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Theory of change for climate action Wales: public engagement strategy 2023 to 2026

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Theory of change for climate action Wales: public engagement strategy 2023 to 2026

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Glossary

Definitions are taken from the Climate Action Wales Public Engagement Strategy 2023-26 where relevant. This is indicated in brackets as (Welsh Government, 2023a) and included in the reference section of this report.

5 Es

The green choices framework of the Public Engagement Strategy, which is how it will be delivered:

1. **Exemplify - lead by example:** Inspire others to act by exemplifying green behaviours.
2. **Enable - make it easier:** Provide people with the support the need to make green choices.
3. **Evaluate - share the impact of actions:** Demonstrate meaningful outcomes showing that together we can make a difference.
4. **Engage - get people involved:** Engage people in policy decision-making about how to tackle climate change.
5. **Encourage - give the right signals:** Encourage people to make everyday changes that will help tackle climate change. (Welsh Government, 2023a)

Ask & Warm Up green choices

Ask green choices: Sustainable behaviours that are easy for most to adopt, and for which the population's support and willingness is relatively high.

Warm Up green choices: Relates to some sustainable choices being difficult for most people through barriers such as cost, convenience and availability, and overcoming misinformation. For these situations, communications should focus on messaging on 'warming up' people to green choices. (Behavioural Insights Team, 2023).

Behavioural Science Advisory Group

The main purpose of the Advisory Group is to inform decision making and provide subject matter expertise in the field of research, behavioural insight/change, climate change and campaign strategy in Wales. The Advisory Group applies current knowledge, critical thinking and analysis to ensure that the Welsh Government can meet its objective to drive and mobilise climate change behaviour change by people in Wales, in line with the Committee for Climate Change's recommendations on emission reductions.

Bounce rate

Referring to measuring a website's success, bounce rate is the percentage of website visits that were not engaged. Bounce rate is the opposite of engagement rate – see Engagement rate.

Climate Action Wales Public Engagement Strategy 2023-26

This Strategy sets out a framework for the Welsh Government and its Partners to work together to support and engage the people and communities of Wales in action on the climate and nature emergencies (Welsh Government, 2023a).

Climate adaptation

Climate adaptation is about anticipating the risks and impacts arising from climate change and making sure the required work is carried out to ensure we are well prepared (Welsh Government, 2023a).

CCC

The Climate Change Committee.

Climate emergency

A situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it.

Climate mitigation

The process of preventing or reducing the emission of greenhouse gases into the atmosphere to reduce the impacts of climate change.

COM-B model of behaviour change

A behaviour change framework that proposes three necessary components for any behaviour (B) to occur. Through assessing capability (C), opportunity (O), and motivation (M), we can understand why a specific behaviour occurs and how to create targeted interventions that lead to effective change (Michie, van Stralen and West, 2011).

Contribution analysis

A theory-based evaluation approach, consisting of three steps:

1. Develop a Theory of Change, including hypotheses about the effects of an intervention.
2. Test these hypotheses through the collection and analysis of data.
3. Update the original theory of change by indicating which hypotheses are verified.

Conversions

Referring to measuring a website's success, conversion means the number of people (users) who took a desired action on a website. A desired action can be, for instance, downloading material or filling out a form. The conversion rate is calculated by taking the

number of users who converted (took a desired action) as a percentage of the total number of website users.

Dwell time

Referring to measuring a website's success, dwell time refers to the amount of time users spend on a page entered from search results, before returning to the search engine results page, and navigating away from the page. Average dwell time can help to measure users' interest in a web page, and how relevant they find the content.

Engagement rate

Referring to measuring a website's success, engagement rate refers to the percentage of sessions (website visits) that involve the user interacting with the website content in some way. Google Analytics counts a session as engaged if it lasts for more than 10 seconds, has a key event (a user has scrolled through at least 90% of a webpage's content), or has at least 2 page views.

Environmental protection

Managing air, land and water quality to safeguard our health (Welsh Government, 2023a).

Environmentally sustainable choices

Ways of living that help maintain the balance of the planet's natural environment and conserve natural resources.

Formative evaluation

A process that assesses the progress of an intervention while it is in development. It is used to identify and address challenges early on to increase the intervention's success, efficiency, and effectiveness.

Four Nations Behaviour Change and Engagement Group

The Four Nations Group on Behaviour Change and Public Engagement for Net Zero is a collaborative body comprising officials from the Scottish Government, Welsh Government, Northern Ireland Executive, and UK Government. Its primary aim is to foster a coordinated approach to behaviour change and public engagement related to achieving net zero emissions across the four nations. The group seeks to align policy, improve communication, share best practices, and address public awareness to support net zero targets. Regular meetings ensure that members work collectively on strategies and messaging for consistent implementation and public support across the UK.

Green choice themes Consumption choices

Choosing ways to consume goods to minimise the impact on the environment (Welsh Government, 2023a).

Green choice theme: Food choices

Choosing ways to consume and store food to minimise the impact on the environment (Welsh Government, 2023a).

Green choice theme: Home energy choices

Choosing ways to use energy at home to minimise the impact on the environment (Welsh Government, 2023a).

Green choice theme: Transport choices

Choosing ways to travel to minimise the impact on the environment (Welsh Government, 2023a).

Green policy

A set of guidelines, regulations, and practices aimed at minimising environmental impact and promoting sustainable development.

Just Transition

A Just Transition means that whilst decarbonising from a fossil fuelled economy, no one is left behind (Welsh Government, 2023a). The approach to Just Transition in Wales is built on the Well-being for Future Generations (Wales) Act 2015 and aims to mitigate any unintended impacts and maximises the opportunities that decarbonisation provides and does this fairly (Welsh Government, 2023c).

Magenta Book

The Magenta Book provides guidance on how to incorporate evaluation through the design, implementation, delivery and review stages of policy making (HM Treasury, 2020).

Nature emergency

17% of 3,902 species studied in Wales are at risk of extinction, with many others in decline. Weather and temperature changes make it harder for many animals and plants to survive (Welsh Government, 2024d).

Net zero

Where the greenhouse gases taken from the atmosphere are in balance with the greenhouse gases emitted (Welsh Government, 2023a).

Noise management

The practice of reducing noise levels to protect human health and well-being.

Partners

Members of Team Wales – see ‘Team Wales’.

PESTLE framework

A strategic tool used to evaluate external macroeconomic factors that may impact an organisation, industry, or company. The acronym PESTLE stands for six categories of factors that are analysed: Political, Economic, Social, Technological, Legal and Environmental (Aguilar, 1967).

Team Wales

The Team Wales approach (referred to as Partners in this report) is where the Welsh Government, public service bodies, businesses, voluntary sector organisations and local communities across Wales work together to tackle the shared challenges of the climate and nature emergencies (Welsh Government, 2023a).

The circular economy

A circular economy aims to maintain the value of products, materials and resources for as long as possible by returning them into the production cycle at the end of their use, while minimising the generation of waste (Welsh Government, 2023a).

Theory of Change

A framework that explains how and why a change will occur as a result of an intervention, and what strategies and resources are needed to achieve that change (HM Treasury, 2020).

Well-being of Future Generations (Wales) Act 2015

This Act aims to ensure that future generations have at least the same quality of life as we do now. The act provides for better decision-making by ensuring that public bodies take account of the long term and help to prevent problems occurring or getting worse. The Act's 5 ways of working guide the Strategy and all related policies and strategies in Wales: Long term, integration, involvement, collaboration, and prevention.


1. Introduction and Background

- 1.1 The Welsh Government commissioned SYSTRA to develop a Theory of Change for the Climate Action Wales Public Engagement Strategy (2023-2026) (the Strategy) (Welsh Government 2023a).
- 1.2 The Strategy provides a framework for how the Welsh Government and Team Wales (referred to as Partners in this report) will support and engage people in Wales to act on the climate and nature emergencies and ensure views are captured across a range of communities, sectors, and individuals.
- 1.3 The Strategy highlights the role of the UK Government in supporting environmentally sustainable choices and the need for mutual progress but focuses on actions that the Welsh Government is either leading or directly funding. It emphasises two interlinked aspects of public engagement on climate issues:
- engagement in decision-making
 - engagement in climate action.
- 1.4 The Strategy calls for coordinated efforts across the public sector and a broader network of Partners working together to achieve the desired outcomes. It is designed around the following four green choice themes:
- Green home energy choices - including green energy actions, energy efficiency, draught proofing, insulation and renewable energy systems
 - Green transport choices - including active travel, public transport, electric vehicles and flying less
 - Green food choices - including eating a balanced diet, sustainable food choices, storage and shelf life, and reducing food waste
 - Green consumption choices - including buying less and shopping sustainably, reusing and repairing, recycling and using less water.
- 1.5 The Strategy encompasses actions beyond climate mitigation, including climate adaptation, the nature emergency, the circular economy, environmental protection, noise management, and education, skills, and careers. These actions also require collaboration and partnership within Government and externally with Partners to ensure public engagement is at the heart of related policy development.
- 1.6 Formative evaluation will be important for the Welsh Government to understand what is working, why, and how to continuously iterate the Public Engagement Strategy to increase the positive environmental impacts. The purpose of developing

a Theory of Change for the Strategy is to establish a clear outline of exactly what the Strategy aims to achieve and how. This will be useful for future evaluation activity on the Strategy, which will seek to measure attributable outcomes and impacts.

- 1.7 This Theory of Change was developed after conducting a close reading of the Strategy, an evidence review of relevant literature, and a series of workshops with stakeholders and delivery Partners both internal and external to Welsh government.
- 1.8 Figure 1.1 summarises the context to the Public Engagement Strategy, using a PESTLE framework (Aguilar, 1967), which structures macroeconomic factors as follows:
- Political - for example, government, tax policies, political trends and issues, changes in leadership.
 - Economic - factors that influence the economy such as inflation, economic growth, interest rates and unemployment levels.
 - Social - social and cultural changes, societal trends and patterns.
 - Technological - the availability, development and awareness of technology, automation, and research and development.
 - Legal - law and regulations.
 - Environmental - the physical environment.
- 1.9 This context has been informed by an evidence review (described in Section 2), which included a detailed analysis of Climate Action Wales Public Engagement Strategy (2023-2026), and a summary review of 46 additional sources. The full list is included in Annex A, which includes additional references explored during the review. The italicised numbers in brackets in Figure 1.1 indicate the evidence review source listed in Annex A.

Figure 1.1: Context to the Public Engagement Strategy



Political

- The Climate Change Committee (CCC) recommends that the Welsh Government should have greater engagement with the public for the transition to net zero. (2)
- The Public Engagement Strategy is driven by Wales' people-centred approach. (1)
- Net Zero Wales Carbon Budget 2 (2021-2025) sets out the journey to net zero by 2050 and a greener, stronger, fairer Wales. (5)
- Just Transition - designing green interventions with resolving, not exacerbating, inequalities in mind. (9)
- A range of Welsh Government policies relating to climate mitigation and adaptation and building the necessary green skills for this within the Welsh Government and the public, including, but not limited to, the reviewed sources listed in Annex A. (13, 14, 18, 38, 39, 53)
- Delivery must happen in parallel with UK ambitions for mutual progress. The Welsh Government does not have devolved powers in electricity and fuel supply, manufacturing and construction, aviation and shipping. (1, 55, 60)



Economic

- Globally responsible – the Strategy observes that, “until recent decades, developed countries, like ours, have been the source of most carbon emissions. These countries possess the financial and technological resources to lead international efforts”. (1)
- Just Transition Framework vision of the transition happening in partnership with business and industry, ensuring the right skills and new green industries are developed. (8, 9)
- Inequalities, the cost-of-living crisis and additional cost of certain green lifestyle choices means the public have differing capabilities for behaviour change. Simultaneously, some groups are predicted to experience worse impacts of climate change (4, 1)
- While data suggests 9 in 10 consumers want to make sustainable choices, some behavioural change initiatives are expensive e.g. owning an Electric Vehicle (which is also inconvenient without off-street parking), installing a heat pump, and there are no cheap and quick alternatives to long-haul flights. (23)
- Wealthier people generate higher emissions, and have more political power to resist policies that may impact their lifestyles. (36)
- A range of funding sources have been made available to the general public to help ease the financial burden of switching to more sustainable choices. (76)

Social



- There are high levels of concern about climate change amongst the Welsh public – The National Survey for Wales (2022) finds that 76% of the population of Wales are ‘very’ or ‘fairly’ concerned about climate change, and 94% think that the general public have ‘some’ or ‘a lot’ of responsibility to tackle climate change. (1)
- Public engagement in decision-making processes requires ongoing two-way dialogue. (36)
- Public engagement can improve the legitimacy and perceived fairness of net zero policy and generate trust. (21)
- Some changes in green behaviour since the Covid-19 pandemic for instance fewer people are travelling to work, but more people are using cars. (11)
- Many community organisations and initiatives encouraging greener behaviour e.g. FareShare (65); Funding redistribution of surplus food; Repair Cafes in Wales (66); Sustainable food production and consumption; Food Sense Wales. (72)
- The challenge of ensuring more marginalised, vulnerable and underrepresented groups have a chance to be heard in climate change conversations. (21, 47)
- Careful consideration should be given to the frequency of engagement approaches and methods used to avoid people being overwhelmed, or activity leading to engagement fatigue. (44)

Technological



Technological

- Globally responsible – the Public Engagement Strategy observes that, “until recent decades, developed countries, like ours, have been the source of most carbon emissions. These countries possess the financial and technological resources to lead international efforts”. (1)
- In the Energy Generation in Wales report from 2017, the Welsh Government announced a target for seventy percent of Wales’ electricity consumption to be from renewable energy by 2030. (60)
- Evidence shows that it is important to build public support and understanding for large-scale energy technologies, greenhouse gas removal technologies and carbon capture and storage, and the changes individuals can make (e.g. switching to using heat pumps and electric vehicles), if these are to be part of a future net zero pathway. (21; 1)
- UK Government investment in rolling out existing technologies and developing new technologies to tackle climate change and reach net zero (20).

Legal

- The Wellbeing of Future Generations (Wales) Act 2015 - seven wellbeing goals, requires public bodies to carry out sustainable development (the process of improving the economic, social, environmental and cultural wellbeing of Wales). The Act's guiding principles are integrated into the Public Engagement Strategy. (25)
- The Paris Agreement requires signatories to promote and facilitate public participation in addressing climate change and its effects and developing adequate responses at both the national and regional levels. The Aarhus Convention states that citizens must be entitled to participate in decision-making in environmental matters and that public participation in decision making on the environment enhance the quality and the implementation of decisions. (45, 77)
- The Environment (Wales) Act 2016 - a modern statutory process to plan and manage natural resources in a joined up and sustainable way. (61)
- The Environment (Air Quality and Soundscapes) (Wales) Act 2024 – an Act to improve the quality of the air environment and reduce the impacts of airborne pollution on human health, nature, the environment and the economy. (70)
- The Environmental Protection (Single-use Plastic Products) (Wales) Act 2023 – an Act to tackle plastic pollution and deliver Wales's commitment to abolish commonly littered single-use plastic products. (71)
- 20mph speed limits – in September 2023 Welsh Government introduced a default 20mph speed limit on restricted roads across Wales. (67)



Legal

Environmental (continues overleaf)

- Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Synthesis Report (2023):
 - Human activities have caused global warming, principally through greenhouse gas emissions. This is causing adverse impacts on people and nature, which will increase with increased warming. The UK is already seeing increases in temperatures and changes in rainfall. Immediate actions are needed for deep and rapid cuts in global emissions of greenhouse gases to reach net zero. Strategies to achieve net zero greenhouse gases in the UK include a shift to low-carbon energy, improved efficiency and reduced demand, and removing CO₂ from the atmosphere.
 - Strategies require consistent policy, infrastructure planning, and research and development in energy storage, renewable energy, agricultural emissions reductions and carbon capture and storage. (62)
- The CCC Report, May 2019 - 62% of the changes in their Balanced Net Zero Pathway for the UK to 2035 rely on societal behavioural changes. (63)
 - The biggest carbon reductions (53%) come from the adoption of new technologies (electric vehicles, heat pumps, home energy-efficiency improvements). Nine percent depend on lifestyle changes including less red meat and dairy, more active travel, and less flying and driving. (63)
- Research suggests much of the remaining 38% also depends on social and behavioural constraints, including public support for green infrastructure and policy. (1, 3, 16, 23)

E



Environmental

E



Environmental

- The Well-being of Future Generations (Wales) Act 2015 includes Wales becoming a “low carbon society” which “uses resources efficiently” and acts on carbon change, and “maintains and enhances a biodiverse natural environment” (25).
- In 2021, the Welsh Government declared a nature emergency, meaning that 17% of species studied in Wales are at risk of extinction, and many more declining. The nature emergency is linked to the climate emergency and can also be addressed through behaviour change (77).
 - The Welsh Government addresses the nature emergency through various measures, including developing a national forest, ending retail sale of peat, hosting ‘Nature and us’ national conversations, and promoting the sustainable management of natural resources (77).
- The Welsh Government has committed to protect at least 30% percent of land and 30% of the sea by 2030 (39).
- Wales has committed to environmental protection through a series of measures in addition to those already described here, including default 20mph speed limits, land and noise management and efforts to preserve water quality (78).

1.10 This report is structured as follows:

- Section 1 outlines the background to the Public Engagement Strategy and its Theory of Change, and presents the findings from the evidence review of background literature in a PESTLE (political, economic, social, technological, legal and environmental) framework format
- Section 2 outlines the methodological approach of the research, including a presentation of Theory of Change as a methodology, and descriptions of how the evidence review and workshops were delivered
- Section 3 provides the findings through presenting the Theory of Change model for the Strategy (including a simplified version of it), and describes each stage of the model, and discusses underlying assumptions, risks and dependencies that should be considered in a future evaluation of the Strategy.
- Section 4 consists of a brief summary of the report and concludes by making final recommendations for future evaluators.

2. Methodology

2.1 To develop a Theory of Change for the Public Engagement Strategy, SYSTRA conducted the following research activities:

- a review of evidence and policy documents that have fed into the Public Engagement Strategy and / or relate to it
- a review of available survey data to use for measuring outcomes
- a workshop with internal Welsh Government stakeholders directly involved in implementing the Strategy, to develop a draft Theory of Change for the Strategy
- four workshops including both internal Welsh Government and external stakeholders, one covering each of the following areas:
 - green home energy choices
 - green transport choices
 - green food choices
 - green consumption choices
- a final stakeholder workshop including both internal Welsh Government and external stakeholders to explore the Strategy's overarching aims and sense check the draft Theory of Change.

2.2 Annex E lists the organisations represented in the stakeholder workshops.

Structure of this Section

2.3 This section introduces the Theory of Change as a methodology for developing an evaluation tool and proceeds to describe how the evidence review and workshops were delivered. The section concludes with a discussion of methodological considerations and limitations of this research.

Theory of Change

2.4 A Theory of Change logic model is an established evaluation tool for outlining causal pathways between programme and policy activities and their intended impacts. It is described in the Magenta Book (HM Treasury, 2020), which is designed to help government decision-makers and analysts understand the role of evaluation and the processes and methods for conducting an evaluation.

- 2.5 For reasons described throughout this report, it is likely that future evaluation of the Strategy will need to draw on theory-based methods. Creating a Theory of Change is an important first step to enable this.
- 2.6 A Theory of Change maps the following elements of an intervention:
- the problem the intervention aims to address
 - the change the intervention seeks to bring about
 - the causal chain of events expected to bring about the desired change
 - who the main actors are
 - which groups are expected to be impacted
 - the expected conditions required for the intervention to succeed
 - which underlying assumptions the intervention is based on, including the strength or weakness of the evidence supporting these assumptions
 - an examination of the wider policy, social, economic and environmental factors.
- 2.7 The following aspects are explored to understand and map the causal mechanisms and logical steps towards achieving the desired change. These aspects are presented graphically to represent the Theory of Change:
- inputs – the resources committed to the intervention
 - activities – the activities that combine to constitute the intervention
 - outputs – what is delivered or produced
 - outcomes – early- or medium-term results
 - impacts – long-term results.
- 2.8 The Public Engagement Strategy 2023-2026 was published in July 2023 and had evolved over the past year before this research was conducted. The Theory of Change described in this report is based on any developments since the publication of the Strategy. It is anticipated that the Theory of Change described in this report will further develop and change alongside the Strategy in future.

Evidence review

- 2.9 SYSTRA conducted an evidence review to collate the currently known information for the project, set the context for the Theory of Change, help the project team identify any gaps in information, and produce a summary to use in the Theory of Change workshops.
- 2.10 Evidence for the review was provided by the Welsh Government, and by Professor Wouter Poortinga and Dr. Caroline Verfuert, our academic Partners at Cardiff

University's Centre for Climate Change and Social Transformations (CAST).

SYSTRA also included documents mentioned in the sources provided by the Welsh Government where they were felt to deepen contextual understanding.

2.11 SYSTRA researchers agreed the following research questions for the evidence review with the Welsh Government.

- What are the reasons for the Public Engagement Strategy?
- What are existing indicators?
- How are they measured?
- What data collection methods are currently available?
- What other strategies, policies, programmes and funds are related to the Public Engagement Strategy?
- What are the desired impacts of the strategy – long-term, medium-term, immediate?
- What are the outcomes that will lead to the desired impacts?
- What are the inputs?
- What are the activities?
- What are the outputs?
- What are the assumptions?
- What are the enablers?
- What are the barriers?
- Who are the stakeholders for the Public Engagement Strategy?
- What is their level of influence, how are they involved?
- What are their needs, priorities, concerns?
- What are other UK nations doing in this area and what can Welsh Government learn from other nations?

2.12 The review started by breaking down the detail of the Public Engagement Strategy into the constituents of a Theory of Change. The team then followed a systematic approach to draw out the relevant information from each source into an evidence synthesis matrix compiled in MS Excel. Each source was labelled according to which green choice theme(s) it addressed, and whether it was relevant to the

strategy or to the wider areas for consideration (e.g. climate adaptation, nature emergency or environmental protection).

- 2.13 A list of documents included in the evidence review is included in Annex A.
- 2.14 The evidence review fed into the design of the draft Theory of Change. A summary of contextual findings is also included in Figure 1.1 in the Introduction and Background section of this report, using a PESTLE framework.

Workshops

- 2.15 Following the evidence review, SYSTRA researchers facilitated a workshop with members of the Welsh Government in June 2024. The purpose of this workshop was to develop a shared understanding of the Strategy's ambitions and implementation. The topic guide for this workshop is in Annex B of this report.
- 2.16 Ahead of the workshop, SYSTRA used the detailed breakdown of the Strategy document to structure the information included in the Strategy according to its Theory of Change components – inputs, activities, outputs, outcomes and impacts. Due to participant availability, the workshop needed to be conducted online, and ahead of the workshop the project team added the Theory of Change components as prompts to an online whiteboard. During the workshop, participants used the online whiteboard to structure discussion of each component of the Strategy Theory of Change, starting with the desired impacts and working backwards to the inputs. At each stage, the discussion started with participants' spontaneous thoughts and understanding, before moving into prompting with the information prepared from the Strategy to make sure nothing was missed.
- 2.17 Through this workshop, the project team was able to understand how the information included in the Strategy will be implemented in practice, and any developments since the Strategy had been published (around a year before this research was conducted). This gave them a good initial understanding of the logic of the Strategy.
- 2.18 During the workshop the project team took summary notes on the shared whiteboard, which was structured by the Theory of Change components. Attributes were recorded on individual virtual 'post-it notes', allowing the group to move notes around and consider if there were causal links, assumptions and dependencies.
- 2.19 Following the workshop, the SYSTRA project team referred back to the detailed breakdown of the Strategy and evidence review (both detailed in an Excel matrix),

and workshop outputs (the whiteboard and additional notes made during the session) and structured the whiteboard outputs into a draft Theory of Change. The SYSTRA project team then worked with the Welsh Government project leads to develop the first draft of the Theory of Change into the model included in the stakeholder workshops. The topic guide for these workshops is added in Annex C.

- 2.20 SYSTRA facilitated five additional workshops with stakeholders of the Public Engagement Strategy. Stakeholders included Welsh Government representatives and Partners from civil society, who were selected based on being organisations the Welsh Government regularly engages with on climate-related policies and programmes. Four workshops focused on each of the four green choice themes (see Annex C for topic guide) and the fifth focused on the Strategy overall, including assessing and sense-checking the draft Theory of Change (see Annex D for topic guide). A list of organisations that participated in the workshops is included in Annex E.
- 2.21 Similar to the first workshop with the Welsh Government, the four green choice theme workshops were delivered on MS Teams and facilitated by SYSTRA social researchers. The purpose of these workshops was to sense-check the logic of the draft Theory of Change model that had been developed after the initial Welsh Government workshop. Additionally, the workshops were used to gain an understanding of assumptions, risks and dependencies of the successful implementation of the Strategy.
- 2.22 Each workshop opened with a discussion to explore the level of knowledge the participants already had of the Strategy, before going through the draft logic model and gathering their feedback. An understanding of assumptions, risks and dependencies was established through asking the participants about how they viewed their role in delivering the identified activities and contributing to the desired outcomes and impacts, and by discussing what success factors and barriers they could see to delivery for their policy area.
- 2.23 After these four green choice theme workshops, the research team worked with the Welsh Government delivery team again to update the logic model.
- 2.24 The final stakeholder workshop invited participants to comment on the updated draft logic model from an overarching perspective. The purpose of this final workshop was to sense-check the logic flow of the Theory of Change model with an additional set of Partners. As in the previous workshops, participants were talked through

each component of the model separately before looking at the model overall, enabling the participants to give their feedback on both key sections of the model as well as discuss their perceptions of the logical flow across the model.

- 2.25 Following this final workshop and a feedback session with the Welsh Government project team, the SYSTRA research team conducted a one-to-one interview with one of the Partners who had participated in the final workshop and was able to give additional input. This input was used to make amendments to the logic model and develop an additional simplified Theory of Change model. In total, there were 13 iterations of the Theory of Change model developed through the stakeholder workshops based on Partner feedback, before the final version of the model was agreed between the research team and Welsh Government.

Considerations and limitations of the research

- 2.26 The evidence review was conducted as a familiarisation exercise to understand the evidence behind the Strategy and the components of a Strategy Theory of Change, drawing predominantly on sources identified by Welsh Government. It was beyond the scope to conduct a systematic search and review of evidence.
- 2.27 The Theory of Change described in this report was developed at a stage in the Strategy implementation where there was a mature communications plan, but a planned review to inform engagement activities had not yet been conducted. This made it more difficult to incorporate engagement activities into the Theory of Change, and participants in the green theme workshops questioned some of the detail. The Theory of Change should be updated following this work to strengthen the logic of the Strategy, in particular, how the Strategy activities will lead to the Engagement Outcomes.
- 2.28 While there was a large number of stakeholder organisations represented in the workshops (a list is included in Annex E) this research used qualitative methods to develop the Theory of Change and the views were those of individuals attending the workshops and not generalisable.
- 2.29 While participants in the stakeholder workshops had heard of the Strategy, there were differing levels of familiarity and many felt they did not know a lot about it. The research team anticipated this and managed this through the discussions (the workshop guides are included in Annex B, C and D) but it does mean stakeholder feedback is not based on a full and detailed understanding of the Strategy.

3. Findings

Structure of this Section

3.1 This Section starts with an overview of the full Public Engagement Strategy Theory of Change, before discussing the impacts that it aims to contribute to. It then discusses the remaining components of the Theory of Change in turn - inputs, activities, outputs, and outcomes.

Public Engagement Strategy Theory of Change

3.2 Figure 3.1 shows a simplified version of the Public Engagement Strategy Theory of Change, which overviews the underlying logic of the Strategy. It is followed by Figure 3.2, which shows the detailed Strategy Theory of Change, and Table 3.1, which summarises the assumptions, dependencies and risks discussed throughout this section.

3.3 The logic of the Strategy is that it will contribute to and increase a range of impacts (shown in Figure 3.2) through two main success factors:

- The direct communications activities of the Strategy are amplified through Welsh Government and Partner channels and networks, ensuring trusted voices are used to resonate with and reach different audiences. This gives people the capability and motivation to change their behaviour.
- The Strategy contributes to developing green policy that is strengthened by public engagement. This means people will feel greater ownership of policy and the issues it is striving to tackle; people have an enhanced sense of personal responsibility to contribute to tackling the policy issue; and policies will be better informed and better targeted to help people where and how they need to be helped. Policy will address the major cost and convenience barriers to green behaviours. This creates and increases opportunities for people to adopt greener behaviour and increases public support for broader Welsh Government climate policy.

Figure 3.1: Simplified Public Engagement Strategy Theory of Change

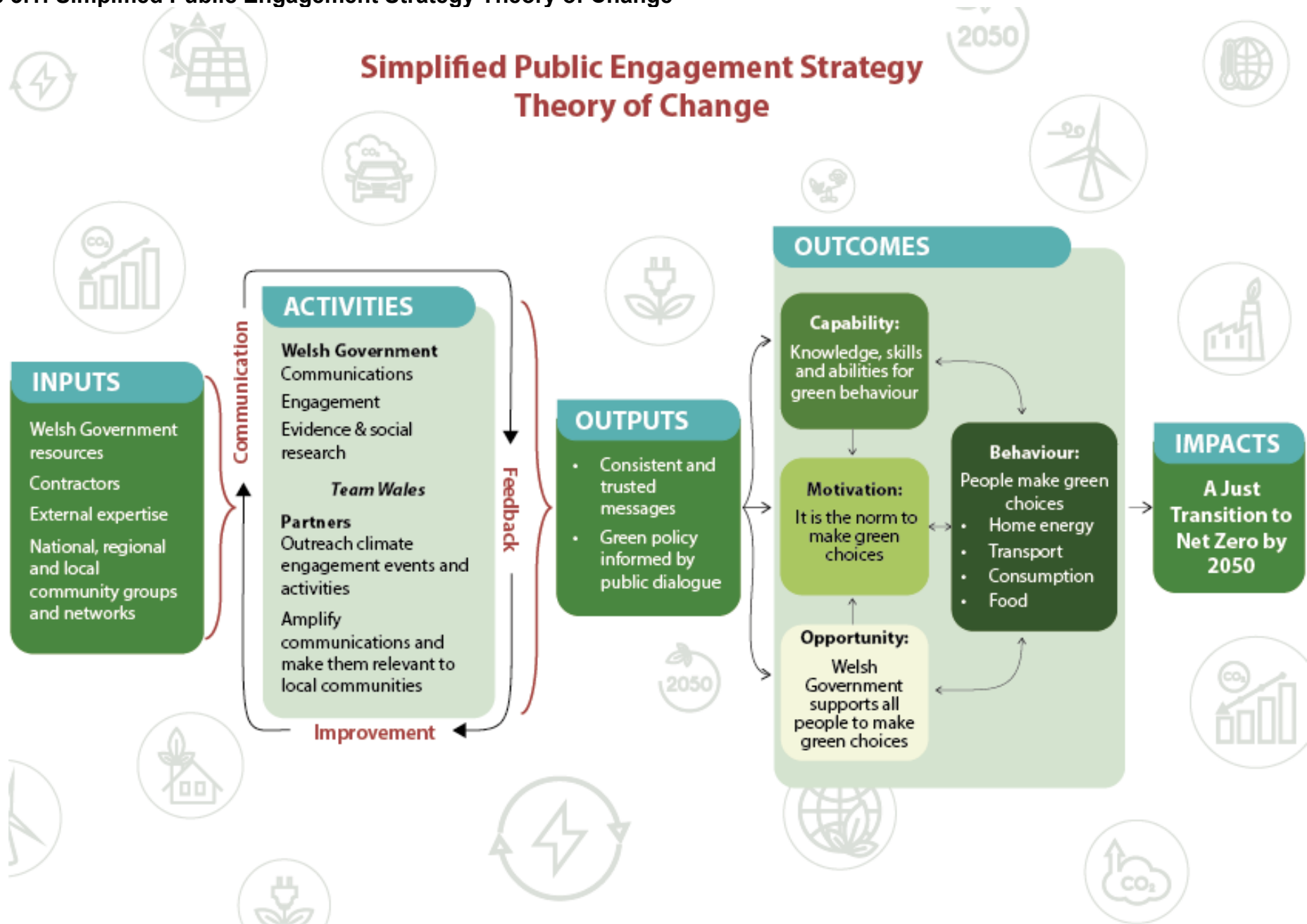


Figure 3.2: Detailed Public Engagement Strategy Theory of Change



(gathered through Climate Change Perceptions and Actions survey, campaign tracking survey, desk research, evidence from engagement activity).

REGIONS & COMMUNITIES (DELIVERED VIA TEAM WALES PARTNERS)

Communications:
Share, amplify and make national and regional climate communications activity locally relevant.

Engagement:
Deliver national and regional outreach climate engagement events and activities.
Feed diverse local experiences into the national strategy iteratively, including underrepresented groups and those with different needs (Just Transition).

place-based solutions
E10 Through partners, the needs of the most vulnerable are heard and incorporated into green policy

Engagement Outcomes enable the COM-B Outcomes

COM-B BEHAVIOURAL THEORY OF CHANGE OUTCOMES

Motivation Outcomes

M1 Increased public desire to change their behaviour

M2 Increased public belief that collective action can make a difference

M3 Increased consideration of warm up green behaviour (e.g. buy an EV)

M4 Increased belief that Welsh Government is leading by example

Opportunity Outcomes

O1 Government policy is effective in making green choices more convenient and affordable for all
O2 Government green policy is fair and protects people who are more vulnerable

Capability Outcomes

C1 Increased people's emotional connection with climate change
C2 Increased public awareness of human impact on climate change
C3 Increased public knowledge about climate change and awareness of the changes individuals can make

for future generations.

- Create more cohesive communities
- Promote a globally responsible Wales

Table 3.1: Summary of dependencies, assumptions and risks

	Dependencies and assumptions	Risks
Inputs	<ul style="list-style-type: none"> • The inputs are sufficient to meet the requirements of the Strategy. • The evidence behind the Strategy is robust. 	<ul style="list-style-type: none"> • Resources are insufficient.
Activities	<ul style="list-style-type: none"> • There is an established relationship between the Welsh Government and its Partners, where they are working together to achieve the desired outcomes and impacts, stakeholders understand the consistent messages, amplify them and make them relevant at a local level. • It is possible to send consistent messages (targeted by identified segments) that are the right Asks and Warm Up messages to promote behaviour change. • There are other voices that are more trusted than Welsh Government and these voices are engaged by the Strategy. • Partners have the institutional and technical capacity required to deliver and amplify the Strategy’s activities. • There is continual feedback and improvement. 	<ul style="list-style-type: none"> • There is not a defined activity to create the relationship between the Welsh Government and its Partners that will deliver the activities of the Strategy. Partners are not aware that they have a role in implementing the Strategy and do not fully engage with it. • Activities continue as discrete strands of work, rather than being an integrated Public Engagement Strategy so the Strategy itself does not lead to change. • Some messages are not accepted by Partners. • Messages do not cut through to the right audiences in the right way and at the right time. • The launch of the communications campaign ahead of policy levers means communications target capability and motivation before facilitating the required opportunities for green behaviour change, in some instances.

Table 3.1: Summary of dependencies, assumptions and risks

Dependencies and assumptions	Risks
	<ul style="list-style-type: none"> Partner needs to enable the engagement activities are not met, for example because some Partners lack the resources to conduct engagement activities, or do not find the toolkits usable. The Strategy does not directly address the organisations actively delivering mis / dis-information, which undermines Strategy communications.
<p>Outputs</p> <ul style="list-style-type: none"> The Theory of Change does not assume that the core outputs of the Strategy are quantifiable - they require assessment using a range of methodologies and contextualising the output measurement with the outcomes. 	<ul style="list-style-type: none"> Campaign evaluation metrics are given too much weight in the early assessment of the Strategy - evaluation will need to incorporate assessments of all aspects of the Strategy as they are so strongly interlinked.
<p>Outcomes</p> <ul style="list-style-type: none"> The activities will lead to increased capability, motivation and opportunity for green behaviour. Involving the public, including disadvantaged groups, in decision-making on the climate will lead to better outcomes for the wider public and disadvantaged groups. 	<ul style="list-style-type: none"> Communications focus on capability and motivation, without sufficient underlying policy bundles and schemes to enable the opportunity for green behaviour by making it an affordable, desirable and convenient choice. Improvements that would have happened anyway are misattributed to the Strategy.

Table 3.1: Summary of dependencies, assumptions and risks

Dependencies and assumptions	Risks
<ul style="list-style-type: none"> • Improvements are required to the capability, opportunity and motivation outcomes for there to be improvements in the behaviour outcomes. • It is likely there would be improvements to the capability, opportunity, motivation and behaviour outcomes in the absence of the Strategy and the Strategy does not assume that it is the only factor in changing these outcomes. • If there are not changes to the engagement outcomes, it is unlikely the Strategy leads to any improvements in the capability, opportunity, motivation and behaviour outcomes. 	<ul style="list-style-type: none"> • Engagement is conducted but it is not effective.
<p>Impacts</p> <ul style="list-style-type: none"> • The Strategy will contribute to a Just Transition to net zero through partnership working and public engagement. This implicitly assumes it is a lack of awareness, partnership working and engagement that means green policy has unequal social impact. • The impacts are not directly attributable to the Strategy due to contextual factors, but the Strategy will contribute to the positive impacts by achieving its green choice behaviour outcomes. • <i>(Future iterations of the Theory of Change may also incorporate adaptation behaviours).</i> 	<ul style="list-style-type: none"> • The challenge of balancing fairness and decarbonisation. Even with collaboration and engagement it isn't possible to find realistic solutions to achieve net zero by 2050 fairly, due to macroeconomic constraints. • The potential policy solutions identified by public engagement and collaboration are not implemented by Welsh Government / supported by UK Government / other countries.

Public Engagement Strategy Impacts

- 3.4 The main impact the Strategy aims to contribute towards is a **Just Transition to net zero by 2050**.
- 3.5 As highlighted in the PESTLE analysis in Figure 1.1, there are technological, social and economic challenges of decarbonisation, and existing inequalities in society means individuals will be impacted by decarbonisation in different ways and to different extents. People may be impacted unfairly by climate policies if the risks are not fully understood and embedded into the policy making process. Some people have greater barriers to greener behaviours than others and there is a risk that some green policy interventions can, in some contexts, impact more vulnerable people disproportionately.
- 3.6 A core premise of the Strategy is that partnership working and public engagement will engage all members of society in the changes required to achieve net zero. Through its Partners, Welsh Government will reach voices that would otherwise be unheard, so it is able to design effective policy levers that understand and meet different needs and ensures policy is fair.
- 3.7 The Strategy aims to contribute to a range of green impacts:
- reduce carbon emissions
 - minimise climate risk and build greater resilience within Welsh homes & communities
 - promote more sustainable food, renewable energy, transport, and circular economy systems
 - promote a fairer, more inclusive and equal society
 - improve the quality of our local environment (including protecting biodiversity, reducing litter, noise pollution and providing cleaner air, land and water)
 - improve public health and wellbeing
 - bring financial benefits to households and new skills and career opportunities
 - promote the rights of children and safeguard our planet for future generations
 - create more cohesive communities
 - promote a globally responsible Wales.

- 3.8 In the absence of the Strategy, the areas of work identified in the PESTLE analysis in Figure 1.1, such as the range of policies relating to climate mitigation and adaptation and building the necessary skills for this, would continue to contribute to the impacts outlined in the Strategy Theory of Change. None of these impacts are directly attributable to the Strategy in isolation. Stakeholders such as the Climate Change Committee will measure and publish progress towards these impacts.
- 3.9 Future evaluation will need to take care to avoid making causal assumptions (in the absence of designing and implementing trials) and should consider theory-based and contribution analysis methods. The Theory of Change described in the report should be updated as the Strategy evolves, particularly as the engagement activities are more clearly defined. Rather than asking the questions such as, “did the Strategy lead to a Just Transition to net zero?”, contribution evaluation will assess questions such as, “is it reasonable to conclude the Strategy contributed to a Just Transition to net zero?”. This may be evaluated through quantitative outcome measurement supported by qualitative methods to explore and fully understand how the Strategy led to change.

Impacts: Assumptions, dependencies, risks and areas to explore in an evaluation

- 3.10 Assumption: The Strategy will contribute to a Just Transition to net zero through partnership working and public engagement. The Strategy recognises social inequity and that the barriers to and impacts of green behaviour and decarbonisation vary. There is an assumption in the Strategy that by greater engagement and partnership working to listen to lesser heard voices, it will be possible to introduce effective policy and support packages to achieve net zero fairly.
- 3.11 Risk: The risk of this assumption is that the challenge of balancing fairness and decarbonisation could be too great to achieve a Just Transition to net zero by 2050. An implicit Strategy assumption is that it is a lack of awareness and partnership working to engage the public in solutions that means green policy has unequal social impact. This may not overcome an issue that even with collaboration and engagement, solutions to meet social justice needs and achieve net zero are not delivered, due to factors such as macroeconomic constraints (for example, certain green lifestyle choices carry additional cost, and as such, may not feel attainable for all, described in the PESTLE analysis in Figure 1.1).

- 3.12 Areas to explore in an evaluation: Future evaluation might take a case study approach to explore how public engagement changes the design of a particular policy that risks impacting certain members of society disproportionately. This will be possible to explore qualitatively. It may also be possible to design trials and pilots to make causal assessments.
- 3.13 Areas to explore in an evaluation: The impacts are not directly attributable to the Strategy due to contextual factors such as other Welsh and UK Government net zero initiatives, but the Strategy is designed to contribute to the positive impacts by achieving its green choice behaviour outcomes. Future evaluation should avoid inferring causality and use theory-based evaluation methods to assess the success of the Strategy.
- 3.14 Areas to explore in an evaluation: Future iterations of the Theory of Change may also incorporate adaptation behaviours. The Strategy isn't limited to mitigation policy and behaviour and is expected to evolve. This Theory of Change should be updated alongside evolutions to the Strategy.

Public Engagement Strategy Inputs

- 3.15 Figure 3.2 details the inputs into the Strategy. These include resources directly provided or commissioned by Welsh Government and expertise provided at a national and international level.
- Welsh Government Resources – financial, staff and governance.
 - Contractors – campaign, social research and event management consultancies.
 - External expertise – including the Climate Change Committee, Behavioural Science Advisory Group and Four Nations Behaviour Change & Engagement Group.
- 3.16 Another input to the Public Engagement Strategy is outside of the Welsh Government, but central to the Strategy's success - non-governmental national, regional and local community groups and networks that work on communicating to and engaging with regions and communities on the climate and nature emergencies.
- 3.17 A range of these partner organisations were consulted while developing the Strategy and joined the stakeholder workshops described in Section 2 (a list in

included in Annex E). These organisations are also involved in Strategy activities described in the next section.

Inputs: Assumptions, dependencies, risks and areas to explore in an evaluation

3.18 Assumption: The inputs are sufficient to meet the requirements of the Strategy. Future evaluation should assess if this is the case, for example, was the level of resource, expertise and finance sufficient. The success of the Strategy depends on a small, dedicated Strategy team in Welsh Government delivering the Climate Action Wales programme and mobilising Partners to deliver the Strategy engagement activities. This assumption is discussed in the activities component of this section and evaluation should consider if the resources were sufficient to achieve these aims.

3.19 Assumption: The evidence behind the Strategy is robust. The evidence review described in Section 2 indicates that this is an appropriate assumption and the evidence behind the Strategy is robust (a list of sources is included in Annex A). Evaluation should assess the process by which the evidence was continually updated (in line with the activities of the Strategy) and how it was incorporated into future Strategy activities to continually improve the Strategy implementation.

Additional observations on the inputs

3.20 This research was conducted a year after the Strategy was published. At the time of writing there was a mature Climate Action Wales communications campaign being implemented, but the details of the engagement activities were still being defined. This caused some stakeholders in workshops to identify a risk that messages to the public focusing on encouraging green behaviour might not be supported by the required policy and programmes (such as skills building and appropriate financial support) to make it affordable and convenient. Future evaluation should assess this further once the engagement activities and guidance have been more clearly defined.

Public Engagement Strategy Activities

3.21 Although the Welsh Government and Partner activities are presented separately in the Strategy Theory of Change (Figures 3.1 and 3.2), they are strongly interrelated, with outcomes of partner activities continually feeding back into strengthening the Welsh Government activities, and vice versa. This strong, continual feedback and improvement is a core assumption of the Strategy.

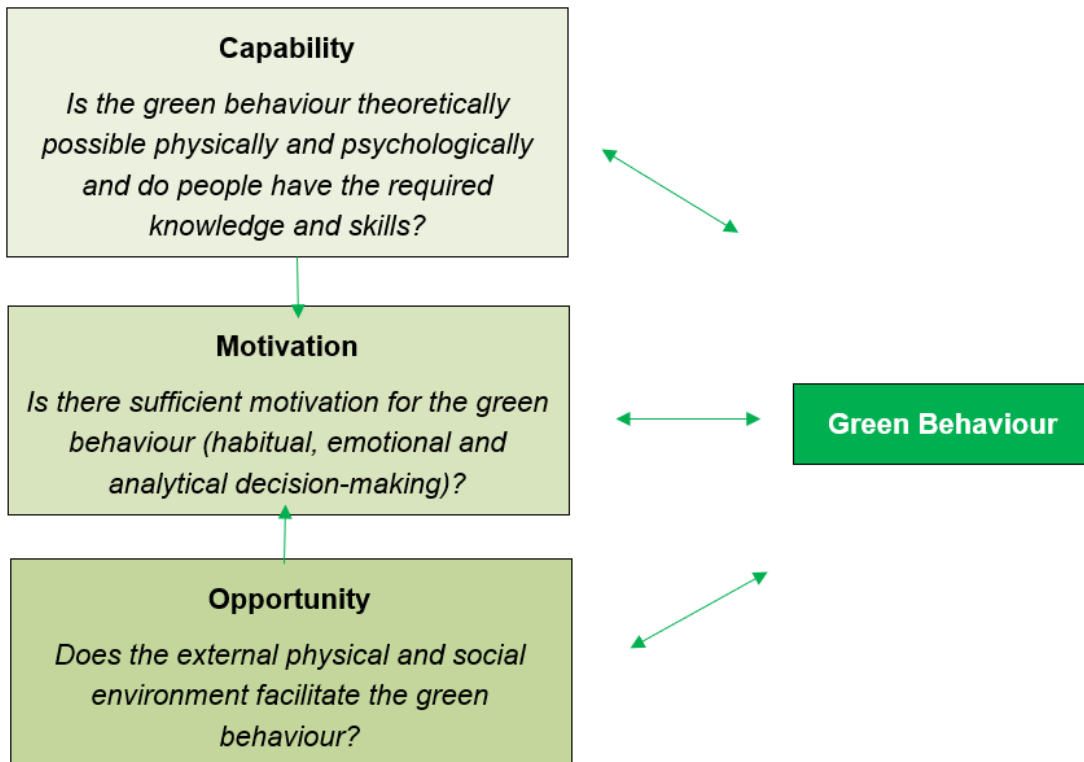
- 3.22 The logic of the Strategy is that the Welsh Government collaborates with its Partners, who both willingly deliver consistent and relevant messages to the public, and outreach engagement to deepen understanding of people’s knowledge, attitudes and barriers and involve them in localised solutions for tackling climate change. Welsh Government shares consistent, nationwide, evidence-based communications, and Partners amplify these messages, make them relevant at a local level and form effective place-based solutions.
- 3.23 The communications activities led by the Welsh Government consist of several interrelated actions and initiatives under the Climate Action Wales brand, including a national campaign, a communications toolkit for Partners (Welsh Government, 2024a), media relations, digital and social media channels, case studies of carbon reducing actions the public can take, and ministerial and Welsh Government corporate communications (Welsh Government, 2024b). All these activities target the broader Welsh public and Partners, who are expected to help amplify these messages. Partners are also part of the Welsh public themselves. Simultaneously, there is co-working with both the UK Government and the other UK nations on communications on topics such as heat pumps and EVs to tackle mis- and disinformation and to have consistent ‘Warm Up’ messaging to prepare the public for the changes ahead.
- 3.24 The Strategy works on constant engagement and feedback, with Partners engaging with the public effectively and trusted voices sharing messages that resonate with the local community. Constant feedback and engagement create an interrelationship of collaboration and iterative learning and informs effective policy levers that create the opportunities for greener behaviour. This is underpinned by the Green Theme Theories of Change, which are described in the following paragraphs.

The Green Theme Theories of Change

- 3.25 The Public Engagement Strategy Climate Action Wales communications strategy was informed by behavioural research conducted by the Behavioural Insights Team (BIT) and Beaufort Research (Welsh Government 2023b). BIT built on the 5 E’s outlined in the Public Engagement Strategy: Exemplify, Engage, Enable, Encourage and Evaluate and used the widely validated behavioural science COM-B model (Michie, van Stralen and West 2011) to develop a Theory of Change for the green

themes. A simple overview of COM-B in relation to the green themes is shown in Figure 3.3.

Figure 3.3: COM-B model



3.26 The green theme behavioural Theories of Change developed by BIT draws on behavioural science to identify ‘Asks’ and ‘Warm Ups’ for the Public Engagement Strategy communications campaign:

- An Ask is a call-to-action for green behaviours that meet some, but not necessarily all requirements of the COM-B model and people are ready and able to change their behaviour.
- A Warm Up is a green behaviour where there may be barriers to immediate action, so the communications purpose may be to increase awareness or offer a more achievable call-to-action. For example, a campaign may have a call to action to, “test drive an Electric Vehicle,” rather than, “buy an Electric Vehicle”.

3.27 Appropriate Asks and Warm Ups vary by audience, which means effective campaigns will target different groups of people with different messages. Table 3.2 overleaf summarises the green choices recommended in the research.

Table 3.2: The Asks and Warm Up green choices of the Public Engagement Strategy Climate Action Wales communications campaign

Category	Green choice	Ask	Warm Up
Transport	Replace car journeys with active travel or public transport where possible	Tell people ‘how’ (e.g. swapping commute, download X app). Publicise ‘Cycle to work’	Communicate upcoming infrastructure and policy efforts, highlight the co-benefits and the long-term improvements
	Replace car journeys with lower carbon vehicles e.g. Electric Vehicles (EVs) where possible	Car sharing, EV hire cars/ taxis	EVs - exemplify and communicate upcoming policies, and help address frequently asked questions and overcome mis- and disinformation on EVs
	Reduce the amount of flying	Normalise holidaying in Wales	Welsh Government to convey UK Government actions, as this is a non-devolved area
Home energy	Improve decisions in energy efficiency (e.g. retrofitting and energy generation such as solar)	Publicise existing grants. Promote Energy Performance Certificates, uptake cheaper retrofits, and wider retrofitting (if able to pay)	Publicise government efforts on harder-to-heat homes
	Low carbon heating (heat pumps)	Publicise existing grants for low carbon heating (heat pumps)	Myth bust. Ask for preparatory actions. Communications to help answer frequently asked questions

Table 3.2: The Asks and Warm Up green choices of the Public Engagement Strategy Climate Action Wales communications campaign

Category	Green choice	Ask	Warm Up
			and overcome mis- and disinformation on heat pumps
	Energy demand reduction	Provide clear guidance. Promote Smart Meters. Align existing comms	Publicise government efforts. Link energy efficiency with security
	Switch to a Green Energy tariff	Switch to a Green Energy Tariff	
Diet and Land Use	Low-carbon diets	Eat more local and seasonal food	Provide procedural knowledge about cooking/seasonal foods. Publicise policy efforts
	Minimise food waste	Promote key actions (freeze food) and explain how (e.g. to donate food). Align with existing campaigns. Only buy what they need to reduce waste	Food waste: Explain what Welsh Government do with wet recycling.
Consumption and waste management	Recycle and reuse	Promote local shopping, recycling and reusing Use their buying power to support businesses which are leaders in tackling climate change	Publicise Welsh Government efforts for circular economy, and educate on how to reuse, reduce and recycle

Source: Developed from Welsh Government (2023b).

Activities: Assumptions, dependencies, risks and areas to explore in an evaluation

- 3.28 **Dependency:** The Strategy is owned and implemented by the Welsh Government and its Partners together, and is not a purely Welsh Government strategy. The Climate Action Wales national communications campaign is by nature a broadcast communication and some of the two-way engagement with the public will be conducted by Partners, using strong, effective feedback loops. This assumes that internal and external communications, activities and tools are effective at engaging internal and external stakeholders and they play their role in its implementation. The workshops conducted with Partners to the Strategy provided strong evidence of the existence of many organisations and initiatives that will contribute to the impacts, an appetite for engaging with the public, and many internal and external stakeholders doing so. This is also documented in the Public Engagement Strategy (Welsh Government, 2023a) and other literature (e.g. Involve, Climate Outreach, and Ashden 2023; Verfuert et al., 2023). The workshops also provided strong evidence for organisations working at a local community level having in-depth understanding of the needs of different members of the community, having dialogue with lesser-heard voices (at a national level) understanding the barriers to green behaviour and understanding how policy could have unequal social impact (the need for a Just Transition). This role of local level knowledge is also documented in literature (e.g. Centre for Climate Change and Social Transformations, 2023; Verfuert, Jones and Roberts, 2023).
- 3.29 **Risk:** The dependency of stakeholders understanding the consistent messages wasn't evident, although some stakeholders in workshops had seen Climate Action Wales communications, and there was widespread awareness of Wales Climate Week (as might be expected as these stakeholders had been engaged by Welsh Government). This means that rather than making the communications relevant and resonate at a local level and amplifying messages as part of a partnership, stakeholder engagement activities risk being conducted separately to the Strategy. The policy makers in workshops tended to be aligned with the idea of public engagement to create policy, but this also appeared to be independent to the Strategy.
- 3.30 **Areas to explore in an evaluation:** Future evaluation should consider how to measure the effectiveness of the role of Partners by identifying what changed as a result of the Strategy. The workshop held with Partners with a potential role to play

in delivering the Strategy did not provide strong evidence of organisations being aware of the Strategy vision and their role within it. While awareness of the Strategy and the collaborative approach of working with Partners could be a consideration, more important will be engagement in the Strategy activities. Following from this, an evaluation should look to assess whether this engagement led to different community organisations working as part of an effective team with Welsh Government stakeholders towards common goals, and whether Partners are playing a strong role in engagement on effective green policy, both place-based and national.

- 3.31 Risk: There is a possible gap in the activities of the Strategy to create the partnership approach needed to deliver the Strategy, rather than this being an assumption in the Theory of Change. There are engagement activities included in the Theory of Change, such as building and strengthening relationships, communications toolkits and Wales Climate Week, and the Strategy itself is intended as a framework for partnership working. All these activities should be assessed in an evaluation. The risk is that without Partners being aware that they are implementing the Strategy, fully understanding their role and engaging with it, current activities will continue as discrete strands of work, rather than being an integrated Public Engagement Strategy. This risks positive outcomes being attributed to the Strategy, when they would have happened in its absence, and also risks the Strategy not delivering the desired outcomes or to the extent that it proposes.
- 3.32 Assumption: It is possible to send consistent messages (targeted by identified segments) that are the right Asks and Warm Ups to promote behaviour change. Some Partners raised concerns about the extent to which consistent messaging on green behaviour is possible. For example, it was felt that celebrating Wales's success in recycling home waste and encouraging the public to do more is a simple and compelling message. Conversely there was felt to be a lack of agreement amongst Partners on messaging on food choices to achieve net zero. Some stakeholder organisations promote more plant-based diets, tying this to public health, while others advocate for eating more locally produced foods, including dairy and meat, to reach net zero, linking this to the ambition to preserve Welsh culture. This means in addition to the risk of Partners not being aware of the central

messages of the Strategy, there is a risk that some messages will not resonate with stakeholders, and that messaging to the public will be inconsistent.

- 3.33 Risk: Messages do not cut through to the right audiences in the right way and at the right time. There is strong evidence behind the design of the communications campaign (evidence review sources – see Annex A - 16, 23, 42), with a clear logic for the Asks and Warm Ups to target messages. There appears to be an assumption in the Strategy that Partner organisations will be aware of the national communications campaign, understand its aims and messages, and work at a local level to make this relevant to local communities. This was not widely apparent during the workshops and future evaluation should test this assumption and its implications. In addition to measurement of whether messages are noticed, recalled and understood as intended by the public, an evaluation of the Strategy should consider how well Partners understood the messages being shared as part of the national campaign and whether they felt part of a team in applying these at a local level. Did they all feel the messages were practical, realistic and relevant, and that Welsh Government was sensitive to the barriers for different people and providing the right support to overcome them?
- 3.34 Assumption: There are other voices that are more trusted than Welsh Government. The logic of the Strategy is that messages will be amplified and made relevant to different audiences. Partners involved in the workshop tended to hold the view that other voices may be more trusted than the Welsh Government's (see also, for example Verfuert, Jones and Roberts, 2023); however, related to the points above, workshop participants were not necessarily able to identify how this is incorporated into the Strategy.
- 3.35 Assumption: Partners have the institutional and technical capacity required to deliver and amplify the Strategy's activities. This was particularly raised in the green transport choices workshop, where it was felt local authorities have the main responsibility for effective public engagement but often lack the resources. Related is the assumption that toolkits are understood and usable. There is a risk that the needs of Partners to enable the engagement activities are not met. Given the broad scope of Partners, future evaluation should include feedback from a wide range of stakeholders, including local authority representatives.
- 3.36 Dependency: There is continual feedback and improvement. The Strategy is expected to evolve and incorporate learning into future activities and partnerships

are expected to continually grow. Evaluation should explore the evidence of continual dialogue between Partners and communities; and Partners and Welsh Government resulting in diverse needs being incorporated into green policy and strategy.

- 3.37 Risk: A risk to the Strategy is mis-/disinformation by external organisations. The Strategy aims to increase the accuracy of knowledge by providing information and engaging with the public through partner organisations. Workshop participants felt mis-/disinformation was a significant risk to achieving these aims. Workshop participants could not see an activity in the Strategy to actively engage with organisations that consciously spread mis-/disinformation and were concerned this could be a gap in the Strategy activities. The risk is that the positive messages shared by Partners continue to be undermined, which reduces the outcomes and impacts.
- 3.38 Risk: Stakeholders in the workshops raised a risk that communications that encourage greener behaviour are not underpinned by the required policy to make these choices affordable and convenient. Promoting behaviour change without making it easy and affordable has an additional risk of backlash amongst members of the public if they perceive they are being asked to make unrealistic behaviour changes, leading to unintended negative consequences.
- 3.39 Areas to explore in an evaluation: Future evaluation might incorporate an assessment of broader communications shared by the media and social influencers and how well they complement or disrupt the Strategy Asks and Warm up messages. An example might be the media taking headline messages from the Heat Strategy for Wales (Welsh Government 2024c) that undermines the Strategy communications by effectively turning heat pumps into an Ask communication, rather than the intended Warm Up. Evaluation could use media monitoring and social listening methods to quantify messages and sentiment and triangulate this data against the messages being shared with communications campaign plan, details of local partner activities, and public opinion. The Welsh Government have already implemented social listening on campaigns and wider communications on the climate, and data from this can be utilised in a future evaluation.

Additional observations on the activities

- 3.40 In 2024 the Welsh Government commissioned a Strategy activity, an Engagement Review, as committed to in the Public Engagement Strategy¹, to gather evidence and identify best practice for public engagement in policy making. The activity will potentially address the current possible gaps in the Strategy implementation with the engagement activities not being fully understood and coordinated. It is recommended that the outputs of this activity are incorporated into an updated Theory of Change.
- 3.41 Future evaluation could take a case study approach framed by the COM-B model to deep dive into specific communications and policy initiatives. These case studies might use a journey approach to explore how and where diverse members of the population received green choice messages from Welsh Government and partner organisations, how well national Ask and Warm Up messages cut-through, whether they felt able to take the green choice at the intended time, the reasons for this and how they felt about it.

Public Engagement Strategy Outputs

- 3.42 The simplified Theory of Change (Figure 3.1) summarises the main outputs from the Strategy activities. These are:
- consistent and trusted messages
 - green policy informed by public engagement that is accessible to all.
- 3.43 In themselves these two summarised outputs are not directly quantifiable as they cannot be measured objectively but are vital outputs as part of the logic of the Strategy. Future evaluation will need to identify appropriate methods of assessing whether the Strategy created these outputs, for example by relating them to the outcomes and drawing on the qualitative and quantitative methods discussed throughout this section.
- 3.44 The Strategy does also include a range of quantifiable outputs. The communications campaign includes a campaign evaluation strategy that will measure media, press coverage and paid digital. Social media measurement will include the number and reach of influencers. Digital Hub measurement will include the number of users, sessions and conversions, engagement rate, average dwell

¹ Welsh Government (2023). [Climate Action Wales Public Engagement Strategy \(2023-2026\)](#). (Accessed 4 September 2024).

time, average bounce rate, E-newsletter subscriptions, downloads of the Climate Action Wales Toolkit and number of Partners using Climate Action Wales branding.

- 3.45 Wales Climate Week has measurable outputs, including the number of registrations to Wales Climate Week and number of session views. Currently the Climate Conversations Fund aims to increase the diversity of public engagement through funding organisations to host local events to encourage more people to engage in conversations on the climate. This will have measurable outputs such as the number of Climate Conversations, number of people attending Climate Conversations and the profile of participants in Climate Conversations.
- 3.46 Other engagement outputs may be challenging to measure as Partners encompasses a broad set of stakeholders, and part of the Strategy is about working together and strengthening dialogue and engagement. It could include numbers of meetings with existing / new Partners, number of case studies, number of public consultations, number and diversity of people responding to engagement activities. These should be contextualised by the outcome measures.

Outputs: Assumptions, dependencies, risks and areas to explore in an evaluation

- 3.47 Assumption: The Theory of Change does not assume that the core outputs of the Strategy are quantifiable. Process evaluation, a form of evaluation that looks at how an intervention is being implemented, would benefit from assessing the measurable output data from the communications evaluation and other sources (such as Climate Action Wales) to assess whether the resources, particularly time and financial, were sufficient for the Strategy to meet its objectives. However, the core outputs of consistent and trusted messages, and policy informed by public dialogue and accepted by the public, cannot not be measured objectively and require assessment using a range of methodologies and contextualising the output measurement with the outcomes. It will be important to identify methods of doing this to evaluate whether the Strategy led to change.
- 3.48 Risk: Too much emphasis is placed on this output data in early assessments of the Strategy because the campaign evaluation metrics are clear and easy to measure, and this activity has been implemented ahead of the forthcoming Engagement Review 2024. Evaluation will need to incorporate assessments of all aspects of the Strategy as they are so strongly interlinked.

Public Engagement Strategy Outcomes

- 3.49 Twelve outcomes in the Strategy Theory of Change (Figure 3.2) have been structured by the COM-B model of behaviour change, identified by their prefix:
- C – 3 capability outcomes
 - O – 2 opportunity outcomes
 - M – 4 motivation outcomes
 - B – 3 behaviour change outcomes, which ultimately contribute to the Strategy Theory of Change impacts
- 3.50 Following the logic of the COM-B model and the Strategy, we would not expect changes to the Behaviour outcomes without seeing improvements in the Capability, Opportunity and Motivation outcomes.
- 3.51 There are also 10 Engagement outcomes (prefixed E under ‘Outcomes’ in the Theory of Change model). The core logic of the Strategy is that these outcomes are what achieves the Capability, Opportunity and Motivation outcomes (which in turn achieve the Behaviour outcomes). We therefore would not expect to see changes to the Capability, Opportunity and Motivation outcomes without seeing improvements in the Engagement outcomes.
- 3.52 Given activities outside of the Strategy, it is possible (even likely) that future outcome measurement will see improvements to the Capability, Opportunity, Motivation and Behaviour outcomes. Within the Strategy Theory of Change, if this is not accompanied by improvements to the Engagement outcomes, then it is unlikely that these improvements were due to the Strategy.
- 3.53 If improvements to the Capability, Opportunity, Motivation, and Behaviour outcomes are accompanied by improvements to the Engagement outcomes, this supports the hypotheses (subject to accompanying evidence) that:
- The direct communications activities of the Strategy were amplified through climate stakeholder channels and networks, with Partners and trusted voices making this information relevant at a local level.
 - The Strategy contributed to developing green policy that was strengthened by public engagement. Policy addressed the major cost and convenience barriers to the green behaviours of the campaign.

Measuring outcomes

- 3.54 This is a national Strategy with the aim of creating behaviour change across Wales, which makes it appropriate to measure the outcomes at a national level. Any trials or pilots should incorporate localised measurement.
- 3.55 There are existing surveys, such as the Climate Change Perceptions and Actions survey and the Welsh Government National Survey of Wales, that provide a precedent and potentially a data source for many of the capability outcomes and potentially some of the motivation and behaviour outcomes.
- 3.56 Other motivation and behaviour outcomes, the engagement, and the opportunity outcomes, may require an evaluator to design appropriate measures. It will be possible to measure many, if not all, of the outcomes quantitatively. However, in isolation this would not enable an effective evaluation as the existing activities outside of the Strategy means it would not be possible to determine that positive outcomes and impacts would not have happened in the absence of the Strategy. Quantitative measurement of the outcomes will be useful but should be contextualised using theory-based evaluation methods, including qualitative research to understand what difference the Strategy made and whether it achieved its success factors and delivered the outputs described in the simplified Theory of Change (Figure 3.1).
- 3.57 The main current Welsh sources identified by Welsh Government during the evidence review are:
- The Welsh Government National Survey of Wales², which at the time of writing is planned to be repeated (although this only includes a small number of outcomes).
 - The Climate Change Perceptions and Actions survey, which runs two waves per year from 2023 to 2026. Outputs from this survey are due to be published in winter 2024. There are no current plans beyond 2026.
 - The Climate Action Wales Behavioural Tracking Survey 2023, which is intended to be repeated annually (Beaufort Research, 2024).
- 3.58 These are all nationally representative surveys of the Welsh public. Table 3.3 identifies questions in these surveys that could be used to measure the Theory of Change COM-B communication outcomes. Methods for measuring Engagement

² Welsh Government (2024). [National Survey for Wales](#). (Accessed 21 October 2024).

outcomes have not yet been identified and will be determined as this area of the programme develops.

Table 3.3: Possible outcome measures

No.	Outcome description	Question wording	Source
C1	Increased public emotional connection with climate change	How concerned, if at all, are you about climate change?	Welsh Government National Survey of Wales
		You may have heard the idea that the world's climate is changing due to increases in temperature over the past 100 years. What is your personal opinion on this?	Welsh Government National Survey of Wales
		How concerned are you about any changes, past or future, to the variety of species in Wales?	Welsh Government National Survey of Wales
		To what extent do you think climate change is a problem at this moment?	Climate Change Perceptions and Actions Survey
C2	Increased public awareness of human impact on climate change	Do you think that climate change is caused by natural processes, human activity, or both?	Welsh Government National Survey of Wales
		What do you think climate change is caused by?	Climate Change Perceptions and Actions Survey

Table 3.3: Possible outcome measures

No.	Outcome description	Question wording	Source
C3	Increased public knowledge about climate change and awareness of the changes individuals can make	To what extent do you feel a personal responsibility to try to prevent climate change from worsening?	Climate Change Perceptions and Actions Survey
		To what extent do you believe the following are responsible for tackling climate change? (General public and your local community are response options)	Climate Change Perceptions and Actions Survey
		How much do you know about the following? (Net Zero; climate adaptation; the nature emergency).	Climate Change Perceptions and Actions Survey
		How much responsibility do you think the general public has to tackle climate change in Wales?	Welsh Government National Survey of Wales
		How much do you feel you know about the individual actions people in Wales can take to help combat climate change?	Climate Action Wales Behavioural Tracking Survey
		How much do you feel you know about how to do each of the following things (various green behaviours relating to the green choice areas)	Climate Action Wales Behavioural Tracking Survey
M1	Increased public desire to change their behaviour	To what extent do you feel a personal responsibility to try to prevent climate change from worsening?	Climate Change Perceptions and Actions Survey
		To what extent do you feel that your own personal actions can help prevent climate change from worsening?	Climate Change Perceptions and Actions Survey
M2	Increased public belief that collective action can make a difference	None currently	None currently

Table 3.3: Possible outcome measures

No.	Outcome description	Question wording	Source
M3	Increased consideration of Warm Up green behaviour (e.g. test drive an EV)	Do you have a smart meter in your home?	Climate Change Perceptions and Actions Survey
		At the moment, how often do you check how much energy you are using?	Climate Change Perceptions and Actions Survey
M4	Increased belief that Welsh Government is leading by example	Thinking now about how the government is responding to climate change, do you think the government is doing too little, enough, too much, don't know?	Welsh Government National Survey of Wales
		How much responsibility do you think the government has to tackle climate change in Wales?	Welsh Government National Survey of Wales
O1	Government policy is effective in making green choices more convenient and affordable for all	What are you currently doing to reduce your home energy and water use? Question about "Finding out what grants and support I can get for my home" could be used as proxy indicator for measuring public awareness of Welsh and UK government policy to aid people in making green changes to their homes.	Climate Action Wales Behavioural Tracking Survey 2023
O2	Government green policy is fair and protects people who are more vulnerable	None currently	None currently
B1	Increased green behaviours	How many days a week do you usually eat each of the following things?	Climate Change Perceptions and Actions Survey
		Have you made any of the following changes to your diet?	Climate Change Perceptions and Actions Survey

Table 3.3: Possible outcome measures

No.	Outcome description	Question wording	Source
		At the moment, how often in a typical week does your household need to throw away food...?	Climate Change Perceptions and Actions Survey
		Does your household put food waste in your food waste recycling bin (caddy) rather than putting it in your general rubbish?	Climate Change Perceptions and Actions Survey
		Do you do any of the following when food shopping or cooking meals? (E.g. buy locally grown food)	Climate Change Perceptions and Actions Survey
		Do you do any of the following? (E.g. shop close to home, buy second-hand items)	Welsh Government National Survey for Wales
		Do you do any of the following when travelling from place to place? (E.g. walk/wheelchair where possible, Cycle where possible)	Welsh Government National Survey for Wales
		Have you taken any of the following steps to reduce your energy use? (Lowered thermostat; Wear warmer clothing; etc)	Welsh Government National Survey for Wales
		How do you usually heat your home when it's cold?	Welsh Government National Survey for Wales
		When it's cold, what temperature do you usually heat your home or set your thermostat to?	Climate Change Perceptions and Actions Survey

Table 3.3: Possible outcome measures

No.	Outcome description	Question wording	Source
		Does your home have any of the following energy efficiency measures to help keep your home warm?	Climate Change Perceptions and Actions Survey
		[other energy efficiency measures] Which, if any, do you have in your home?	Climate Change Perceptions and Actions Survey
		Thinking now about your everyday life, do you do any of these things? (Avoid or cut down travelling by car; Avoid or minimise travelling by plane; Avoid or eat less meat; Avoid or eat less dairy; etc).	Welsh Government National Survey for Wales
		What, if anything, are you personally doing to help combat climate change?	Climate Action Wales Behavioural Tracking Survey
		Are you taking any steps at the moment to...? (Questions on various relevant green behaviours, e.g. to do with home energy, recycling, reusing, repairing, active travel, food waste, reducing consumption, reducing flying)	Climate Action Wales Behavioural Tracking Survey
		What are you currently doing [increase various green behaviours?	Climate Action Wales Behavioural Tracking Survey
B2	Increased Warm Up green behaviours (e.g. test drive an EV)	Do you have a smart meter in your home?	Climate Change Perceptions and Actions Survey
		At the moment, how often do you check how much energy you are using?	Climate Change Perceptions and Actions Survey

Table 3.3: Possible outcome measures

No.	Outcome description	Question wording	Source
		What are you currently doing to switch to a lower emissions vehicle? (Asks about Researching and Test-driving hybrid or electric vehicles)	Climate Action Wales Behavioural Tracking Survey
		Since living in your home, has your household or your landlord ever taken the following steps to see what measures could make your home more energy efficient?	Climate Change Perceptions and Actions Survey
B3	Increased adaptation actions	<i>Not yet defined –to align with the strategy</i>	

Source: Welsh Government

Outcomes: Assumptions, dependencies, risks and areas to explore in an evaluation

- 3.59 Assumption: The activities will lead to increased capability, motivation and opportunity for green behaviour. The risk is that communications focus on capability and motivation, without sufficient underlying policy bundles and schemes to enable the opportunity for green behaviour by making it an affordable, desirable and convenient choice. This would mean people feel they are unable to make the green choices that lead to the behavioural outcomes. Evaluation of the Strategy should assess all elements of the COM-B model included in the Theory of Change outcomes. Given the concern raised by stakeholders during the workshops for this research, particular attention should be on whether the Strategy led to increased opportunity, by exploring the extent to which partnership working meant all needs were considered and met effectively in policy levers.
- 3.60 Assumption: Improvements are required to the capability, opportunity and motivation outcomes for there to be improvements in the behaviour outcomes. This is the core logic of the strongly evidenced COM-B model of behaviour change.
- 3.61 Risk: Positive outcomes are identified being attributed (in part) to the Strategy when they would have happened without it. Based on the core logic that the Strategy leads to stronger, more effective green policy and green behaviour change, there is a risk that internal and external Partners continue to conduct their existing activities to encourage and enable greener behaviour irrespective of the Strategy. For the Strategy to be a success, its activities will need to create stronger partnership working and engagement that strengthens the outcomes and impacts that are measured.
- 3.62 Reinforcing the logic of the Strategy, there is strong evidence that public engagement and partnership working can lead to stronger green outcomes (evidence review sources – see Annex A - 1, 3, 19, 21, 25, 36, 40, 41, 43, 44, 45, 46).
- 3.63 Areas to explore in an evaluation: Given the complex environment it will be challenging for an evaluation to identify causation and care should be taken when interpreting outcome measurements. An evaluation will need to use effective theory-based, qualitative contribution methods and a clear indicator framework to assess the extent to which the Strategy contributed to the desired outcomes.

- 3.64 Assumption: It is likely there would be improvements to the capability, opportunity, motivation and behaviour outcomes in the absence of the Strategy. The Strategy does not assume that it is the only factor in changing these outcomes.
- 3.65 Dependency: If there are not changes to the engagement outcomes, it is unlikely the Strategy led to any improvements in the capability, opportunity, motivation and behaviour outcomes. There is a lot of activity beyond the Strategy and for the Strategy to be successful it means something must be better to how it would have been in the absence of the Strategy. Without improvements to the engagement outcomes, the Strategy could not have achieved its purpose, even if the behavioural outcomes improve.
- 3.66 Areas to explore in an evaluation: Theory-based methods will help to unpick the impact of the Strategy, using outcome measurement, qualitative exploration, and policy case studies to identify if the two main outputs of the simplified Theory of Change (Figure 3.1) were delivered. Future evaluation could also explore whether there is a possible counterfactual (for example England or Northern Ireland where there is not currently a Public Engagement Strategy) to help infer causality.

4. Conclusions

- 4.1 The research to create the Public Engagement Strategy Theory of Change was conducted around a year after the Strategy was published. It incorporates developments to the Strategy since its publication and acknowledges that there are still activities to be defined, which should be incorporated into future iterations of the Theory of Change. Known developments include:
- activities informed through the Engagement Review 2024 which has been commissioned by Welsh Government
 - potentially incorporating climate adaptation behaviours into the Green Theme Theories of Change.
- 4.2 Although the Welsh Government and Partner activities are presented separately in the Strategy Theory of Change, they are strongly interrelated, with outcomes of partner activities continually strengthening the Welsh Government activities, and vice versa. Strong, continual feedback and improvement is a core assumption of the Strategy, which means further evolution of the Theory of Change should be expected. This may include inputs, activities, outputs and outcomes that are not currently defined.
- 4.3 The strong interrelationship between all activities and emphasis on Partners amplifying Welsh Government communications also means the Strategy Theory of Change does not consist of a series of clearly defined causal links. No individual activity directly leads to an individual outcome, but the logic of the model is that all activities will continually reinforce each other to achieve the outcomes.
- 4.4 In the absence of the Strategy, Welsh Government will still develop green policy aimed at improving the impacts that the Strategy aims to contribute to, often including different forms of public engagement. There are also already many organisations and networks working towards these aims at a community, national and international level. This means Strategy will not directly lead to the impacts described in the Theory of Change but aims to contribute to them. Evaluation should seek to identify what changed as a result of the Strategy rather than changes that would have happened anyway (see Section 5).
- 4.5 The simplified Theory of Change (Figure 3.1) summarises the main outputs from the Strategy activities:

- consistent and trusted messages
- effective green policy informed by public engagement.

4.6 In themselves these two summarised outputs are not directly quantifiable as they cannot be measured objectively, but these are vital outputs as part of the logic of the Strategy. Future evaluation should identify appropriate methods of assessing whether the Strategy created these outputs as a core method of identifying if the Strategy led to changes that would not have happened in its absence (see Section 5).

4.7 The Green Theme Theories of Change are embedded in the Public Engagement Strategy Theory of Change and frame the Behaviour outcomes through the logic of the COM-B model. This means we wouldn't expect changes to the Strategy's Behaviour outcomes without seeing improvements in the Capability, Opportunity and Motivation outcomes.

4.8 Similarly, public engagement is embedded in the Strategy Theory of Change. We might anticipate improvements to the Capability, Opportunity, Motivation and Behaviour outcomes described in the Strategy in the absence of the Strategy, due to the range of policies and organisations working to encourage this. Evaluation would need to also identify improvements to the Engagement outcomes to support the hypothesis that the Strategy increased the Behaviour outcomes and overall impacts.

5. Recommendations

- 5.1 Recommendation 1: Use contribution analysis when evaluating. The Strategy will not directly lead to the COM-B outcomes or impacts described in the Theory of Change but aims to increase them. Future evaluation should therefore take a theory-based approach, using contribution methods (HM Treasury 2020). Rather than asking the questions such as, “did the Strategy lead to a Just Transition to net zero?”, contribution evaluation will assess questions such as, “is it reasonable to conclude the Strategy contributed to a Just Transition to net zero.”
- 5.2 Recommendation 2: Apply a mixed-methods approach to evaluation. It will be possible to measure many, if not all, of the Strategy outcomes quantitatively. However, in isolation this would not enable an effective evaluation as the existing activities outside of the Strategy means it would not be possible to determine that positive outcomes and impacts would not have happened in the absence of the Strategy. Quantitative measurement of the outcomes will be useful but should be contextualised using qualitative research to explore and fully understand how the Strategy led to change.
- 5.3 Recommendation 3: Use a counterfactual for evaluation. In evaluation a counterfactual seeks to describe what would have happened in the absence of an intervention (HM Treasury 2020). Evaluation of the Welsh Government Public Engagement Strategy should explore whether other UK nations such as Northern Ireland and England, which do not currently have Public Engagement Strategies, could provide useful comparisons.
- 5.4 Recommendation 4: Apply a comprehensive perspective to evaluation. Creating a Theory of Change has been an important first step for a theory-based approach; however, the Strategy Theory of Change highlights the challenges of evaluating the Strategy, as the activities strongly interrelate and strengthen each other to contribute to the outcomes. Evaluation will need to take this comprehensive perspective rather than seek to assess individual causal links.
- 5.5 Recommendation 5: Take account of assumptions, dependencies and risks when evaluating. Table 3.1 in Section 3 summarises the assumptions, dependencies and risks of the Strategy Theory of Change discussed throughout this report. This is a useful reference for identifying evaluation questions and areas to explore when evaluating the extent to which the Strategy achieved its aims.

- 5.6 The Theory of Change and its accompanying assumptions, dependencies and risks described in this report should be updated as the Strategy develops.
- 5.7 Recommendation 6: Update Theory of Change by incorporating Engagement Review 2024 findings. At the time of the research, the collaborative relationship with Partners was both an assumption of the Strategy and a dependency of the activities; however, with the Engagement Review 2024 forthcoming, the engagement activities were not yet fully defined. The Review outputs should be incorporated into future iterations of the Theory of Change.
- 5.8 Recommendation 7: Incorporate feedback from Partners in evaluation. This research revealed a risk that without a Strategy, Partners may continue to work independently rather than as part of a team of everyone working together towards the same aims. Given the broad scope of stakeholders with a potential role to play in delivering the Strategy, future evaluation should include feedback from a wide range of stakeholders, (including local authority representatives) and assess this through:
- Recommendation 7.1: Carry out baseline research with Partners. The Engagement Review 2024 could be used to take a baseline position with Partners, and this exercise could be repeated in future to explore changes in perceptions and behaviour. Evaluation would look for quantitative evidence of improved Partner Engagement outcomes supported by qualitative understanding of what this collaborative relationship with Partners means in practice and what changed as a result of the Strategy.
 - Recommendation 7.2: Establish new measures of public engagement. Identifying methods of measuring the Engagement outcomes amongst the public. This would include quantitative measurement where possible, including adding questions to nationally representative surveys, surveys with members of the public who participate in activities such as Climate Conversations, and surveys with traditionally under-represented groups (who would not be sufficiently represented a nationally representative sample). Quantitative measurement should be supported by qualitative research to understand how the Strategy is leading to change.
 - Recommendation 7.3: Measure COM-B outcomes through both surveys and case studies. Quantitatively measuring the COM-B outcomes described in the Theory of Change – where possible using existing questions on the Welsh Government National Survey of Wales and the Welsh Climate Change Perceptions and Actions survey for cost-effectiveness – and measuring change

over time. Evaluation could also take a case study approach framed by the COM-B model to deep dive into specific communications and policy initiatives.

- Only assessing quantitative improvements in the COM-B outcomes in the context of whether there are improvements in the Engagement outcomes and using qualitative research methods with a range of audiences to explore and understand changes.

- 5.9 Recommendation 8: Facilitate Strategy monitoring and evaluation at both the national and local level. This is a national Strategy and the aim is to create behaviour change across Wales, which makes it appropriate to measure the outcomes at a national level. Any trials or pilots should incorporate localised measurement.
- 5.10 Recommendation 9: Assess Strategy success across different population segments. A more nuanced approach will also explore the changes in awareness, consideration, and behaviour of the green theme Ask and Warm Up activities amongst different population segments. This would require using standard demographic information (such as age and income) included in existing surveys.
- 5.11 Recommendation 10: Assess whether resource is sufficient. The success of the Strategy depends on a small, dedicated team in Welsh Government delivering the Climate Action Wales programme and mobilising Partners to deliver the Strategy engagement activities. Evaluation should consider if the resources were sufficient to achieve these aims.

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Annex B: Topic guide for Welsh government workshop 10 June 2024

Introductions

- Welcome from SYSTRA:
 - o Social researchers, Market Research Society company partner, certified member, follow government and research ethical guidelines and code of conduct
 - o Here today to talk about the Welsh Government Public Engagement Strategy and create a Theory of Change and green theme logic models for the Strategy – we'll explain what we mean by this as we go through
 - o Thank you for agreeing to take part. Participation is voluntary
- Each introduce self:
 - o Name
 - o Role
 - o Involvement in the PES
 - o How are you feeling about the Public Engagement Strategy right now?
- What do we feel the greatest opportunities for PES are?
- What are the greatest challenges?

Set the purpose

- Explain what Theory of Change and logic models are
- Example ToC from Climate change - Net Zero Nation: public engagement strategy
- Talk through how we will create ToC

Impacts

- Check understanding of impacts
- Discuss impacts
- Allow time to read through the PES detail
- Using white board list impacts by green choices framework and green theme (discuss each to ensure full understanding)

5-minute break

Outcomes

- Check understanding of outcomes
 - o Think of what changes in behaviour, wellbeing, attitudes, skills, abilities you'd expect to see
 - o SMART: Smart, Achievable, Realistic, Measurable and Time-Bound
 - o Short-term, medium-term, long-term?
- Discuss outcomes
- Allow time to read through the PES detail
- Using white board list impacts by green choices framework and green theme (discuss each to ensure full understanding)
- Talk through how the outcomes lead to impacts and identify any flows – identify any causal links, assumptions, dependencies, risks

10-minute break

Activities and outputs

- Check understanding of activities and outputs
- Identify activities & outputs
- Allow time to read through the PES detail
- Using white board list activities and outputs by green theme and overall (discuss each to ensure full understanding)
- Talk through how the activities / outputs lead to the outcomes – identify any causal links, assumptions, dependencies, risks
- All participants individually review the logic models so far. Discussion – any thoughts, changes, challenges, gaps etc.

Inputs

- Do we feel there are measurable outputs?
- Spontaneous brainstorm inputs
- Allow time to read through the PES detail
- Using white board list inputs by green theme and overall (discuss each to ensure full understanding)

Assumptions, dependencies, causal links

Go through each logic model step by step and list all the assumptions – identify logic flow and causal links

- Discuss how realistic assumptions are, any concerns. Level of optimism about each theme and overall programme – reasons
- Review what is in / outside the ToC
- Participants given time to look through the detail and think about what might be missing, what they might change
- Discuss
- Are there any gaps that we need to explore with other stakeholders (e.g. what might we want to explore during the stakeholder workshops)

Next steps

Thank and close

Annex C: Topic guide for green choice workshops July 2024

Green Transport Choices: 10 July 2024

Green Food Choices: 10 July 2024

Green Consumption Choices: 11 July 2024

Green Home Energy Choices: 17 July 2024

Introductions

- Hello from WG
- Welcome from SYSTRA: Social researchers, Market Research Society members, follow government and research ethical guidelines and code of conduct.
- Quick talk through of the Strategy: when released and what it's working to achieve.
- Why SYSTRA commissioned to develop Theory of Change evaluation tool.
- Describe having drafted Theory of Change model, and purpose of workshop to understand better how participants fit into the Strategy's activities, and to understand if the logic of the model makes sense to participants.
- Talk through what a Theory of Change is, and why we're making one for the PES.
- Talk through knowledge basis of Strategy (5 Es, COM-B model, Behavioural Insights Team report, asks and warm-ups and the four green choice themes).
- Thank you for agreeing to take part. Participation is voluntary.
- Okay to record? Only for purposes of notetaking, recording will be deleted after.
- Each introduce self:
 - o Name
 - o Role
 - o How much do you know about the Public Engagement Strategy? Not familiar / some knowledge / knowledgeable

Knowledge and understanding of the PES

- Get insight into participants' knowledge and level of understanding of the PES – what do they know, where do they know it from, role of their policy area to the PES
- Gain understanding of greatest opportunities and challenges of the PES to the policy area

Policy context (transport, food, consumption or home energy)

- Highlight relevant WG policy documents to policy area
- Gain understanding of participants' views on relevance of PES to these policies/programmes
- Gain understanding of role of engagement to these policies/programmes

5-minute break

Activities

- Establish what participants think the activities of the PES are
- Present activities in draft model to participants:
 - o Familiarity?
 - o Explore whether participants are able to identify links between activities and policy area
- Gain understanding of participants' views of their role to the PES
- Sense-check logic of how activities are presented in model
- Discuss stakeholders, barriers and underlying assumptions to activities

Outcomes

- Present outcomes in draft model to participants
- Discussion of whether outcomes are realistic to occur as result of activities
- Explore success factors and barriers to outcomes being achieved
- Explore role of participants, and other stakeholders, to achieve outcomes
- Gain understanding of how outcomes tie in with policy area
- Sense-check logic of how outcomes are presented in model
- Discuss barriers and underlying assumptions to activities

Theory of Change

- Show entire draft Theory of Change model
- Talk through inputs, measurable outputs and impacts
- Discuss reactions to logical flow
- Explore reactions to ToC overall – anything not clear, any flaws in the logic, anything missing?
- Explore reactions to a key criterion of success being to create a culture of public and stakeholder participation in shaping climate policies and programmes – had you understood the PES in this way? Reactions?
- How would you measure the success of the PES?
- Does the ToC logic lead to this? Reasons.
- What advice would you give the team delivering the PES?

Thank and close

Annex D: Topic guide for overarching workshop 24 July 2024

Introductions

- Hello from WG
- Welcome from SYSTRA: Social researchers, Market Research Society members, follow government and research ethical guidelines and code of conduct.
- Quick talk through of the Strategy: when released and what it's working to achieve.
- Why SYSTRA commissioned to develop Theory of Change evaluation tool.
- Describe having drafted Theory of Change model, and purpose of workshop to understand better how participants fit into the Strategy's activities, and to understand if the logic of the model makes sense to participants.
- Talk through what a Theory of Change is, and why we're making one for the PES.
- Talk through knowledge basis of Strategy (5 Es, COM-B model, Behavioural Insights Team report, asks and warm-ups and the four green choice themes).
- Thank you for agreeing to take part. Participation is voluntary.
- Okay to record? Only for purposes of notetaking, recording will be deleted after.
- Each introduce self:
 - o Name
 - o Role
 - o Perception of how much the PES will impact your work: not at all, somewhat, or a lot

Run-through of draft Theory of Change model

- Probe on initial reactions, and opinions on the impacts

Activities

- Go through Activities
- Gain understanding of participants' familiarity with activities, asks and warm-ups and case studies
- Understand participants' views of benefits of activities to their work, and views of their role in them
- Discuss barriers and underlying assumptions about the activities
- Sense-check logic of presentation of activities

5-minute break

Outcomes

- Go through outcomes
- Sense-check logic of activities leading to outcomes
- Discuss logic of communications activities carrying over into behavioural change, involving stakeholders
- Gain understanding of barriers and success factors to outcomes
- Understand participants' sense of their role in outcomes

- Gain understanding of success factors to reaching relevant stakeholders and the wider public

Theory of Change model overall

- Show whole model again
- Is there anything missing from the model?
- Are the right stakeholders involved, at the right level?
- Discuss role of stakeholders as collaborators/Partners but that some stakeholders can pose a barrier to the success of the PES
- Discuss participants' level of understanding of the Strategy's key criterion of success being creating a culture of public and stakeholder engagement in shaping climate policies and programmes, and reactions to this
- Probe participants on the logical flow of activities contributing to the desired change (impacts)
- Probe participants on what advice they would give to the PES delivery team

Thank and close

Annex E: List of organisations that participated in the workshops

Green Transport Choices (8 attendees total)

Welsh Government

Transport for Wales

Sustrans Cymru

Community Transport Association

Living Streets

Green Home Energy Choices (6 attendees total)

Welsh Government

TPAS Cymru

National Energy Action

NESTA

Energy Savings Trust

Green Food Choices (15 attendees total)

Welsh Government

Public Health Wales

FareShare Cymru

WWF

Friends of the Earth

Nature Friendly Farming Network

Lantra Wales

National Farmers Union

Farmers Union of Wales

Green Consumption Choices (9 attendees total)

Welsh Government

WRAP

Repair Café Wales

Keep Wales Tidy

Wales Library of Things

Overarching workshop (11 attendees total)

Welsh Government

Climate Cymru

WCVA

Natural Resources Wales

Age Cymru