure

ASK ALL.
Q10: Are you aware of any activities that have been carried out over the last three years by other organisations to engage members of the public in relation to the heat transition to net zero emissions in Scotland?

1. Yes
2. No
3. Don't know / Can't remember

IF YES AT Q10.
Q11. What types of public engagement activities are you aware of that have been carried out over the last three years? MULTICODE.

1. Workshops
2. Public information campaigns
3. Open days or showcases
4. Lectures / talks
5. Training or knowledge-sharing sessions
6. Providing information online
7. Consultations
8. Citizens Panel
9. Advice service (in person)
10. Advice service (online)
11. Advice service (telephone)
12. Other – please specify:

ASK IF CODE 1 AT Q10.
Q12. What topics did that activity / did those activities relate to? MULTICODE

1. General provision of energy efficiency advice/information
2. Information about Scottish Government's Climate Change Plan / net zero targets
3. Improving the energy efficiency of households (such as through improving home insulation)
4. Installing air source or ground source heat pumps
5. District heating networks
6. Other types of clean heating systems*
7. Provision of information about grants / loans
8. Other - please specify:
9. Don't know

ASK IF CODE 1 AT Q10.
Q13. And, as far as you are aware, which of the following groups of people / households did this activity/ those activities focus on? MULTICODE

1. General public (no specific target groups) at national level
2. General public (no specific target groups) at regional or local level
3. Businesses or people working in the energy sector

4. Homeowners
5. Private renters
6. Those renting their home from a local authority or housing association
7. Landlords
8. Low-income households
9. Households in urban areas
10. Households in rural areas
11. Households using gas/oil heating
12. People with protected characteristics (e.g. disabled people, minority ethnic groups)
13. People in fuel poverty
14. Older people
15. Younger people
1. Other - please specify:
16. Don't know

ASK ALL
Q14. Which of the following groups of people, if any, do you think would benefit from more support or information on the heat transition in Scotland? MULTICODE

1. General public (no specific target groups) at national level
2. General public (no specific target groups) at regional or local level
3. Businesses or people working in the energy sector
4. Homeowners
5. Private renters
6. Those renting their home from a local authority or housing association
7. Landlords
8. Low-income households
9. Households in urban areas
10. Households in rural areas
11. Households using gas/oil heating
12. People with protected characteristics (e.g. disabled people, minority ethnic groups)
13. People in fuel poverty
14. Older people
15. Younger people
2. Other - please specify:
16. Don't know

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