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Research Evaluation Consulting



Shaping Wales' Next Climate Plan: Public and Stakeholder Views

Main report from engagement to inform Wales' Carbon Budget 3 Plan (2026-2030)

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Welsh Government

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1. Introduction

Policy context

The Environment (Wales) Act 2016 requires Welsh Ministers to set successive carbon budgets that place limits on greenhouse gas emissions over five-year periods. Carbon Budget 3 (CB3) will be Wales' statutory plan covering 2026-2030. Due for publication at the end of the year, it will set out the next step in Wales' journey to a cleaner future. Addressing climate change is written into our laws, with legally binding targets and carbon budgets setting Wales on a pathway to net zero by 2050. A carbon budget is very much like a financial budget and gives us a maximum amount of carbon we can 'spend' or emit over a five-year period. The new Plan will sets out how we will reduce emissions, while ensuring people, communities and businesses can benefit from the transition".

Public and stakeholder engagement formed a central component of the development of the Carbon Budget 3 Plan, providing evidence on public priorities, perceived barriers and opportunities for accelerating the transition to net zero. The programme sought to understand the opportunities, barriers and priorities associated with reducing greenhouse gas emissions while ensuring the transition to net zero is fair, inclusive and delivers wider social and economic benefits.

The engagement programme

Between October 2025 and February 2026, Welsh Government commissioned a focused programme of engagement to inform the development of the Carbon Budget 3 Plan. The programme comprised several complementary activities held before, during and after Wales Climate Week, each designed to engage different audiences through a range of participatory approaches. Since these took place, Welsh Government has continued to deliver stakeholder engagement on the Plan throughout 2026 until publication at the end of the year.

Engagement activity was undertaken through a range of events and formats during the reporting period to capture perspectives from different audiences across Wales. This included Wales Climate Week, a virtual conference that brought together speakers, stakeholders and attendees through a programme of online sessions; a Bluestone youth engagement event held in October, involving a small group of young people from local schools; two CAST visioning workshops in Wrexham and Mid Wales, attended by members of the public; and a series of Climate Conversations Fund (CCF) events held across Wales, which engaged a diverse range of participants including community groups, members of the public and young people..

The engagement activities were supported by a discussion paper Net Zero Transition 2026 to 2030 and beyond, as well as a film Y Ras i Greu Dyfodol Tecach a Gwyrddach | The Race to Build a Greener, Fairer Future. These documents, and the facilitators

supported participants to contribute and collectively, these activities generated a substantial evidence base comprising facilitator summaries, workshop reports, participant outputs, polling data and participant feedback.

Miller Research was commissioned to synthesise this evidence and identify the principal themes emerging across the engagement programme. This report presents the findings of that analysis.

The engagement programme combined national stakeholder engagement with locally delivered community events and deliberative workshops. This mixed-methods approach enabled evidence to be gathered from a diverse range of audiences, while allowing findings from different engagement methods to be triangulated during analysis.

Attendance

The engagement programme reached a broad range of stakeholders and members of the public across Wales through multiple complementary engagement methods. Participation varied between activities, reflecting their different purposes and target audiences. Programme attendance is presented below:

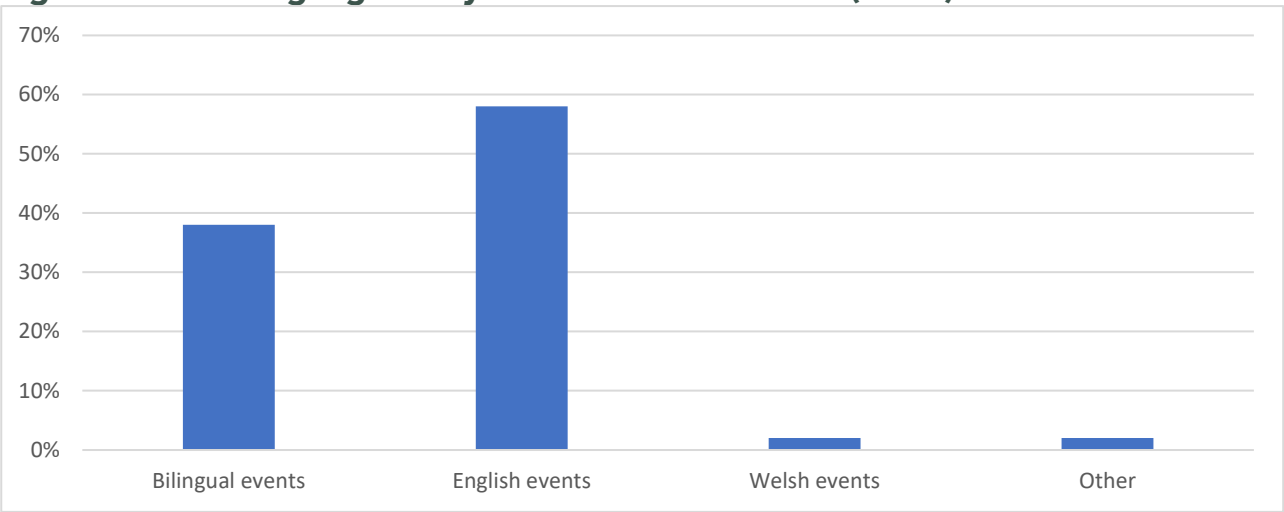
Engagement Activity	Participation Summary
Climate Conversations	168 events organised by 69 organisers
	3,663 participants reported across events
	Organisers of 17 events did not provide attendee demographic data
Climate Cymru Ethnic Minority Event	11 organisations participated
CAST Visioning Workshops	31 attendees across 2 workshops in Wrexham on 7th February and Builth Wells on 11th February
Wales Climate Week Virtual Conference	793 registrations and 462 attendees overall
Housing Day (Monday)	Highest session attendance: 153 Average session attendance: 112
Transport Day (Tuesday)	Highest session attendance: 103 Average session attendance: 84
Agriculture & Land Use Day (Wednesday)	Highest session attendance: 92 Average session attendance: 70

Climate Conversations Demographics

Climate Conversation events were held in 19 out of 22 local authorities, with particularly strong representation from Rhondda Cynon Taf, Cardiff, Carmarthenshire and Powys.

There was the following Welsh language / bilingual representation across the events:

Figure 1: What language was your event delivered in? (n=50)



Source: Miller Research Analysis of CCF Event Feedback Forms

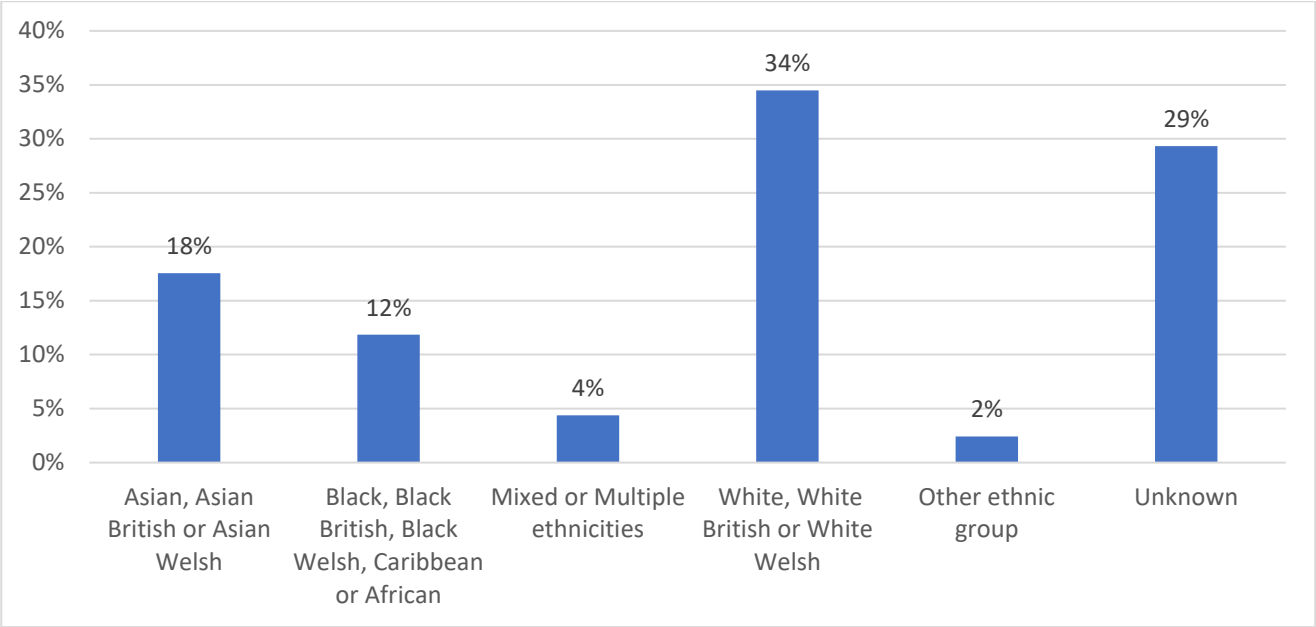
Among respondents, 64% of participants did not disclose their level of Welsh fluency, however 17% described themselves as fluent Welsh speakers and a further 10% identified as Welsh learners.

Employment information was similarly incomplete, with only 46% of participants disclosing this information. However, the largest proportion were in modern professional occupations (12%), followed by clerical and intermediate occupations (5%). 23% described themselves as students, while 10% were unemployed and 10% were retired.

Among participants who provided demographic information, 56% identified as female and 44% as male.

Among participants who disclosed their ethnicity (figure 2), the largest group identified as White, White British or White Welsh (34%). Ethnicity was not reported for 29% of participants.

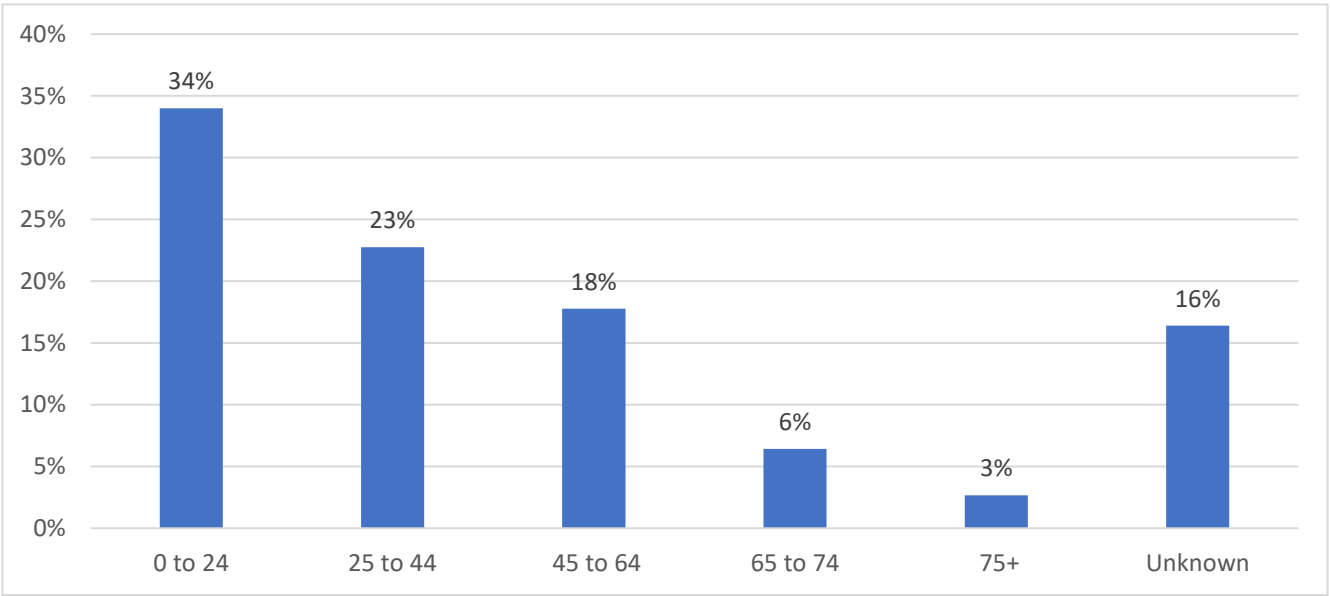
Figure 2: Percentage of participants by ethnicity (n=3663)



Source: Miller Research Analysis of CCF Event Feedback Forms

Young people aged 24 and under were the largest age group represented (34%), while participants aged 65 and over accounted for 9% of respondents (figure 3).

Figure 3 Percentage of participants by age bracket (n=3663)



Source: Miller Research Analysis of CCF Event Feedback Forms

Purpose of this report

This report presents a thematic synthesis of the evidence generated through the engagement programme.

The analysis draws together evidence from across the different engagement activities to identify common themes, areas of agreement and issues raised by participants. Evidence has been organised around three policy areas that formed the focus of the engagement programme:

- housing
- transport
- agriculture and land use.

Within each policy area, findings are presented against the five research questions that guided the engagement programme. A common analytical framework was applied across all evidence sources to enable consistent comparison and synthesis of findings from the different engagement activities.

The report presents qualitative evidence gathered through the engagement programme and reflects the views of participants who took part in the engagement activities. The findings should not be interpreted as statistically representative of the wider Welsh population.

The analysis does not present findings from each engagement activity in isolation. Instead, it synthesises evidence across the programme to identify consistent themes, contrasting perspectives and areas where findings diverged between participant groups.

Report structure

Chapter 2 describes the methodology used to collate, code and synthesise the evidence. It outlines the analytical framework used for the synthesis and discusses the strengths and limitations of the available evidence.

Chapter 3 outlines the cross-cutting overarching findings that appeared across multiple sectors.

Chapters 4-6 present the findings for each policy area. Within each section, evidence is organised according to the five research questions that guided the engagement programme and draws together findings from across the different engagement activities.

The report concludes by summarising the principal findings emerging from the engagement programme and their relevance to the development of the Carbon Budget 3 Plan.

2. Method

Overview

Welsh Government commissioned Miller Research to synthesise evidence generated through the engagement programme. The analysis sought to identify the principal themes, opportunities, barriers and priorities emerging from public and stakeholder engagement and to synthesise these within a common analytical framework to inform the development of the Carbon Budget 3 Plan.

The analysis drew on evidence generated through four engagement activities undertaken between October 2025 and February 2026:

Engagement activity	Evidence reviewed
Climate Conversations Community Events	Organiser reports, participant feedback, demographic information and supporting documentation submitted following community engagement events. In addition to standard template organiser reports, an additional event was held by Climate Cymru Ethnic Minorities who brought together participants from a range of Climate Conversation events to synthesise findings from their ethnic minorities network. This is referred to as the Climate Cymru ethnic minorities consultation paper.
Wales Climate Week Virtual Conference	Session summaries, facilitator notes, participant discussion outputs, keynote summaries, live polling data and online engagement.
CAST Visioning workshops	Workshop reports, participant evaluations and "Postcards from the Future" (PF) outputs.
Bluestone school workshops	Facilitator summaries and outputs from activities with school children.

Each activity was designed for a different audience and generated different forms of evidence, reflecting its distinct objectives and engagement approach. This report synthesises the evidence provided by Welsh Government and does not present findings from primary research undertaken by Miller Research.

Analytical framework

A common analytical framework was developed to enable evidence from the different engagement activities to be analysed consistently.

The framework was organised around the three policy areas explored through the engagement programme:

- Housing
- Transport
- Agriculture and land use

Within each policy area, evidence was coded against the five research questions that guided the engagement programme:

- How can we accelerate a shift in practices and behaviours so that we can realise early benefits?

- How do we unlock Wales' potential to improve productivity, increase household energy security, and make it easier to get around in cleaner, greener ways?
- How can we reduce emissions while building resilience to the changing climate?
- What barriers stand in our way, and how can we remove them?
- What risks or consequences do we need to work together to avoid to ensure a fair and just transition?

Applying this framework enabled evidence from diverse engagement activities to be analysed using a consistent structure while retaining the context in which it was generated.

Analysis

Qualitative evidence was analysed using thematic analysis.

Evidence from each engagement activity was reviewed and coded according to the relevant policy area and research question. Themes were identified inductively within each analytical category before being reviewed across evidence sources to identify recurring patterns, areas of consensus and contrasting perspectives. The coding framework was refined iteratively throughout the analysis to ensure that conceptually similar themes were grouped consistently while preserving important contextual differences between engagement activities.

Quantitative evidence, primarily Wales Climate Week virtual conference polling data and participant demographic information, was analysed descriptively. Quantitative findings were used to contextualise and triangulate the qualitative evidence where appropriate but were not interpreted independently.

The final synthesis integrates evidence across all engagement activities to identify recurring themes, divergent perspectives and issues that emerged uniquely within particular participant groups or engagement settings.

Reporting

To improve readability and transparency, abbreviated source references are used throughout the report. These indicate the origin of the evidence supporting each finding. These are outlined below for reference:

Abbreviation / Code	Source
CCF	Climate Conversation Fund Events Feedback
WCW virtual conference	Speaker and participant notes from across the Wales Climate Week virtual conference themed days.
CAST Visioning workshops	CAST Visioning workshop reports
PF	CAST "Postcards from the Future" (PF) outputs.
CCEM consultation	CCEM (Climate Cymru Ethnic Minorities) consultation paper: Ethnic Minorities' perspectives on Housing, Transport, and Agriculture and Land Use in Wales
BS	Bluestone and Size of Wales group work reports

To aid interpretation of the qualitative findings, the report uses indicative descriptors to reflect the frequency with which themes were identified during analysis. The descriptors are intended to indicate the relative prominence of themes within the coded evidence rather than the number of participants expressing a particular view.

Descriptor	Number of coded references
One participant/source	1
A couple of participants/sources	2
Several participants/sources	3–4
Many participants/sources	5 or more

Given the variation in reporting formats across engagement activities, these descriptors should be interpreted as indicative rather than statistically meaningful measures of prevalence.

Limitations

The engagement programme generated evidence from a wide range of participants using different engagement approaches. Synthesising these sources provided a broad evidence base to support development of the Carbon Budget 3 Plan.

The findings should, however, be interpreted in light of several limitations.

Diversity of evidence sources

The engagement activities were designed independently to meet different objectives and engage different audiences. As a result, the evidence varied in structure, depth and format.

Evidence included facilitator summaries, organiser reports, workshop outputs, participant evaluations, keynote summaries, polling data and written reflections. Some sources addressed specific research questions directly, while others provided broader summaries of discussion.

The analytical framework enabled these diverse sources to be synthesised consistently. Accordingly, the analysis identifies themes emerging across the combined evidence base rather than comparing individual engagement activities directly.

Reporting consistency

Most qualitative evidence was provided as facilitator or organiser summaries rather than verbatim records of discussions. The level of detail and emphasis therefore varied between activities and reflected both participant discussions and facilitator interpretation.

Similarly, reporting formats differed across the engagement programme. For example, Climate Conversations reports varied in the level of detail provided, while the virtual conference polling questions differed between sessions. These differences limit the extent to which evidence can be compared across engagement activities.

Representativeness

The engagement programme was designed to inform policy development rather than to produce statistically representative findings. Participants were recruited through a range of engagement approaches and participation was voluntary. In addition, polling data from the virtual conference was used to inform discussion on the day rather than provide statistically representative findings. Participation in the polls was also limited, with relatively small numbers of attendees responding to individual questions, and the results should therefore be treated as indicative only.

The findings therefore reflect the views and experiences of those who participated in the engagement activities and should not be interpreted as representative of the wider population of Wales.

Interpretation of qualitative evidence

As with all qualitative research, thematic analysis involves researcher judgement in coding and interpreting evidence. A common analytical framework and internal quality assurance processes were used to promote consistency throughout the analysis. Nevertheless, alternative interpretations of individual pieces of evidence may be possible.

3. Overarching Findings

Analysis across the engagement programme identified several themes that were consistently raised across multiple policy areas and engagement activities. While each policy area had its own specific issues, a number of common opportunities, barriers, and priorities emerged repeatedly. These cross-cutting findings provide important context for the more detailed sectoral analysis presented in the following chapters.

Barriers to Progress

Across the engagement programme, participants consistently identified several common barriers when considering the research question: "What barriers stand in our way?". Potential approaches to addressing these barriers are explored in later sections on accelerating behaviour change and unlocking potential.

Awareness

A consistent finding across sectors was the importance of awareness and understanding in enabling climate action. Participants identified gaps in awareness of available funding, support schemes, technologies and opportunities, alongside broader challenges relating to climate literacy and understanding of decision-making processes. Clearer communication, more accessible information, and greater sharing of practical examples were identified as important enablers of change. Collectively, these findings suggest that improving awareness is both a communications challenge and a prerequisite for enabling informed participation across multiple areas of the net zero transition.

Infrastructure Constraints

Participants frequently highlighted infrastructure as a barrier to progress. In transport, concerns centred on public transport reliability, active travel infrastructure and EV charging provision. In agriculture, participants pointed to limitations in infrastructure supporting local supply chains and innovation. Across sectors, there was a view that individuals and communities are less able to adopt lower-carbon practices where supporting infrastructure is not in place. Participants therefore viewed infrastructure investment as a necessary condition for behaviour change, rather than a consequence of it.

Trust and Confidence

Across sectors, participants emphasised the importance of trust in policies, institutions and transition processes. Concerns were raised where communities felt disconnected from decision-making or lacked confidence in schemes and technologies. Participants highlighted the value of transparent communication, meaningful engagement and opportunities for communities to shape decisions affecting them.

Cost and Affordability

Cost emerged as one of the most consistent barriers across sectors. Participants highlighted the cost of low-carbon technologies, sustainable transport options, retrofit measures and changes to farming practices being a key factor in choosing less sustainable choices. There was a common view that financial barriers can limit participation in the transition and risk excluding those with fewer resources. This was one of the several themes to emerge consistently across all sectors, suggesting affordability is a fundamental consideration for successful policy implementation.

Agency

Participants emphasised that willingness to act does not always translate into the ability to act. Across sectors, people identified practical constraints that limited their choices, including tenancy arrangements, access to transport alternatives, financial limitations and policy constraints. This suggests that enabling action often requires changes to wider systems and structures, rather than relying solely on individual behaviour change. Participants therefore emphasised that systemic change, alongside individual action, will be required to achieve meaningful emissions reductions.

Accelerating Behaviour Change

Analysis identified four recurring themes relating to accelerating behaviour change when considering the research question: "How can we accelerate a shift in practices and behaviour so that we can realise early benefits?".

Education and Awareness

Participants consistently identified education and awareness raising as important mechanisms for accelerating change. Suggestions included climate education in schools, public information campaigns, greater sharing of best practice, and improved access to information about support schemes and opportunities. Participants felt that increasing understanding could help build support for climate action and enable more informed decision-making.

Community-Led Action

Community action emerged as a key theme across sectors. Participants outlined the value of local initiatives, community growing projects, community charging schemes, peer-to-peer learning and community involvement in decision-making. There was a widespread view that change is often most effective when rooted in local knowledge and community ownership. Across discussions, community-led initiatives were frequently presented as mechanisms for building trust, increasing participation and demonstrating practical action.

Government Support

A consistent finding across sectors was the importance of government support in enabling climate action. Participants highlighted the role of grants, subsidies, incentives and funding programmes in reducing barriers to change, alongside practical support to help people navigate available schemes and opportunities

Skills and Workforce

The need for new skills and workforce capacity was identified as an important enabler of change, particularly in the housing and agriculture sectors. Participants acknowledged the importance of training, career pathways and workforce development in areas such as retrofit, sustainable farming and emerging low-carbon technologies. There was also recognition that existing workers require support to adapt to changing practices and technologies.

Unlocking Potential

The following cross-cutting themes were identified across two or more sectors when considering the research question: "How do we unlock the potential in Wales for example, to improve productivity, increase our household energy security, and/or make it easier to get around in cleaner, greener ways?"

Policy and Regulation

Participants identified the important role of policy and regulation in creating the conditions for change. There were calls for long-term policy certainty, accessible support schemes and policy development that reflects local circumstances and lived experience. Participants frequently emphasised that policies are more likely to be effective when developed in partnership with those affected by them. Participants emphasised that policy certainty is important both for encouraging investment and maintaining confidence in the transition.

Clean Energy and Infrastructure

Many participants viewed investment in clean energy and supporting infrastructure as central to unlocking decarbonisation opportunities. Discussions included electrification, renewable energy generation, EV charging infrastructure, hydrogen technologies and community energy approaches. Participants highlighted the importance of ensuring these systems are accessible and capable of supporting future demand.

Green Jobs and Economic Opportunities

Participants frequently linked climate action with economic opportunity. Across sectors, discussions highlighted the potential for green jobs, workforce development, innovation and new industries to support both decarbonisation and economic prosperity.

Reducing Emissions and Building Resilience

The following cross-cutting themes were identified across two or more sectors when considering the research question: "How can we reduce emissions while also building our resilience to the changing climate?"

Nature-Based Solutions

Across housing and agriculture in particular, participants highlighted the role of nature-based approaches in reducing emissions while building resilience to climate change. Suggestions included biodiversity enhancement, green infrastructure, land regeneration and multi-functional land management. More broadly, participants often emphasised that climate mitigation and adaptation should be considered together rather than as separate challenges.

Risks and Consequences to avoid, ensuring a Just Transition

The following cross-cutting themes were identified across two or more sectors when considering the research question: "What risks or consequences do we need to work together to avoid, ensuring a fair and just transition?"

Access to Information and Services

Participants expressed concerns that unequal access to information, services and support could create barriers to participation in the transition. This included digital exclusion, awareness gaps and challenges navigating support schemes. Ensuring information is accessible and widely available was seen as important to achieving a just transition.

Inclusive Policy Design and Decision Making

A consistent finding across sectors was the importance of designing policies and interventions that reflect the diverse needs and circumstances of different communities. Participants raised concerns that poorly designed schemes can unintentionally exclude some groups, create additional barriers to participation, or fail to account for local contexts. Across sectors, there were calls for policies to be developed with those affected by them, ensuring that support, incentives and regulations are accessible, equitable and practical to implement. Participants emphasised the value of co-production, meaningful engagement and inclusive decision-making processes to help avoid unintended consequences and build public support.

Protecting Marginalised and Vulnerable Groups

Participants consistently stressed that climate action should not increase existing inequalities. Discussions emphasised the need to consider the experiences of groups who may face additional barriers, including people on lower incomes, disabled people, older and younger people, ethnic minority communities and those experiencing digital exclusion. Ensuring that the benefits and opportunities of the transition are shared fairly was viewed as a core principle of a just transition.

Conclusion

Collectively, these findings suggest that many of the issues raised by participants transcend individual policy sectors. Rather than viewing housing, transport, and agriculture in isolation, participants consistently highlighted the importance of coordinated policy, long-term investment, inclusive decision-making, and accessible

support. These cross-cutting themes provide an important context for understanding the more detailed sector-specific findings presented in the following chapters.

4. Housing

This chapter presents the findings related to housing, synthesising evidence from across all engagement activities. Findings are organised around the five research questions that guided the engagement programme, drawing together common themes, areas of agreement and contrasting perspectives where these emerged.

Barriers to Progress

The following themes were identified when considering the research question: "What barriers stand in our way?" through the lens of the housing sector. Potential approaches to addressing these barriers are explored in later sections on accelerating behaviour change and unlocking potential.

Financial and Digital Exclusion

Both WCW virtual conference speakers and broader participants identified cost as a major barrier to decarbonisation and energy efficiency improvements. Many CCF events (over 20) emphasised that high upfront costs of energy efficiency improvements were a pertinent barrier, with ongoing cost-of-living pressures and financial constraints faced by both individuals and organisations limiting the ability or urge to invest in retrofit measures. Participants also noted that some homes require significant structural repairs before decarbonisation measures can be implemented, while the long-term costs, housing insecurity, and concerns about hidden expenses associated with retrofit were viewed as additional challenges. The CCEM event similarly elicited the fiscal barrier of unequal access to green home improvements. Across evidence sources, affordability emerged as one of the most significant constraints on housing decarbonisation, influencing both the willingness and ability of households to invest in improvements.

Limited Understanding and Access to Information

Participants across several CCF events highlighted low awareness of the need for decarbonisation measures, the options available, and the support that can be accessed. Many participants described the retrofit journey as difficult to navigate, particularly in relation to understanding available technologies, grant eligibility, and the practical steps required to undertake improvements to their homes. There were also concerns about a lack of clear and accessible information on the decarbonisation process, its impacts, and the governance of the sector.

Lack of Trust

In many CCF events, participants identified a lack of trust as a key barrier to decarbonisation. Concerns were raised about poor-quality installations, exploitative providers, and the effectiveness of some government schemes. There were also concerns about profit-driven approaches (the ECO4 scheme was commonly noted as an example of this) driving these issues. Participants highlighted a need for greater regulation, stronger quality assurance processes, clearer accountability for installers, and more evidence of impacts through case studies and lived experiences. These

findings suggest that improving confidence in retrofit delivery will require both strong consumer protections and greater visibility of successful outcomes.

Tenure Constraints

Feedback from many CCF events, as well as WCW virtual conference participants and the CCEM event, highlighted that people living in rented or social housing may face additional barriers to decarbonisation, as they are often unable to authorise improvements to their homes. Suggested solutions included greater support for tenants through housing advisers and grants, and stronger collaboration between local authorities, landlords, and tenants to enable and encourage improvements.

Governance

Across several CCF events, the CCEM event and the CAST visioning workshop, participants identified policy, planning and governance arrangements as significant barriers to progress. Concerns centred on complexity, bureaucracy and a lack of alignment between organisations, with inconsistent priorities and frameworks making coordinated action more difficult. Participants from one CCF event also raised concerns about the quality and enforcement of housing standards, suggesting that existing regulations are not always sufficient to drive change. These concerns were reflected in the calls for clearer, more consistent and more ambitious regulatory approaches to support decarbonisation and accelerate action across the housing sector.

Implementation

Several CCF events had discussions on issues surrounding the practical implementation of green homes, including the difficulty of improving the energy efficiency of existing older housing stock and listed buildings. Meanwhile, another CCF event noted that new builds are being built too rapidly for quick profit and not taking efficiency into account. Participants recognised that the practical challenges of decarbonising Wales' existing housing stock differ considerably between housing types. Older buildings, listed properties, and rapidly constructed new developments were all identified as requiring different policy responses and technical solutions.

Accelerating Behaviour Change

The following themes were identified in the data when considering the research question: "How can we accelerate a shift in practices and behaviour so that we can realise early benefits?" through the lens of the housing sector.

Community Involvement

Several CCF events placed a strong emphasis on community-based approaches to reducing emissions in the housing sector. This included greater community involvement in decision-making and planning, opportunities for community learning and engagement, and the development of community ownership models. These participants highlighted the value of cooperation between residents and suggested that collective approaches should be made easier. Examples included exploring shared

heating systems and other community-scale solutions. Participants from two of the CCF events also emphasised the importance of working through trusted community organisations when delivering initiatives, information and support.

In several CCF events, further suggestions included community-based workshops, drop-in sessions and local advice hubs as ways of building knowledge and understanding among residents.

Role of Housing providers

CCF participants across several events felt that landlords and housing associations should have a responsibility to support residents in the transition to greener homes. There were calls for stronger expectations and incentives for landlords to improve the energy efficiency of their properties. They noted that tenants often have limited influence over home improvements and therefore rely on landlords to make changes. Participants therefore viewed housing providers as key delivery partners in enabling household decarbonisation.

Alongside the role of organisations, participants from some CCF events stressed that individuals also have a role to play in reducing emissions and adopting lower-carbon behaviours.

Renewable Energy Schemes

Participants from one CCF identified utilities companies as another potential actor, suggesting that they could encourage greener behaviours through reward schemes linked to the use of renewable energy. Across two events, participants also stated that electricity generated through solar panels installed on council homes should provide a direct benefit to the tenants living in those properties.

Awareness raising

Across WCW virtual conference speeches and CCF participant feedback, awareness-raising was identified as an important component of supporting behaviour change and increasing participation in decarbonisation initiatives. There was a desire for greater awareness of existing support schemes, including clearer information about eligibility, available funding and application processes.

One WCW virtual conference speaker and CCF participants from one event similarly suggested the development of a centralised "one-stop shop" where residents could access information, advice and guidance on available technologies, support schemes and actions they could take.

A range of communication methods were discussed. Participants highlighted the potential role of digital tools, trusted organisations, face-to-face support, social media and traditional media in reaching different audiences.

Participants across two CCF events felt that messaging should be targeted and appeal to a range of motivations, including financial benefits as well as environmental outcomes, and not focused on divisive or judgemental language.

Participants from one CCF event highlighted the need to improve environmental literacy in schools, while other CCF event attendees suggested this continue beyond formal education settings within communities.

Support

Accessible and inclusive support is seen as a critical enabler of decarbonisation across the sector. More than one in five poll participants (22%) identified government support as one of the biggest opportunities to accelerate decarbonisation (figure 4).

Across several CCF events, participants argued that existing support schemes are too narrowly targeted and should be broadened beyond low-income households, with some advocating for a sliding-scale approach that reflects varying levels of need.

Participants from several CCF events also emphasised that improving access to support is as important as the funding itself, highlighting the need for simpler application processes, clearer guidance, and assistance navigating available schemes. Greater flexibility within support programmes was also identified in one CCF event as important, particularly to address the additional challenges and costs associated with retrofitting historic buildings and older housing stock.

Across two CCF events, participants expressed uncertainty about the future availability of funding and questioned whether existing schemes would be sufficient to deliver meaningful change.

Participants across numerous CCF events noted that future support should be tailored to the needs of different groups, including:

- Landlords and homeowners– subsidies and incentives to make housing more efficient and upgrade properties
- Renters – direct benefits of solar panels to tenants, access to finance akin to homeowners
- Older people and people on low incomes – helping these households make the necessary changes for free or cheaper

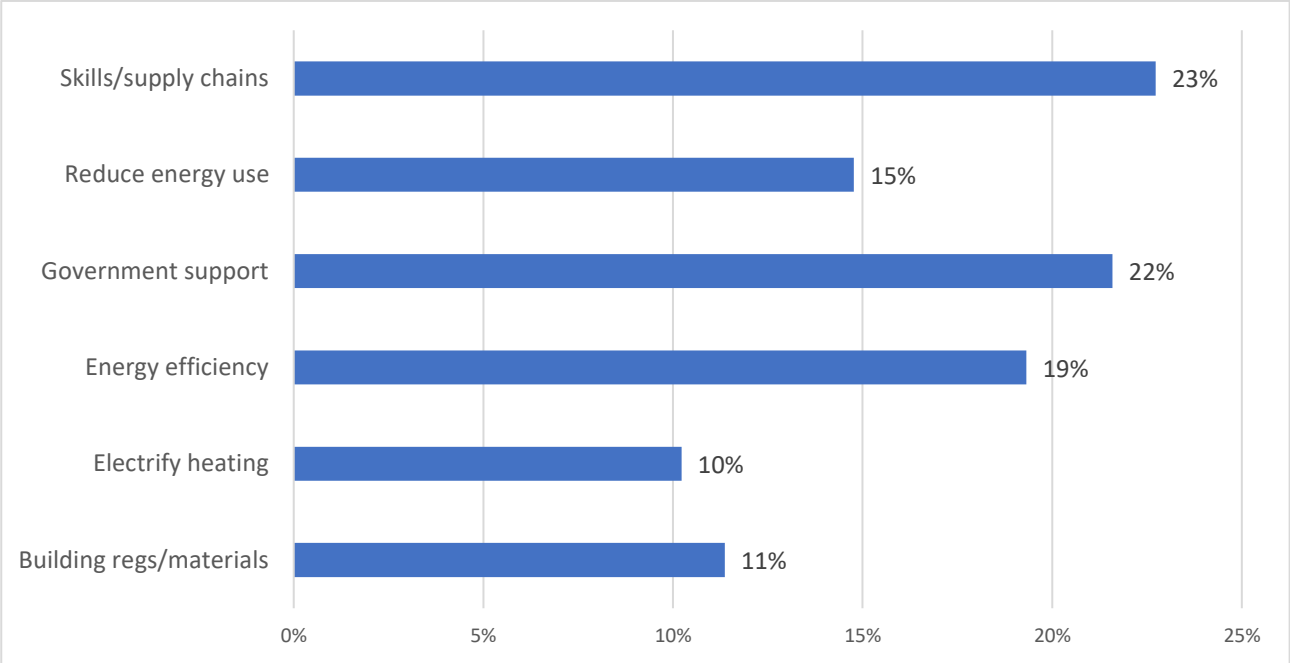
Together, these findings suggest that more accessible, inclusive and adaptable support mechanisms could play a significant role in enabling wider uptake of decarbonisation measures.

Funding

Participants from CCF, WCW virtual conference, and PF events suggested that a range of funding mechanisms would be needed to support the transition to greener homes and lower-carbon lifestyles. These included grants, low-interest loans and community finance models. There was also support from one CCF event for funding arrangements that enable collaborative approaches, including shared infrastructure such as communal heating systems.

Participants from two CCF events reiterated the importance of delivering funding and support through trusted community organisations where possible.

Figure 4: What are the biggest opportunities to accelerate decarbonisation over the next 5 years? – Housing



Source: Miller Research Analysis of Wales Climate Week Virtual Conference Poll Data (n=88, multiple choice)

Unlocking Potential

The following themes were identified in the data when considering the research question: "How do we unlock the potential in Wales for example, to improve productivity, increase our household energy security, and/or make it easier to get around in cleaner, greener ways?" through the lens of the housing sector.

Fit-for-Purpose Regulation

Participants from many CCF events highlighted the role of regulation and policy in supporting the transition to greener homes. There were calls from both CCF and PF event attendees for technology such as solar panels and heat pumps to become a standard feature of all new-build housing developments. Participants also suggested that stronger protections for tenants are needed to ensure landlords are held accountable for the condition and energy performance of their properties.

Concerns were raised in one CCF event about market practices associated with green technologies, with participants suggesting a need for greater regulation. Separately, a speaker identified planning regulations, including the three-metre planning rule, as a potential barrier to the installation of energy efficiency and renewable energy measures and suggested that reducing planning and administrative requirements could support delivery.

Large-Scale Retrofit

Participants from several CCF events and a WCW virtual conference session emphasised the importance of a long-term, strategic approach to large-scale retrofit, including adequate grant provision, estate-by-estate planning and programmes that support more extensive retrofit works. There was also support for greater collaboration, for example between neighbouring housing providers, to enable delivery at scale. At one WCW virtual conference event, participants suggested that shared procurement frameworks could help coordinate retrofit activity while creating opportunities for local businesses and supporting local economic benefits.

Skills, Employment and Community Benefits

Many CCF events' feedback, and one WCW virtual conference participant, identified the transition to greener homes as a potential opportunity for skills development and job creation across a range of contributing sectors. Roles highlighted included installers, engineers, energy advisers, and community educators. The need for investment in skills development was raised, including opportunities to upskill the existing workforce and provide training for new entrants to develop green skills. This was also reflected in the quantitative poll data (figure 4), which had skills being the most commonly voted for as the largest opportunity to decarbonise the housing sector (23%).

While a WCW virtual conference speaker noted that housing investment could contribute to local economic growth if accompanied by a clear and sustained pipeline of investment, two CCF events' feedback identified support for local entrepreneurship in sustainable services as a potential benefit.

In addition to economic opportunities, several CCF events' participants highlighted the potential for wider community benefits. Examples included community energy projects and investment in green spaces, which were seen as opportunities to deliver positive outcomes alongside improvements to housing.

Opportunities to engage and promote the Welsh language as part of the transition to greener homes were also identified in one CCF event.

Reducing Emissions and Building Resilience

The following themes were identified in the data when considering the research question: "How can we reduce emissions while also building our resilience to the changing climate?" through the lens of the housing sector.

Feedback from many CCF events and several PF participants highlighted the importance of building greener, future-proof homes and ensuring that new developments prioritise nature. Suggested measures included green roofs, home planting, rainwater recycling systems, and the reuse of materials.

There was also support from CCF and PF participants for expanding renewable energy alongside improved energy storage and community energy schemes to increase local energy resilience and flexibility.

In one CCF event, government investment was viewed as important for supporting adaptation and resilience measures in public buildings, including cooling systems for schools and other public buildings.

Risks and Consequences to avoid, ensuring a Just Transition

The following themes were identified in the data when considering the research question: "What risks or consequences do we need to work together to avoid, ensuring a fair and just transition?" through the lens of the housing sector.

Housing Inequalities

Several CCF events had participants expressing concerns that the costs and risks associated with decarbonisation are falling disproportionately on households with the fewest resources or agency. Participants also raised concerns about poor housing conditions, including damp, mould, inadequate insulation, overheating, and rainwater ingress. Across a couple of CCF events, these issues were seen as contributing to negative health outcomes and worsening health inequalities, with one WCW virtual conference speaker referencing evidence on the costs of poor-quality housing to the NHS in Wales.

Exclusion From Information

In two CCF events, language barriers were identified as a challenge, with participants noting that information is not always available in multiple languages and that technical terminology can be difficult to understand. In others, refugees and asylum seekers were highlighted as facing additional barriers in relation to housing and home improvements.

Financial pressures, accessibility challenges, and barriers to information were seen as increasing the risk of exclusion for some groups. Two CCF discussions noted that people with disabilities and existing health conditions can face additional challenges in accessing schemes and information, while several CCF events had feedback that lower-income households may struggle to afford home improvements due to wider financial pressures and high energy costs.

In one CCF event, participants from marginalised communities felt that their views were not sufficiently heard or reflected in decision-making. Groups identified (across many different CCF events) as being at greater risk of exclusion included rural communities, older people, renters, and ethnic minority communities.

5. Agriculture and Land Use

This chapter presents a synthesis of the evidence relating to agriculture and land use generated through the engagement programme. Findings are organised around the five research questions that structured the engagement and draw together evidence from across the different engagement activities. The chapter identifies the key themes raised by participants regarding the barriers to agricultural decarbonisation, opportunities to accelerate change, and considerations for ensuring a fair and just transition.

Barriers to Progress

The following themes were identified when considering the research question: "What barriers stand in our way?" through the lens of the agriculture and land use sector. Potential approaches to addressing these barriers are explored in later sections on accelerating behaviour change and unlocking potential.

Capacity and Support Constraints

Participants from many CCF events identified access to funding, education and support as significant barriers to change. Limited resources were seen as restricting farmers' ability to adopt new approaches, invest in innovation and respond to emerging challenges. Several CCF events also highlighted gaps in infrastructure and regulation needed to support wider innovation within the sector. Collectively, these findings suggest that many participants viewed capacity constraints as limiting the sector's ability to respond to both climate and economic change.

Policy and Governance Challenges

Participants from many CCF events and a WCW virtual conference event expressed concerns about agricultural policy and decision-making processes. In many of the CCF events, participants felt that policy schemes do not adequately reflect the needs of all farmers, citing concerns around scheme design and exclusion from initiatives such as the Sustainable Farming Scheme. More broadly, participants from several CCF events and a WCW virtual conference event highlighted a lack of clarity around decision-making structures and responsibilities, which was seen to contribute to uncertainty and mistrust. Additionally, uncertainties about scheme funding contributed to anxiety across many CCF groups. These concerns were reflected in the Wales Climate Week Virtual Conference Poll, where 22% of respondents identified changes to government support as one of the biggest opportunities to decarbonise the sector (figure 5).

Market and Economic Barriers

Several CCF events and the CCEM consultation identified structural barriers within both land and food markets. Concerns were raised that land markets favour commercial buyers, making it more difficult for new entrants and local farmers wishing to expand. It was noted in one CCF event that the lack of appropriate infrastructure prevents the development of local food systems.

Many CCF event participants and a CAST visioning workshop also highlighted challenges in accessing local produce and healthy food, noting that the affordability and convenience of large supermarket chains can make it difficult for local food systems to compete.

Skills, Knowledge and Communication

Participants from many CCF, two WCW virtual conference events, and CAST visioning workshops highlighted declining skills and knowledge within the agricultural sector, including perceived gaps in advisory services and educational support. It was discussed across the groups that there is a loss of traditional land management skills and environmental literacy, not being passed from older to younger generations due to an ageing workforce. A lack of awareness or scepticism around climate action and environmental policies was also identified as a barrier in several CCF events. Alongside skills shortages, participants highlighted communication challenges. Several CCF events' participants suggested that unclear communication can contribute to confusion, mistrust and, in some cases, misinformation, making it harder to build support for change.

Cultural Resistance to Change

Several CCF events' participants noted that established traditions and cultural norms within agriculture can sometimes act as a barrier to adopting new technologies and approaches. While these traditions remain an important part of farming communities, some participants felt they can slow the uptake of innovation and alternative practices that may be more sustainable.

Climate Impacts and Environmental Pressures

CCF participants across several events highlighted the growing impact of extreme weather events, including periods of heavy rainfall and heat, on farming outputs. These pressures were seen as creating additional challenges for the sector while increasing the urgency of adaptation and resilience measures.

Accelerating Behaviour Change

The following themes were identified in the data when considering the research question: "How can we accelerate a shift in practices and behaviour so that we can realise early benefits?" through the lens of the Agriculture and Land Use sector.

Education, Skills and Awareness

Participants consistently identified education and awareness raising as critical enablers of long-term change in the agriculture and land use sector. Across many CCF events and the CCEM event, there was support for introducing agricultural learning and food system awareness into the school curriculum to strengthen understanding of where food comes from, the role of farming in environmental stewardship, and the opportunities available within the sector. Participants also highlighted the need to create clearer pathways into agricultural careers, helping to attract a new generation of

workers and address skills shortages. The CCEM event also highlighted the importance of engaging with ethnic minority groups to encourage them to participate in farming.

Strengthening Community Connections to Food and Growing

Participants from many CCF events saw greater involvement in food growing as an important route to changing behaviours, increasing resilience, and strengthening relationships with food, land and nature. There was support across CCF events, CAST visioning workshops, and the CCEM event for expanding opportunities for local communities to participate in growing activities through initiatives such as community gardens, cooperatives, communal tools and equipment, and innovative approaches including rooftop and vertical growing spaces. It was felt that this would foster land stewardship and knowledge exchange but would need to be supported by changes in policy such as improving public access to land.

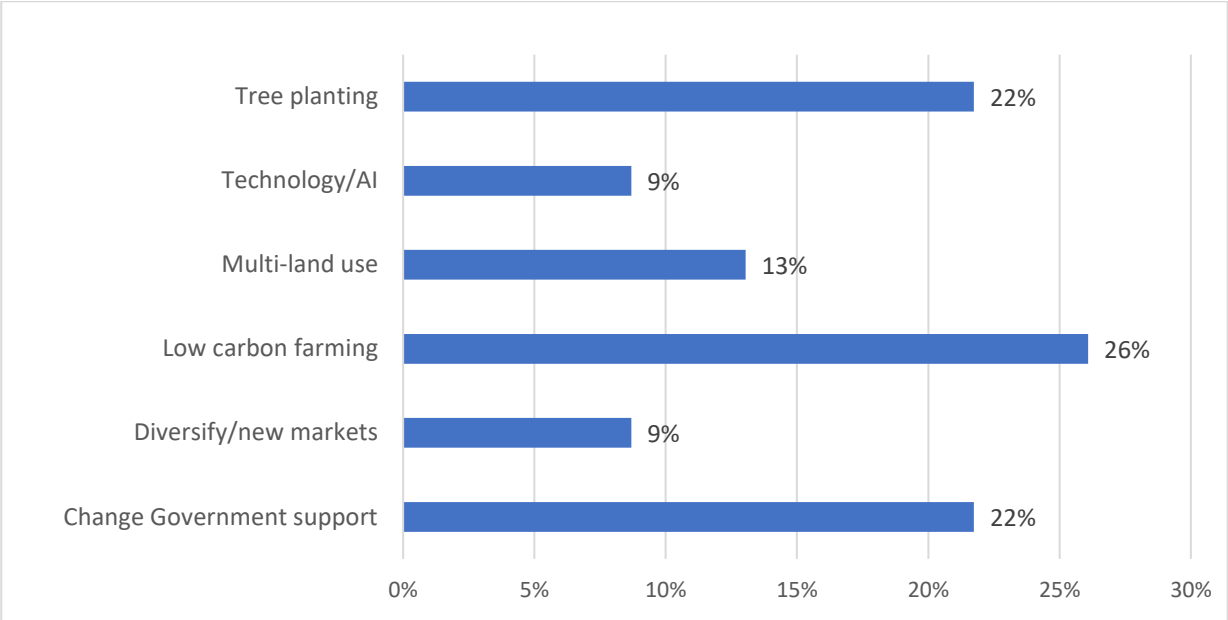
Building Local Food Economies

Behaviour change was also linked to strengthening local food systems and increasing connections between producers and consumers. Many CCF events' participants, the CCEM event, and PF and WCW virtual conference attendees highlighted the potential for community-level markets and local supply chains to encourage people to purchase food from farmers in their area, supporting local livelihoods while reducing the environmental impacts associated with longer supply chains. Improving access to locally grown produce was viewed as an opportunity to promote healthier diets, increase appreciation of seasonal food, and create stronger economic incentives for sustainable land management practices. Participants from two CCF events suggested that subsidies for healthier foods could support shifts in consumer behaviour, with BS attendees also suggesting a move to more local meat produce.

Community-Led Decision Making on Land Use

There was support across several CCF events for greater community involvement in decisions about land use and land management. Participants highlighted the value of community organising, collaboration and collective decision-making processes that enable local people to shape how land is used and managed within their area. Increased participation was seen as a way to encourage shared ownership of local areas and maintain cultural identity.

Figure 5: What are the biggest opportunities to accelerate decarbonisation over the next 5 years? – Agriculture and Land Use



Miller Research Analysis of Wales Climate Week Virtual Conference Poll Data (n=23, multiple choice)

Unlocking Potential

The following themes were identified in the data when considering the research question: "How do we unlock the potential in Wales for example, to improve productivity, increase our household energy security, and/or make it easier to get around in cleaner, greener ways?" through the lens of the agriculture and land use sector.

Creating the Conditions for Change

Participants identified policy, funding and support mechanisms as key factors in unlocking the potential of the agriculture and land use sector. In many CCF events, additional funding was seen as important to enable farmers to adopt new approaches and to support community engagement with lower-emission food supply chains. WCW virtual conference attendees suggested blended private and public finance, while participants across CCF and WCW virtual conference urged for accessible grants associated with the Sustainable Farming Scheme, new entrants, and supporting nature improvements and livelihoods concurrently.

Suggested areas for policy support included promoting horticulture, prioritising food production, habitat creation such as salt marshes and peatlands, and multi-use land management (e.g. designing land use systems that support multiple goals such as renewables farming, and nature).

Participants from many CCF events urged that policies are more likely to be effective when developed with input from farmers and clearly communicated to agricultural communities. Collaboration and co-production were also strong themes in the WCW virtual conference event, with speakers and attendees emphasising the importance of policies that are both implementable and remain live and evolving. There were also

calls for accessible, consistent and incentivised policy schemes, alongside fair and positive approaches to implementation and enforcement.

Research, Training and Knowledge Sharing

CCF and WCW virtual conference participants highlighted the importance of research, education and knowledge exchange in supporting improved productivity and sectoral change. Suggested approaches included training schemes focused on new technologies and nature-positive skills, peer-to-peer learning opportunities, demonstration farms and facilitator-supported farmer groups. Participants also highlighted the need for continued research into emerging markets and technologies, while noting that any new technologies should be practical, accessible and appropriate for users.

For example, several CCF events discussed the potential of restoring traditional markets such as agroforestry, or sheepskin and wool for peat-free compost and insulation, while others discussed exploring new ones such as hemp and hydroponics. However, only 9% (n=23) of WCW virtual conference poll respondents chose diversifying and exploring new markets as one of the biggest opportunities for decarbonisation, indicating that this is not a universally popular option.

Meanwhile, examples of possible technology discussed across CCF and WCW virtual conference events included satellite-based soil monitoring, AI-enabled forecasting tools and drone technology. Some CCF participants discussed how this could also support farmers in adapting to climate change. Again, only 9% (n=23)of WCW virtual conference poll respondents chose Technology and AI as one of the biggest opportunities for decarbonisation, so this may not be a one-size-fits-all solution.

Examples such as Niels Coalfield, the Nature Friendly Farming Network and Tir Gofal were highlighted as demonstrating effective leadership within the sector.

Encouraging Uptake of Sustainable Practices

Discussions highlighted a range of actions that could be taken at farm level to support more sustainable and productive land management. Many CCF events and WCW virtual conference participants identified best practice approaches to biodiversity management and tree planting, including the use of marginal land and the 'right tree right place' approach. There was also support for changes within areas of the industry such as livestock production, processing and soil management, with participants discussing opportunities to adopt more sustainable and less intensive approaches. This is supported by the poll data, which indicates the most support for low carbon farming methods to decarbonise the sector (26%, n=23)).

Reducing Emissions and Building Resilience

The following themes were identified in the data when considering the research question: "How can we reduce emissions while also building our resilience to the changing climate?" through the lens of the agriculture and land use sector.

Biodiversity Protection and Land Regeneration

Participants across CCF, WCW virtual conference, and PF events identified biodiversity protection and land regeneration as important opportunities to reduce emissions while increasing resilience to climate change. Discussions highlighted the need to protect and enhance biodiversity while ensuring that ecological benefits are maintained over the long term. Participants also pointed to the role of land regeneration and tree planting in supporting adaptation and helping landscapes respond to changing climatic conditions such as flooding or urban heat.

Climate-Resilient Land Management as a Route to Emissions Reduction

Participants across CCF and WCW virtual conference events highlighted the close relationship between adaptation and emissions reduction within the agriculture and land use sector. Discussions focused on actions such as animal health programmes, agroforestry, reduced fertiliser use and improvements to soil fertility, which can support both climate resilience and lower emissions. A WCW virtual conference speaker noted that adaptation often feels more immediate and practical for farmers, making it an effective entry point for wider climate action. Discussion in both a CCF and WCW virtual conference event recognised that land is central to Wales' climate response, with opportunities to support carbon storage, nature recovery and resilience alongside sustainable food production.

Shortening Supply Chains with Local Markets

Many CCF events suggested that strengthening local food systems could help reduce reliance on imported foods while increasing resilience to climate-related disruptions. Across several CCF events, local production and distribution were seen as important components of a more resilient food system, and participants highlighted the importance of local food systems in connecting people to their culture and community.

Risks and Consequences to avoid, ensuring a Just Transition

The following themes were identified in the data when considering the research question: “What risks or consequences do we need to work together to avoid, ensuring a fair and just transition?” through the lens of the agriculture and land use sector.

Excluding Farmers and Rural Communities

Many CCF events’ participants expressed concern that farmers and rural communities have or could become unfairly blamed or "othered" in discussions about climate change and environmental impacts, and that the public lacks awareness about the benefits farmers provide to Wales. Thus, participants stressed the importance of recognising farmers as partners in delivering climate action, rather than positioning them as the source of the problem.

Unintended Policy and Land-Use Outcomes

There was a view in several CCF events that policy and planning decisions should consider local circumstances and long-term impacts on land use, food production and

rural communities. For example, participants from a CCF, PF, and WCW virtual conference event highlighted concerns about the long-term consequences of decisions relating to renewable energy development, planning and environmental change. Participants emphasised the importance of involving farmers and agricultural communities in decision-making to help avoid unintended consequences and build support for change.

Undermining the Future of the Sector

Participants identified a lack of funding and financial support as a potential risk to the long-term viability of the agricultural sector. There were concerns that insufficient funding, incentives or subsidies could reduce interest in farming as a career and make it more difficult for the sector to attract and retain people. Participants viewed ongoing investment and support as important for ensuring that the transition is both fair and sustainable.

Participants in several CCF groups also raised concerns about the risk of 'corporate land grab', favouring a land market where aspiring growers are outbid by corporate carbon offset investors or tree planting schemes. Together, these concerns reflected wider anxieties about the long-term viability and accessibility of farming in Wales during the transition to net zero.

6. Transport

This chapter presents a synthesis of the evidence relating to transport generated through the engagement programme. Findings are organised around the five research questions that structured the engagement and draw together evidence from across the different engagement activities. The chapter identifies the key themes raised by participants regarding the barriers to transport decarbonisation, opportunities to accelerate change, and considerations for ensuring a fair and just transition.

Barriers to Progress

The following themes were identified when considering the research question: "What barriers stand in our way?" through the lens of the transport sector. Potential approaches to addressing these barriers are explored in later sections on accelerating behaviour change and unlocking potential.

Infrastructure and Service Limitations

Participants identified shortcomings in transport infrastructure as a significant barrier to change. Public transport services were frequently described across many CCF events and by PF and WCW virtual conference participants as currently poor or unreliable, with long and complicated routes; long commuting times; unreliable timetables; and uncomfortable services. These issues were felt to be worse in rural areas.

Electric Vehicle (EV) charging infrastructure was considered insufficient by many CCF events and within the CCEM event, particularly in rural areas, social housing developments and locations where residents do not have access to private driveways. Participants suggested that these gaps can contribute to concerns about the practicality of switching to lower-emission transport options.

Regarding active travel infrastructure, many CCF events highlighted concerns that many places remain designed around car use rather than active travel. Traffic conditions, accessibility and inadequate lighting were identified as barriers to walking and cycling, with particular concerns raised about safety for women and children. Participants felt these conditions can discourage people from choosing active travel options. Taken together, these findings suggest that participants viewed infrastructure as a prerequisite for behaviour change rather than expecting behaviour change to occur in advance of infrastructure improvements.

Cost and Affordability Barriers

The cost of lower-emission transport options was identified as a significant challenge. Across the CCEM event, many CCF events, and a PF participant noted the high upfront cost of electric vehicles, which are seen as too expensive, particularly for low-income households, even when second hand. WCW virtual conference and CCF events also noted the perceived expense of charging EVs, with energy bills spiking.

There were also concerns raised in the CCEM event and many CCF events about the affordability of public transport, particularly for longer-distance rail travel and for whole-

family travel. Across evidence sources, affordability was viewed as a major determinant of whether lower-emission transport options were considered realistic alternatives to private car use.

Concerns About Transport Technologies

Many CCF events raised concerns about aspects of EV technology, including vehicle safety, quality, and suitability for rural needs. In particular, the short battery life and time taken to charge were considered barriers to uptake.

Several CCF events and a WCW virtual conference attendee also highlighted environmental and social concerns associated with the mining of battery materials and the disposal of batteries at the end of their lifespan, though the WCW virtual conference attendee raised the question around whether criticisms of EVs are disproportionately harsh compared to historic acceptance of fossil fuel-powered vehicles. These concerns were identified as potential barriers to wider adoption. These findings suggest that concerns related to practical performance and wider environmental impacts of EVs continue to influence public confidence.

Cultural and Skills Barriers

Participants from a CCF event and a CAST visioning workshop identified social and cultural factors as barriers to change, including perceptions of active travel and its desirability. Practical skills barriers were also highlighted, with participants noting a lack of confidence in road cycling and gaps in bicycle maintenance knowledge. Participants suggested that behavioural change depends on infrastructure as well as confidence, skills, and changing social norms around sustainable travel.

Accelerating Behaviour Change

The following themes were identified in the data when considering the research question: "How can we accelerate a shift in practices and behaviour so that we can realise early benefits?" through the lens of the transport sector.

Improving Access to Sustainable Transport

Encouraging the use of public transport was considered by the most poll respondents (48%, n=23) to be the biggest opportunity to accelerate decarbonisation (figure 6). Participants across CCF, WCW virtual conference, and PF events and in the CCEM event consistently identified improvements to transport infrastructure as key to accelerating behaviour change. There were calls in many CCF events and in the CCEM event for more reliable and extensive public transport services with greater links and frequent services, alongside cheaper and more accessible fares. Other necessary accessibility measures noted in CCF events were an improved app with integrated travel information; clearer timetable information at bus stops, and improved step-free access and seating,

Many CCF Events and WCW virtual conference participants also highlighted the importance of creating safer conditions for active travel, which was recognised as

providing a number of benefits for both climate and health. It was felt that improved active travel infrastructure and making walking and cycling more attractive and practical options would be essential for changing behaviour.

In addition, improving both the affordability of EVs and access to charging infrastructure was identified across a variety of events as important for supporting a shift away from higher-emission transport. Suggestions included second-hand EV markets, subsidised EVs, and street-charging solutions in residential areas.

Incentivising Sustainable Travel Choices

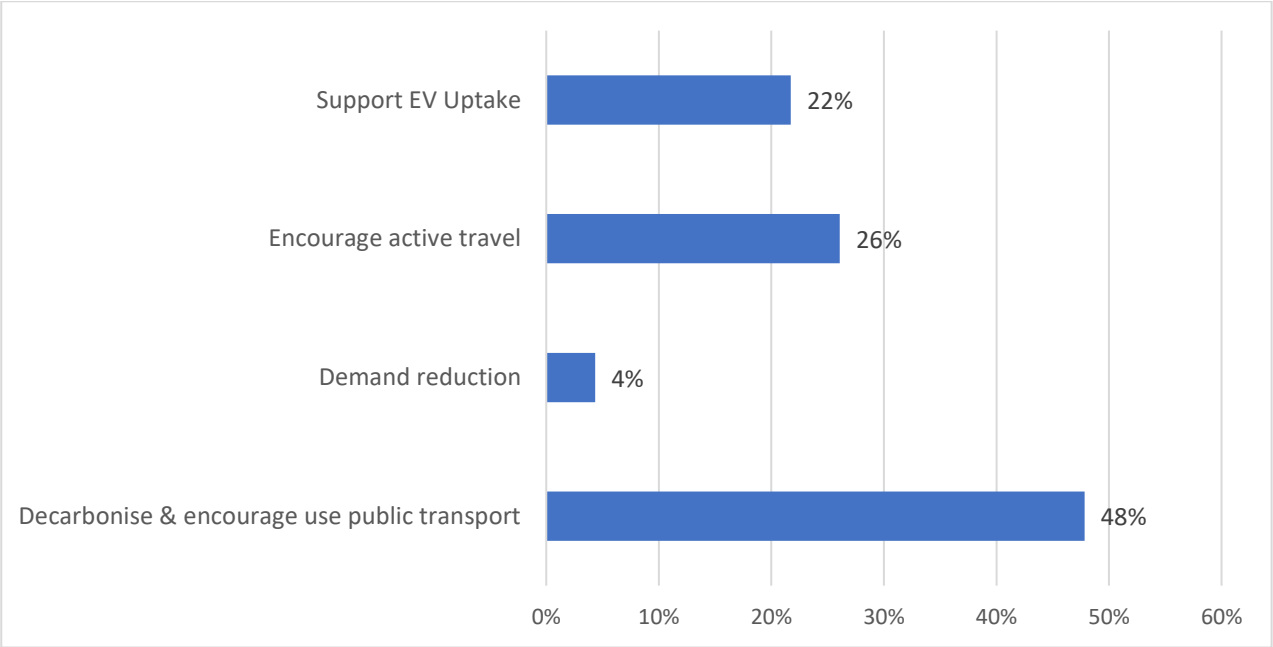
Participants from many CCF events and one WCW virtual conference emphasised the role of incentives in encouraging more sustainable travel choices. Suggestions included reward-based schemes for sustainable travel behaviours, car-sharing initiatives, and community or public-sector bicycle and car-sharing schemes. Participants also highlighted the need for streamlined funding mechanisms and dedicated budgets, including workplace support for travel by rail, bus or bicycle. Participants generally viewed positive incentives as more acceptable than measures that restrict travel choices.

Building a Culture of Sustainable Travel

Participants highlighted the importance of cultural and behavioural change in reducing transport emissions. Across CCF, CAST visioning workshops, and WCW virtual conference events, schools and workplaces were identified as important settings for encouraging behaviours such as active travel, agile working and staggered start times. Participants from several CCF and WCW virtual conference events also emphasised the role of communication and education, including behaviour change campaigns, sharing examples of good practice, and linking decarbonisation messages to wider outcomes.

More broadly, there were calls for greater community involvement in transport planning to help develop transport systems that people trust and are willing to use. Poll data (figure 6) indicates limited support for demand reduction measures as a means of encouraging transport decarbonisation. WCW virtual conference attendees noted that enforcement-based approaches risk being perceived as unfair where people lack access to affordable and practical alternatives.

Figure 6: What are the biggest opportunities to accelerate decarbonisation over the next 5 years? - Transport



Miller Research Analysis of Wales Climate Week Virtual Conference Poll Data (n=23, multiple choice)

Unlocking Potential

The following themes were identified in the data when considering the research question: "How do we unlock the potential in Wales for example, to improve productivity, increase our household energy security, and/or make it easier to get around in cleaner, greener ways?" through the lens of the transport sector.

Investing in New Transport Solutions

Participants across several CCF events, as well as a PF attendee and WCW virtual conference speakers highlighted opportunities to invest in a wider range of transport technologies and systems. Suggestions included hydrogen fuel cells, renewable energy generation to support electrification, and alternative forms of public transport such as trams. These were seen as opportunities to strengthen the transport system by providing new connections between towns, and complement existing decarbonisation pathways by bridging gaps where EV technology is facing challenges.

Reducing the Need to Travel Through Planning

Participants from CCF, CAST visioning workshops, and WCW virtual conference events identified urban planning and town centre regeneration as important opportunities for change. Discussions highlighted the potential of hyperlocal approaches that improve access to jobs, services and amenities within communities, helping to reduce the need for travel. Some attendees across CCF and WCW virtual conference events noted how communities observing benefits within their own communities could foster improved trust and action.

Innovation and New Approaches

Several CCF events and WCW virtual conference speakers and participants highlighted the importance of trialling innovative approaches to reduce transport emissions and improve transport efficiency. Suggestions included changes to the working week, which some felt could reduce transport demand, alongside road pricing frameworks and alternative approaches to urban logistics, such as cargo bikes and cycle couriers for last-mile delivery.

Community charging schemes were also identified as an opportunity to support the transition to lower-emission transport. Participants from one CCF event suggested installing EV charging infrastructure at community facilities, with charging schemes designed to provide benefits for local areas while improving access to charging.

Leadership, Collaboration and Scaling Change

WCW virtual conference participants and speakers, together with participants from two CCF events, emphasised the importance of collaboration between public bodies, businesses, energy providers and communities in creating a prosperous transport sector. A more joined-up approach was seen as necessary to address challenges that cut across sectors, including those beyond transport itself. Participants from one CCF and one WCW virtual conference event highlighted the importance of co-producing transport solutions with communities, ensuring that local needs and experiences are reflected in decision-making and fostering a sense of ownership over proposed changes.

Participants also identified opportunities for stronger leadership and coordinated action to support the transition. Suggestions included national guidance on workplace travel incentives, subsidised public transport fares, and other approaches to encouraging sustainable travel choices. There were also calls from WCW virtual conference attendees and participants at several CCF events for greater sharing of best practice, including learning from successful approaches implemented elsewhere. Participants highlighted the important role of public bodies in leading by example, demonstrating what is possible and supporting progress through clear, measurable targets.

Reducing Emissions and Building Resilience

The following themes were identified in the data when considering the research question: "*How can we reduce emissions while also building our resilience to the changing climate?"* through the lens of the transport sector.

One WCW virtual conference speaker suggested that, by fostering collaboration and resilience, reducing dependence on oil and strengthening supply chains, Wales has the opportunity to lead a transport transition that delivers both environmental and economic benefits. This highlights the potential for transport decarbonisation to support wider objectives alongside emissions reduction.

Young people from a CCF event viewed sustainable transport not only as an environmental necessity, but also as an investment in their future. This suggests that transport decarbonisation is seen as delivering wider long-term benefits beyond

emissions reduction alone, reinforcing the importance of taking action to create a more sustainable and resilient transport system.

Risks and Consequences to avoid, ensuring a Just Transition

The following themes were identified in the data when considering the research question: "What risks or consequences do we need to work together to avoid, ensuring a fair and just transition?" through the lens of the transport sector.

Exclusion

Participants emphasised the importance of ensuring that access to sustainable transport is fair and inclusive. In many CCF events, concerns were raised that some groups already face transport access issues or could be disproportionately affected by transport changes, including younger and older people, people with disabilities. The CCEM event raised the risk of ethnic minority groups facing barriers to sustainable transport, while one WCW virtual conference speaker spoke of those experiencing digital exclusion. Participants highlighted the need to ensure that decarbonisation efforts do not create new barriers to travel or worsen existing inequalities (for example between urban and rural areas).

Unintended Social Impacts

Several CCF events highlighted the important role that public transport can play in supporting community cohesion and enabling participation in social and cultural activities. This suggests that changes to transport systems should consider not only environmental outcomes, but also the wider role transport plays in connecting people and communities. One CCF event and a WCW virtual conference speaker also emphasised the need to ensure that changes do not place those vulnerable to harassment or discrimination at greater risk.

Developing Solutions Without Community Input

In light of the barriers and risks, participants from a CCF and a WCW virtual conference event stressed the importance of involving communities in transport planning and decision-making. There was the broad view that transport services are more likely to meet local needs when communities are actively engaged in their design and delivery. Participants suggested that meaningful community involvement will be important in ensuring that transport changes are both effective and fair.

7. Conclusion

This report has synthesised evidence generated through the engagement programme to identify the principal opportunities, barriers, and risks associated with reducing emissions while supporting a just transition. Although findings differed between sectors and participant groups, several consistent themes emerged across the evidence base.

Participants highlighted that achieving meaningful emissions reductions will require more than individual behaviour change alone. Progress depends on creating the conditions that enable lower-carbon choices through supportive policy, investment, infrastructure, co-benefits, collaboration and inclusive decision-making.

The following conclusions summarise the principal cross-cutting priorities emerging from the public engagement and highlight areas where participants considered action in the next Carbon Budget Plan could have the greatest potential to accelerate decarbonisation, increase resilience and support a just transition for communities across Wales.

1. Enabling Change

The findings suggest that the primary challenge is not persuading people to act but enabling them to do so. Across sectors, participants identified practical barriers including cost, infrastructure, access to information and limited choices. This indicates that carbon reduction policies are likely to be most effective when they focus on removing barriers and making low-carbon options the most accessible and convenient choices that benefit people's lives.

The evidence suggests that policy measures which address structural barriers are likely to be important in supporting wider participation in lower-carbon choices. Examples raised through the engagement include:

- Expand affordable and accessible funding and support schemes.
- Invest in enabling infrastructure, particularly public transport, active travel networks, and EV charging.
- Simplify access to information and support, ensuring schemes are easy to understand and navigate.
- Remove financial barriers to participation by improving access to affordable sustainable transport options

2. Put Communities at the Centre of Delivery

Across all three policy areas, participants consistently linked successful climate action with trust, participation, and local ownership. The findings suggest that public support for climate action is closely linked to whether people feel involved in shaping the changes that affect them.

Examples raised through the engagement include:

- Embed co-production and community participation within policy development and delivery.
- Support community-led initiatives, such as local food growing, community charging and local climate action projects.
- Strengthen mechanisms for ongoing public engagement and feedback.
- Share examples of successful community-led approaches and encourage peer learning.

3. Design for Fairness from the Outset

Participants consistently highlighted differences in needs, opportunities and barriers across places and populations. Rural and urban communities face different challenges, while factors such as income, disability, age, ethnicity and digital exclusion can affect people's ability to participate in the transition. The findings suggest that flexible, locally responsive, and inclusive approaches will be needed to deliver a just transition.

Examples raised through the engagement include:

- Assess how proposed policies affect different groups and places.
- Ensure funding, incentives and support schemes are accessible to a broad range of households and communities.
- Develop tailored approaches for rural and urban contexts.
- Prioritise accessibility and inclusion within transport, housing and energy policies.

4. Focus on Multi-Benefit Areas for Change

Participants consistently identified several areas that could deliver significant emissions reductions while also providing broader economic, environmental and social benefits. These opportunities often emerged across multiple sectors and were viewed as capable of accelerating progress whilst supporting a just transition. The findings suggest that policies which achieve multiple objectives are likely to generate greater public support and create stronger foundations for long-term change.

Examples raised through the engagement include:

- Expand public transport, active travel and shared transport solutions.
- Invest in renewable energy generation and supporting infrastructure.
- Support sustainable land management, biodiversity enhancement and nature-based solutions.
- Strengthen local food systems and shorter supply chains.
- Develop green jobs, skills and workforce pathways to support delivery of the transition.

Conclusion

Overall, the engagement programme suggests that participants recognise both the scale of the challenge and the opportunities associated with the transition to net zero. While barriers relating to affordability, infrastructure, and access remain significant, there was broad support for collaborative approaches that combine emissions

reduction with wider social, economic, and environmental benefits. Together, these findings provide an evidence base to inform the development of the Carbon Budget 3 Plan and support a transition that is both effective and fair.