



Llywodraeth Cymru
Welsh Government

Number: WG46260

Welsh Government
Consultation Document

Climate Change - A Strategy for Public Engagement & Action (2022-2026)

Part B – Context, Evidence and Behavioural Science

Date of issue: 20 October 2022

Action required: Responses by 14 December 2022

Mae'r ddogfen hon ar gael yn Gymraeg hefyd / This document is also available in Welsh
Rydym yn croesawu gohebiaeth a galwadau ffôn yn Gymraeg / We welcome correspondence and telephone calls in Welsh

Overview

Draft strategy for engaging the general public in action on climate change

We want your views on a strategy that will set out how we will work together to inform, support and encourage the public in taking action on climate change.

Consultation description

[Net Zero Wales \(Carbon Budget 2\)](#) committed to an important period of consultation on a new 5-year 'Strategy for Public Engagement & Action on Climate Change (2022-2026)'. The aim of the final strategy will be to set out an agreed framework and guiding principles around how we will:

- Engage the general public in climate policies that will affect them and their communities,
- support people in taking action; and
- Work with Team Wales partners to enable and support public action at a local and regional level.

The Strategy is structured into 2 separate parts:

Part A – The Main Strategy

Part B – Context, Evidence and Behavioural Science

How to respond

Submit your comments by **14 December 2022**, in any of the following ways:

ONLINE FORM

EMAIL

Download the [response form](#).

Complete and return to: climatechange@gov.wales

POST

Download the [response form](#).

Complete and return to:

Climate Change & Energy Efficiency Division
Welsh Government
Cathays Park 2
Cardiff
CF10 3NQ

Further information and related documents

Large print, Braille and alternative language versions of this document are available on request.

Contact details

For further information:

Climate Change & Energy Efficiency Division
Welsh Government
Cathays Park
Cardiff
CF10 3NQ

Email: climatechange@gov.wales

This document is [also available in Welsh](#).

UK General Data Protection Regulation (UK GDPR)

The Welsh Government will be data controller for any personal data you provide as part of your response to the consultation. Welsh Ministers have statutory powers they will rely on to process this personal data which will enable them to make informed decisions about how they exercise their public functions. Any response you send us will be seen in full by Welsh Government staff dealing with the issues which this consultation is about or planning future consultations. Where the Welsh Government undertakes further analysis of consultation responses then this work may be commissioned to be carried out by an accredited third party (e.g. a research organisation or a consultancy company). Any such work will only be undertaken under contract. Welsh Government's standard terms and conditions for such contracts set out strict requirements for the processing and safekeeping of personal data.

In order to show that the consultation was carried out properly, the Welsh Government intends to publish a summary of the responses to this document. We may also publish responses in full. Normally, the name and address (or part of the address) of the person or organisation who sent the response are published with the response. If you do not want your name or address published, please tell us this in writing when you send your response. We will then redact them before publishing.

You should also be aware of our responsibilities under Freedom of Information legislation

If your details are published as part of the consultation response then these published reports will be retained indefinitely. Any of your data held otherwise by Welsh Government will be kept for no more than three years.

Your rights

Under the data protection legislation, you have the right:

- to be informed of the personal data held about you and to access it
- to require us to rectify inaccuracies in that data
- to (in certain circumstances) object to or restrict processing
- for (in certain circumstances) your data to be 'erased'
- to (in certain circumstances) data portability
- to lodge a complaint with the Information Commissioner's Office (ICO) who is our independent regulator for data protection.

For further details about the information the Welsh Government holds and its use, or if you want to exercise your rights under the UK GDPR, please see contact details below:

Data Protection Officer:
Welsh Government
Cathays Park
CARDIFF
CF10 3NQ

e-mail:
Data.ProtectionOfficer@gov.wales

The contact details for the Information
Commissioner's Office are:

Wycliffe House
Water Lane
Wilmslow

Cheshire SK9 5AF
Tel: 01625 545 745 or
0303 123 1113
Website: <https://ico.org.uk/>

Contents

Part B – Context, Evidence and Behavioural Science

	Page No.
Statutory Obligations	7-9
Policy context: Mitigation	10-14
Policy context: Adaptation	15-16
Policy context: Nature emergency	17-18
Policy context: International and UK	19-20
Evidence: Social research	21-23
Evidence: Carbon & adaptation impact and costs (climate choices)	24-25
Theory of success: behavioural science	26-28

Statutory Obligations

The Welsh Government is committed to creating a greener, stronger and fairer Wales and has a statutory duty to act on climate change.

In 2019, Wales' Senedd was the first parliament in the world to declare a climate emergency. Our response to the climate emergency permeates everything we do as a Government. The Welsh Government is committed to creating a greener, stronger and fairer Wales. We are proud to be one of the few administrations in the world with sustainable development as the central principle of how it operates, and this principle is core to achieving the best future outcomes for Wales.

Our statutory duty to act on climate change comes from **three main pieces of legislation**:

1. [The Well-being of Future Generations \(Wales\) Act \(2015\) \(WFG Act\)](#), which provides a comprehensive framework for sustainable development in Wales. It includes seven long term well-being goals for Wales and a well-being duty on government and specified public bodies to carry out sustainable development and act in a manner, which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. This will help us to create a Wales that we all want to live in, now and in the future.



The Team Wales approach described within this strategy to engaging and involving society in decisions that will affect them, is based on the 5 ways of working described within the Act:



This ground-breaking legislation was introduced to help Wales overcome a number of challenges now and in the future, including climate change, poverty, health and wellbeing, coronavirus, jobs and economic activity. It aims to

encourage the public sector to tackle these issues together and think about the long-term impact of the decisions they make to give current and future generations a good quality of life.

2. The [The Environment \(Wales\) Act 2016](#) requires the Welsh Government to reduce greenhouse gas (GHG) emissions (also referred to as carbon emissions) in Wales to net zero for the year 2050. Since declaring a climate emergency in 2019, and responding to advice from the Climate Change Committee, the Act requires us to set decadal targets and 5-yearly carbon budgets in regulations, at a level consistent with meeting the 2050 target. This is known as the pathway to net zero. A carbon budget is the cumulative amount of carbon dioxide (CO₂) emissions permitted over a period of time to keep within a certain temperature threshold. The Act also includes provisions for the sustainable management of natural resources which are relevant for building resilience to climate impacts.
3. Further provisions for decarbonisation are contained within the UK Climate Change Act 2008, which also sets out statutory duties upon the Climate Change Committee (CCC) and all governments across the UK in relation to climate change adaptation.

In 2018 Climate Change (Wales) Regulations were made to provide the maximum amount of net Welsh emissions (a carbon budget) for the first two budgetary periods, 2016-2020 and 2021- 2025. In March 2021 new regulations were laid in the Senedd to formally commit Wales, for the first time, to legally binding targets, which deliver the goal of net-zero emissions by 2050, with a target of 63% emissions reduction by 2030.

Under Section 39 of the Act Welsh Ministers must prepare and publish a report for each budgetary period setting out their policies and proposals for meeting the carbon budget for that period. Carbon budget 2 (2021-25) is set at an average 37% reduction against the baseline¹. Carbon budget 3 (2026-30) is set at a 58% average reduction against the baseline². The interim emissions target for 2030 is a 63% reduction against the baseline³. [Net Zero Wales](#) covers carbon budget 2 but was drafted with an eye to the big step change between carbon budgets 2 and 3, and the 2030 interim target.

¹ See Regulation 2 of the Climate Change (Carbon Budgets) (Wales) (Amendment) Regulations 2021.

² See Regulation 3 of the Climate Change (Carbon Budgets) (Wales) (Amendment) Regulations 2021.

³ See Regulation 2 of the Climate Change (Interim Emissions Targets) (Wales) (Amendment) Regulations 2021.

Policy in Draft

2015	Well-Being of Future Generations (Wales) Act 2015
2016	Environment (Wales) Act 2016
2018	Climate Change (Wales) Regulations 2018
2019	First Minister for Wales declares a climate emergency Prosperity for All: A Low Carbon Wales (2016- 2020)
2021	Climate Change (Wales) Regulations 2021 Net Zero Wales plan for Carbon Budget 2 (2021-2026)

Policy Context: Mitigation

Net Zero Wales: Carbon Budget 2 (2021 to 2025)

Net Zero Wales underlines several important areas for consideration in engaging the public in climate action.

[Net Zero Wales](#) is the second carbon budget plan (2021-2025) but looks beyond to start building the foundations for Carbon Budget 3 and our 2030 target, as well as net zero by 2050. It sets out 123 policies and proposals to meet the second carbon budget, whilst also delivering against the 7 well-being goals in the Well-Being of Future Generations (Wales) Act 2015.

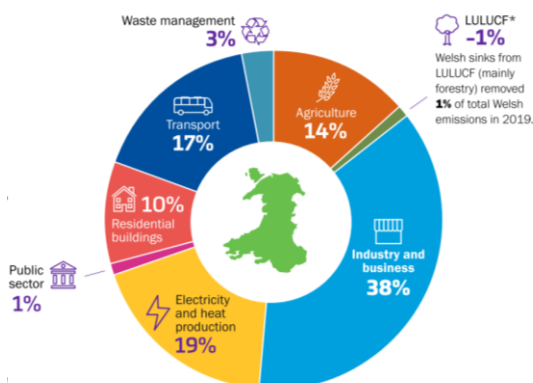
Distributional Impacts of Change

The plan describes the importance of setting the right conditions to enable and support the transition to Net Zero. It commits to responding in ways which create greater equality and better outcomes in our communities, alongside nurturing economic health and international competitiveness. It also emphasises the need for deep understanding around how people, communities and businesses will be affected by the changes and commits to putting in place the mechanisms to ensure both positive and negative effects are distributed fairly. In managing a socially just transition to a cleaner future, it stresses the importance of ensuring that the burden of change does not fall on the shoulders of those least able to pay, such as costs being passed down the supply chain from manufacturers to consumers of goods and services. It commits to embedding the concept of a Just Transition and a Social Partnership approach to public action on climate change.

Emission sector policies

The plan explains how emission sector policies and proposals will contribute towards meeting Carbon Budget 2 (CB2). It sets out the pathways for 8 emissions sectors, describing what is in scope, where Wales' emissions come from, progress to date, our ambition for the future and Government policies and proposals.

Our Emissions



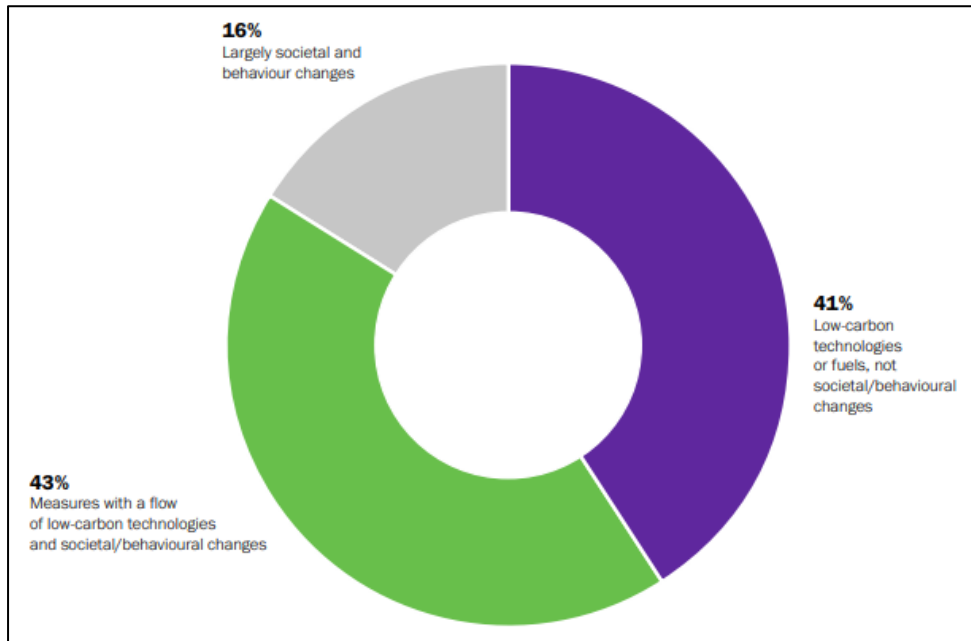
Under each emissions chapter the plan details the following asks of the public (individuals and households):

Emissions Sector	Net Zero Wales: ask of the public
Electricity & heat generation (energy consumption)	We ask the public to improve decisions in energy efficiency, generation and storing their own energy whilst also making conscious choices on the amount of energy consumed and how they heat their homes, switching to more low carbon electricity and heating fuels.
Transport (travel)	We ask the public to make conscious choices for their transport and mobility needs, replacing journeys with low carbon, active travel, or public transport where possible and to also reduce the amount of flying.
Residential buildings (retrofitting & decarbonising homes)	We ask the public to consider ways in which they can retrofit and decarbonise their homes.
Industry & business (buying behaviour)	We ask the public to shop and consume goods and services closer to home, supporting local town centres and to also use their buying power to support businesses which are leaders in tackling climate change.
Agriculture (consumption behaviour)	We encourage Welsh consumers to eat healthier, more sustainably sourced food and to actively consider the positive impacts of eating locally sourced food and minimising food waste.
Land Use Change and Forestry (tree planting)	We encourage everyone in Wales to have the to plant a tree in their garden, school or community and to also better understand the importance of peatlands and the ecosystems services; and increase their awareness of the damaging effects of using peat-based compost can have.
Waste Management (reusing and recycling)	We ask the public to continue separating recyclables, reuse and recycle where possible and only buy what they need to reduce waste. We also would encourage a sharing economy within communities to redistribute surplus food from the supply chain to communities in need, thus preventing food waste going to landfill.

The choices the public make in these areas will be essential to Wales achieving net zero emissions by 2050, and in many areas this will rely on enabling Government policies and on more significant changes being made by people who currently have high carbon lifestyles. The plan draws on the Climate Change Committee's (CCC) advice which determines the importance of societal behaviour change. This is based on a series of models, which made different assumptions about the level of behavioural change and technological innovation we can expect to see. A blend of these approaches resulted in the Balanced Pathway and scenarios to 2035 that

nearly 60% of the abatement will involve large numbers of people acting or choosing differently. This ranges from adopting new low-carbon technologies (for instance driving an electric car or installing a heat pump) or choosing to eat lower carbon foods, flying less and choosing products that last longer.

The role of society in delivering net zero:



Nearly 60% of changes in CCC's Balanced pathway for the UK (2035) will rely on societal behaviour changes.
Source: [CCC Balanced Pathway](#)

Public Engagement

The plan also highlights how progress seen to date has mainly been achieved in areas where little public engagement was necessary and went largely unnoticed by public perception. As an example, it describes how the changes in the electricity grid have not required citizens to use energy differently. It also describes a pathway in which government action is just one component of our response alongside concerted action across the public sector, across our economy and throughout our communities. Research, behavioural science and social science techniques are highlighted as vital to ensuring Government policies and interventions are designed around the citizen, providing policy-makers with a better understanding of the barriers to changing behaviour. Through understanding the experience of different population groups, it commits developing greater insight into whether and how these barriers differ to ensure any policies and interventions support our ambitions on equality.

A Place-Based Approach

The plan acknowledges how different communities will experience policies and changes differently, depending on their local context. It commits to engaging and working with people in all parts of Wales to understand regional issues, opportunities and interests for our communities. It recognises the challenges currently facing

Welsh society and the need to hold especially close to our values and guiding principles. Our [Programme for Government](#) sets out how social justice and tackling the climate emergency are at the heart of our actions for supporting communities over the term of this Senedd.

Net Zero Wales highlights the need for a coordinated approach to Government and public sector, community & third sector, industry and business and societal action in tackling the challenges we are likely to face in the months and years ahead.

Community & Third Sector Action

The importance of voluntary organisations and campaigners in raising awareness about climate change is also highlighted in the plan, and their calls for alternative approaches and positive solutions. Engaging society in climate action involves complex problem-solving and finding climate solutions that also support people's wellbeing will demand contributions across different sectors and organisations. We value our relationships with community and third sector partners which is why we engaged many of these organisations during the drafting of this strategy. We are committed to strengthening these relationships further over the important weeks and months ahead, and recognise the important role these partners play in delivering community and individual level climate action.

Government & Public Sector Action

Beyond the delivery of new and inter-connected climate policy at speed to enable the public to act, the Welsh Government (and broader public sector) has a much greater role than other emissions sectors in not only removing carbon from our own estates but within our span of influence and operations. Our plan emphasises the importance of the public sector in Wales showing leadership and driving change, and this is referenced across its emissions sector chapters. Within the context of this strategy, it is vital that people see their individual actions as part of the bigger picture: society must not feel they are tackling the climate challenge alone and that the public sector, including the Welsh Government and Ministers, are all playing their part.

Net Zero Wales sets out the ambition for the Welsh public sector to be collectively net zero by 2030, radically reducing emissions from over 780 organisations. This includes organisations delivering vital public services including health and social care, protecting people and the environment, education, culture and the arts - supporting and shaping communities. As an important public sector employer and as Wales' national government, we have large financial resources and significant assets under our influence. We will shortly publish our own Net Zero Strategic plan, providing the targets, governance approach, and initiatives as an organisation to meet net zero.

A growing number of public sector organisations have declared a climate emergency and are reporting on their carbon footprint individually or as sectors. A new Public Sector Net Zero Reporting Guide has also been developed which establishes the principles for carbon accounting and reporting for public bodies in Wales. The first Report was published in June 2022 and summarises Welsh public sector carbon

emissions baseline for 2019/20, emissions for 2020/21, provides insight into the distribution of emissions across different parts of the public sector and identifies priority areas for action.

Industry & Business Action

Net Zero Wales describes how our industrial sector faces decarbonisation challenges, which require long-term targeted and symbiotic action to ensure their international competitiveness, including electrification, fuel switching, carbon capture and storage or other new technology solutions and raw material substitution with waste streams from other industries requiring less energy to process. The plan highlights how the 2020s will be the period where substantial resource efficiency improvements are made and we develop and scale up new options for industrial decarbonisation. It also calls upon Welsh businesses to commit to net zero targets and introduce responsible business practices as part of their corporate social responsibility and for the public to use their buying power to support businesses which are leaders in tackling climate change. Our businesses, working alongside academia, will continue to play an important role in delivering innovation and overcoming some of the technological and cost barriers which currently prevent the public from taking action on climate change.

Policy Context: Adaptation

There is a need to increase public understanding of the risks and impacts arising from climate change and to protect and build resilience in our homes, communities and environment.

Policy

[Prosperity for All: A Climate Conscious Wales](#) is our current climate change adaptation plan for Wales. It sets out our commitments to respond to the impacts from climate change already being seen and those we expect to see in the future. The plan complements the steps we are taking to decarbonise the economy of Wales. It shows how we are taking action, over the five years since it was published in 2019 to address the areas of greatest risk, including:

- protecting people, communities, buildings and infrastructure from flooding,
- protecting water supplies from drought and low river flows,
- tackling land management practices that exacerbate climate risks,
- managing risks to ecosystems and agricultural businesses.

Looking forward to the next Climate Adaptation Plan due in 2024, we will need to address this updated evidence. The Climate Change Committee is also conducting an independent assessment of the status and effectiveness of climate adaptation planning and action in Wales. Our next plan will also take a Team Wales approach and will define in more detail the individual level actions required alongside the significant actions at a Government policy level and by industry and business to limit the impact of climate change in areas such as heat management, drought and water resources, and protecting and enhancing biodiversity.

Public awareness

We are already seeing warming in Wales, with more extreme weather events and rising sea levels, so we must mitigate further changes and adapt to those already locked in. Recent changes seen in the climate from hotter summers to wetter winters are bringing it home to people that climate change is already happening, and by 2050 there will be even further changes. This is a critical juncture for mitigating climate change, but it is also vital that we increase public understanding of the risks of climate change already baked in, including:

- Risks to nature, agriculture and forests from multiple climate hazards.
- Risks to supply of food, goods and vital services due to climate-related collapse of supply chains and distribution networks.
- Risks to people and the economy from climate-related failure of the power system.
- Risks to human health, wellbeing and productivity from increased exposure to heat in homes and other buildings.
- Multiple risks to the UK from climate change impacts overseas.

We will ensure alignment between our Climate Behaviour Change and Health & Social Care Climate Emergency national programmes. Both programmes are committed to supporting society in building resilience in our homes and in our communities. We will also work closely with key partners such as Public Health Wales who are already playing an important role in engaging citizens on measures to adapt to extreme heat and protect their health.

Our priority through our adaptation communications will be to support the development of individual and community level resilience in our most disadvantaged communities. We know that climate change can affect our poorest citizens and communities in disproportionate ways. Our focus will be to identify and prioritise engagement with these societal groups, and to use localised education techniques to improve awareness and knowledge on the actions they can take to protect themselves and their communities. We will explore techniques such as the use of social safety nets recommended by the IPCC for educating, deepening knowledge and developing innovative top-down and bottom-up solutions for particularly vulnerable groups in society.

Policy Context: Nature Emergency

People's connection with nature is central to tackling biodiversity loss and the climate emergency.

In 2009, Wales was the first country to declare a biodiversity emergency. We were admitting a failure, shared with all other countries on the planet, to reach the 2010 biodiversity target. As soon as the Welsh Government gained primary legislative powers in 2011, this understanding of the seriousness of our situation led directly to the creation of Wales' first ever Green Paper; [A Living Wales](#). This paper recommended legislation based on the Convention on Biological Diversity [Ecosystems Approach](#) leading directly to the Well-being of Future Generations, Environment and Planning Acts of 2015. In 2019 Wales declared a climate emergency, but it was also a turning point in recognising the escalating nature emergency and stepping up action for biodiversity. [The Nature Recovery Action Plan for Wales](#) was refreshed to take into account the growing evidence around the scale of the loss of biodiversity and the changing policy context in Wales. Amongst the immediate priorities identified for action within the plan is to align the responses to the climate emergency and the biodiversity crisis.

Nature-based solutions are key to addressing both issues and are inextricably linked. Whilst our aim is to measure the impact of climate choices as an important part of our pathway to net zero, it is more difficult to measure the impact of societal action on biodiversity. However, nature-based solutions are integral to mitigating climate and achieving net zero. They can also help provide a nature-rich future which is vital for ensuring we adapt to the impacts of climate change already locked in. People's connection with nature is also central to tackling biodiversity loss, health and food security as well as tackling the climate emergency. In recent years, particularly in response to the impacts of COVID-19 on everyday life, many people spent more time outdoors, enjoying the benefits from engaging with nature, for their physical and mental wellbeing.

Our priority is to take a multi problem-solving approach to Government policies that address the climate and nature emergencies (recognising the impact of climate choices on the nature emergency) and also ensuring a fair and just transition. Getting this right will bring substantial co-benefits to society - from increasing wellbeing, to mitigating flooding, overcoming air quality issues and creating green jobs, whilst also benefiting nature and creating amenities to be enjoyed by the people of Wales and our visitors.

Our priority is also to support societal action. We will listen to and learn from others (in our communities and globally) and deliver Government communication that inspires others to act. Our aim is also to become a reliable and trusted source of information and provide clarity where conflicting information exists. For example, Net Zero Wales highlights that to meet our targets, we must protect our ancient woodlands, manage our soils better and affect a step change increase in woodland creation. But this will only be effective if we work together to ensure tree planting is in the right place to maximise biodiversity. This also includes careful management of

the broader ecosystem - so as well as planting new trees, it is essential that existing trees and hedges are also carefully maintained as sources for carbon capture, including learning from hyper-local good practice.

Another example is around carbon sequestration and the need to convey the limitations associated with carbon offsetting. The increasing popularity for offsetting emissions generated through activity (such as flying) by contributing to schemes that remove carbon from the atmosphere (such as tree planting) only works if the carbon removal scheme is in addition to existing schemes and would not have gone ahead anyway and should only be used when schemes conform to internationally recognised standards for carbon markets.

We are committed to working with nature and biodiversity stakeholders organisations and partners across Wales (such as [Natural Resources Wales](#) on their Nature and Us programme) to encourage people to engage with nature and ensure actions link with climate mitigation and adaptation.

UK and International Context

International context

Climate Change is a global issue that requires a global response. We must and can do more as a globally responsible nation, from the products we buy to what we consume.

The latest IPCC reports, authored and agreed by scientists across 195 countries, tell us that more global action is needed, and the inaction on the climate and nature emergencies will cost us far more dearly in the long term. Wales agrees with the IPCC that global action has been insufficient and calls upon others to set net zero targets as soon as possible, alongside taking positive and significant steps to achieve them. 2021 was a momentous year with the setting of our own Net Zero legislation and playing our part in encouraging others to step up and take action at COP26. Our active membership of networks such as RegionsAdapt and the Under2 Coalition provided an important mechanism for Welsh Ministers to engage in nation-level discussions at COP26 and connect with, learn from and be inspired by other nations worldwide.

The challenge of climate change requires everyone to work together across geographic and sectoral boundaries, and Wales' continued international collaboration is essential if we are going to be successful. We will look to the lessons learnt from other countries across the world who have employed different approaches to societal engagement and action on climate change and will assess their applicability to the Welsh context. We will also remain open-minded to learning from others and will engage openly in discussion with people from other places around the world. We will continue to place importance on being a globally responsible nation, aligning with the goal in the Well-being of Future Generations Act which includes taking into account the positive contribution of an action to global well-being. We will do this by drawing the people of Wales' attention to the products we buy and what we consume, and how these actions impact globally.

UK context

Our strategy for public engagement and action cannot be developed in a vacuum and must be delivered in parallel with Wales and UK ambitions for mutual progress.

The UK is a champion in setting new climate goals; but now faces the challenge of delivering them and turn targets into reality. The [CCC's 2022 Progress Report to Parliament](#) highlights that whilst in some areas there has been progress such as electric vehicles and moving to renewable energy, there are other significant gaps such as helping people insulate homes for more efficient energy use and to lower household energy costs. It states that although the UK Government now has a solid Net Zero strategy in place, important policy gaps remain and greater emphasis is required on delivery. This includes addressing the rising cost of living with Net Zero

by reducing demand for fossil fuels to reduce emissions and limit energy bills for society. It also calls for greater progress on enablers of the transition.

There are many examples where Wales is leading the way in delivering policy and programmes to support action on climate change. From the introduction of the plastic carrier bag charge, to a successful recycling and waste management track-record, and an innovative housing programme, the Welsh Government has already worked successfully with communities and the general public on a number of related climate behavioural change delivery programmes. However, some of the enablers of the public response to climate change rely on UK Government levers. Wales is a sub-national state and our inter-connectedness makes it important that we work together to enable a successful transition, particularly in terms of consistent communications with the public.

This strategy for public engagement and action cannot be developed in a vacuum and must be delivered in parallel with Wales and UK ambitions for mutual progress, employing UK levers where needed and sharing learnings to enable a successful transition. We are committed to working with other UK nations to identify and agree on areas for collaboration through our societal behaviour change programmes. We know that the financial cost for Wales to follow a net zero trajectory will be far more expensive without autonomous behaviour change at the UK (and wider) level. From building up a common social research and evidence base to exploring a consistent eco-labelling programme, the UK cannot deliver its own societal behaviour change programme without Welsh action, and we cannot achieve our own aims without the UK Government playing its fair part.

Evidence – Social Research

What we already know

What we currently know about the level of public knowledge on climate change and key motivations and barriers to action.

Awareness and support for Net Zero

- Public awareness of the climate emergency is high but understanding of net zero and climate change adaptation and the important role the public needs to play in delivery is limited.
- A majority of the public think that they are doing enough to tackle climate change already, or responsibility lies more with government and industry.
- Knowledge levels are rising but this is slow – they are far higher among high-income and younger voters.
- Focus on action that is being taken tends to be towards easier, less impactful actions.
- Willingness to act in some areas is mixed - notable barriers being cost, hassle, attitudes & awareness and physical environment.⁴

Energy use behaviours

- In research conducted before the cost-of-living crisis, 80% of survey participants said they were consistently trying to save energy at home and 71% using heating carefully.⁵ Energy costs is the primary motivator for energy use behaviours (62%).⁶

Travel behaviours

- COVID-19, lockdowns, and working from home, have disrupted established travel behaviours; the effects of which are still being felt to differing degrees across different modes of transport.⁷

Diet & food behaviours

- Dietary change can be an emotive subject, linked to perceptions of identity.
- To limit the effects of climate change' was not the most commonly given reason for doing environmental behaviours. However, it was a reason given by a substantial proportion of people who eat less meat.⁸
- Dietary changes were perceived as relatively less favourable when compared to other changes.⁹

⁴ [BEIS Public Attitudes Tracker - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

⁵ [COVID-19 household research \(Daily Life Survey\): waves 1 and 2](#) (Welsh Government, 2022b)

⁶ (National Survey for Wales, Online trial July 2021-January 2022)

⁷ DfT tracker, 2021

⁸ (National Survey for Wales, Online trial July 2021-January 2022)

⁹ [The effect of COVID-19 on lifestyle behaviours that impact the environment: waves 1 and 2 | GOV.WALES](#) (Welsh Government, 2022a)

Changing behaviour and overcoming barriers

Behaviour is driven by a range of factors, including, but not limited to, awareness and knowledge, finances, and opportunities. Welsh Government will take a behavioural science approach to encouraging net zero behaviour change, drawing on a range of models, frameworks, and techniques. Research to date has identified a range of factors and barriers to be considered going forward. These include, but are not limited to:

- Cost barriers are often cited as they main barrier to adopting high-impact changes, such as installing heat pumps or purchasing electric vehicles. Research suggests that financial factors and well-being were more important drivers of positive net zero behaviour change than concern for the environment.¹⁰
- People are less likely to change behaviour if it inconveniences them. People are creatures of habit and favour the status quo.
- Local infrastructure and the built environment, such as a lack of cycle lanes and EV charging points, can act as a barrier to the adoption of green behaviours
- Individuals may not necessarily be aware of the significance changes that they can make, and support in place to help them make the changes.¹¹
- Research in Wales suggests that ‘carrots’ are preferred over ‘sticks’ when it comes to motivating net zero behaviours. Financial help, subsidies or incentives were by far the most commonly requested support. Improvements to infrastructure and services were also commonly suggested.¹²

Future research

Central to our research programme will be a new net zero behaviours and attitudes survey to be conducted over the next 3 years. This data will be used to benchmark and monitor shifts in societal attitudes and behaviours towards net zero. This work will build on the COVID-19 household research (Daily Life Survey): wave 1¹³ which summarises the environment-related changes in behaviour since the onset of COVID-19.

Key sources of information

- [Climate change and reaching net zero: perceptions and awareness in Wales | GOV.WALES](#) (2021)
- [The effect of COVID-19 on lifestyle behaviours that impact the environment: waves 1 and 2 | GOV.WALES](#) (Welsh Government, 2022a)
- [COVID-19 household research \(Daily Life Survey\): waves 1 and 2](#) (Welsh Government, 2022b)

¹⁰ [COVID-19 household research \(Daily Life Survey\): waves 1 and 2](#) (Welsh Government, 2022b)

¹¹ [BEIS – wave 37](#)

¹² [COVID-19 household research \(Daily Life Survey\): waves 1 and 2](#) (Welsh Government, 2022b)

¹³ [COVID-19 household research \(Daily Life Survey\): wave 1 | GOV.WALES](#)

Policy in Draft

- [Travel behaviour, attitudes and social impact of COVID-19 - GOV.UK \(www.gov.uk\)](#)
- [Future of transport: deliberative research - GOV.UK \(www.gov.uk\)](#)
- [National Survey for Wales](#)

Evidence – Carbon & Adaptation Impacts and Costs (Climate Choices)

We aim to provide a trusted source of information and choice architecture to support the people of Wales in making their own decisions on climate action.

Achieving successful outcomes from a national programme of public engagement & action on climate change relies on gathering evidence to determine the carbon impacts and costs of individual climate choices.

A focus on action in areas that play a limited role in reducing carbon emissions may arguably support a spillover effect (*i.e. one positive behaviour leading to other positive behaviours*), but this will not secure Wales' pathway to net zero. Over-reliance on small interventions in one area triggering tipping points that grow into systemic changes elsewhere is a risky strategy. Communicating messages that small changes matter also brings risk in creating a negative knock-on effect (*i.e. compensatory behaviour in other more impactful areas*) and misleading the public around the more impactful changes ahead.

This strategy focuses on the importance of building trust, challenging misinformation on climate change and emphasising the radical shift needed in the way we all live our lives. Our aim is to provide a reliable source of information and choice architecture to support the people of Wales in making their own decisions on climate action – whilst conveying the benefits these changes will bring. The focus of this strategy is to make the right thing to do the normal, easy, attractive and routine thing to do for the public to act. At present, many people tend to favour lower impact actions as these are often easier to adopt and there will be many factors that influence this. The challenge ahead will be to provide the right support for the more impactful changes that are likely to require a more radical shift to lifestyles.

Our priority will be to design policies that incentivise action and invest in innovation and technology deployment to drive cost reduction, whilst also strengthening people's understanding of the changes that will be needed and engaging them in policy design. Our aim is to create a positive virtuous circle where higher public understanding and knowledge builds support for future policy, and increased technology-development levels lead to reduced costs and make net zero behaviours a social norm.

Unquestionably many of the changes ahead will require trade-offs and not all will be popular, requiring transformation in how we produce and use energy, how we move around, the buildings we live in, and our environment and countryside. But in many cases there will be significant co-benefits and will not require a reduction in living standards. The challenge will be to ensure support is in place to ensure fairness and that particular areas of society are not disadvantaged and bear the costs of different behaviour changes. This is another important underlying principle described in this strategy.

Our evidence workstream will continue to analyse the abatement cost, level of public support and abatement potential of different low-carbon and adaptation behaviour measures.

Through a cross-Government evidence workstream, we will conduct in-depth assessments to determine the potential abatement cost (£/tonne) and level of risk and public support of different low-carbon and adaptation behaviour measures, alongside other key factors such as existing interventions in place, and the ease, timing and affordability of new policy interventions.

This strategy highlights the importance of providing the public with trusted information around different choices to help them make their own informed decisions on climate action at an individual level. To help inform these decisions, the delivery programme associated with this strategy will include communication on the carbon impacts of different choices, informed by evidence on global averages and tailored evidence at a UK and/or Wales level (i.e. where the impact of actions are notably different). As well as highlighting the impact of choices on territorial emissions (i.e. those emissions which take place in Wales), communications will also highlight the potential global impact of different choices (e.g. around purchasing behaviours).

Q14: Do you think the policy contexts and evidence set out in this section are useful?

Theory of Success – Behavioural Science

Applying Behavioural Science

The application of behavioural science will be a central component in our development of informed theories of success in achieving climate action.

Behaviour change is grounded in behavioural science – an understanding of the motivations, incentives and barriers of individuals and groups to make changes to how they behave. The application of behavioural science has already been central to our success in engaging the Welsh public in a number of other areas, from:

- safeguarding the health of our nation (e.g. organ donation, COVID-19 pandemic); to
- pro-environmental behaviours (e.g. plastic bag charge, waste and recycling credentials).

The people of Wales have a strong sense of community and compassion for others, take pride in our natural environment, and (as articulated through our Well-being of Future Generations Act) understand the positive contribution we can make to global well-being. These are all strong foundations to build on.

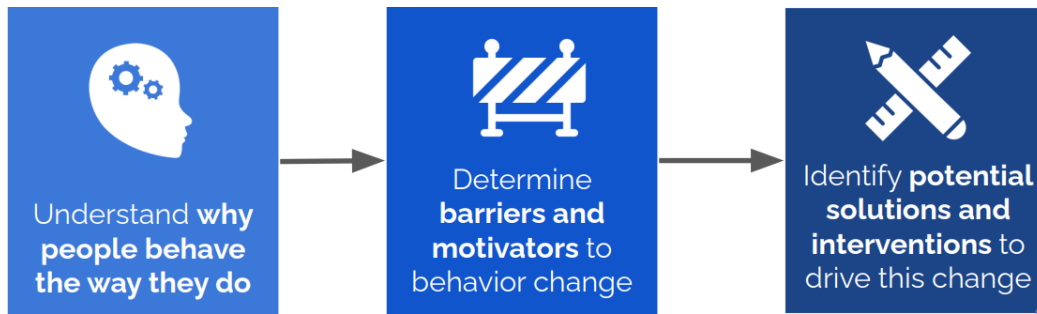
We know that most of the interventions required to reach global emission reduction targets (i.e. climate mitigation) require at least some behavioural change and adapting to the growing impacts of climate change similarly requires significant lifestyle and societal change. Behaviour change is often narrowly conceived as individual-level consumer action (e.g. buying a low carbon product, recycling etc), but this strategy highlights the important role it also plays in policy formation and in understanding likely barriers to climate-resilient technologies. All areas will be considered: from social, environmental, community, organisational, political, economic, health, and developmental factors, and will be applied in testing different theories and interventions to inform more effective mitigation and adaptation behaviour change.

Why a Behavioural Science approach?

Given the broad scope and complexities associated climate behaviour change, we will draw together a panel of behavioural science experts to support us with the delivery of this programme.

We recognise the challenges associated with behavioural science from the range of different models, frameworks, levers and techniques, to the complexity of the task in addressing a wide range of behaviours, for different reasons and by different organisations and groups. Even with adequate knowledge and a desire to do so, many people also fail to take noticeable steps (termed the 'knowledge-action' gap). Behaviour is complex and rarely follows anticipated decision-making (e.g. around cost, convenience, choice). Cognitive biases and motivational factors also need to be considered.

However, behavioural science ultimately helps us to:



Behavioural science also helps us to:

- Build on what we (and others) have successfully done before, apply key learnings, and involve stakeholders and audiences in the ongoing process of learning and change.
- Ensure the approach is grounded in insight and theoretical understanding of target behaviour.
- Ensure we develop a good understanding of motivations and barriers.
- Start with 'who, what, why-not', then shape intervention design (which may include comms but may not).
- Move away from information provision and awareness raising to methodologies which can be evidenced to have real and sustained outcomes.

Our approach to behaviour change will not be prescriptive and will seek to involve stakeholders and audiences in an ongoing process of learning and change. Given the broad scope and complexities associated climate behaviour change, we will draw together a panel of behavioural science experts to support us with the delivery of this programme.

We will also collaborate with others running parallel Behaviour Change programmes, such as:

- Supporting our own policy teams across Government to embed behavioural science into policy design.
- Working with UK Government, Scottish Government and Northern Ireland Executive to share best practice.
- Natural Resources Wales (determining climate-related findings from the [‘Nature & Us’](#) campaign led by NRW and the Welsh Government urging people to have their say on the future of Wales' natural environment).
- Public Health Wales (working with our Health & Social Care division on a Climate Emergency National Programme to mitigate the health and wellbeing risks to the public from climate change).
- Local Governments and the National Health Service in Wales (taking learnings from an innovative pilot behaviour change programme across the public sector workforce delivered by the Welsh Government Energy Service).

Q15: Do you agree with our theory of success and the importance this strategy places on behavioural science?

Q16: Is there anything else you believe should be covered in this section?

OTHER QUESTIONS

Q17: Do you have any other comments on the overall approach, contents or structure of this strategy?

Q18: Overall, has this draft strategy met your expectations or do you have any suggestions for improvement.