

The Net Zero Diaries:

A citizen perspective on tackling the climate emergency



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Executive summary

1. Introducing the Net Zero Diaries

The Net Zero Diaries was a five-month conversation between citizens about climate change. These citizens were selected to represent a wide range of different backgrounds from across the UK and began with different views coming into the process. Throughout the five months, they were provided with information, access to expert testimony, and time to reflect. They discussed the net zero strategies they wanted to see, and what the UK and the world were doing at COP26; and commented on climate policy developments as they happened.

The diaries were designed to bring together people with a range of experiences and attitudes to climate, from those who had previously taken part in a climate assembly (engaged citizens) to those already taking action privately (engaged consumers) to those with no prior interest (general public). The fourth key group in the diaries were experts, people working on net zero in different capacities, as volunteers, academics, policy makers and business leaders.

These groups were brought together for four waves of research that each included a 5-day online diary that was followed by a full-day workshop. Please see chapter 1.2 for a detailed overview of what was covered in each wave of this project.

This report presents a summary of those conversations, and reflects on what these conversations mean for politicians, businesses and individuals who are interested in reaching net zero greenhouse gas emissions and who believe citizens might have some good ideas about how to get there.

Chapter 1 introduces the Diaries and the citizens that took part, otherwise known as the 'Diarists'. It explains how the partnership that commissioned the project was formed, how the Diarists were recruited, and the wider context for this type of research.

Chapter 2 analyses the big picture, thinking about who is responsible for getting the UK to net zero and how citizens think these players need to act in order to be effective.

Chapter 3 digs into the detail of three key sectors that need to decarbonise quickly in order to meet the 2050 net zero target: food, energy and transport. This chapter describes what Diarists are already doing in these three areas, what they're willing to do with the right resources, and what they aren't prepared to accommodate.

Chapter 4 reflects on and describes *how* Diarists came to their conclusions by the end of the process. It tries to unpick the different types of information, people and events that are influential in shaping the way people think about climate change and net zero.

2. Reaching Net Zero: whose responsibility is it anyway?

Many Diarists started the project with little or no understanding of the term net zero or its implications for the UK. They were largely positive about the setting of a target to address climate change but had little awareness of how this could be achieved, beyond small scale changes like switching off lights and recycling. Most Diarists started out with a view that individuals were bearing too much responsibility for addressing climate change, compared with government and business, the actors with the real power to effect change. By the end of the project Diarists had a **more sophisticated understanding of net zero, but for many this had led to less optimism about the UK's chances of getting there.** Diarists felt

increasingly empowered to make changes in their own lives, and developed clear ideas about what government, business and individuals need to do to reach net zero, even when they were unsure about how realistic these changes were.

Expectations of government

Diarists told us from day one that the UK government has the primary responsibility for guiding the country toward net zero, but were sceptical about their commitment and capability to do so. Diarists told us they saw climate as a political football, with party interests getting in the way of real action. Efforts to date were felt to be unsuccessful, and targets missed without consequence. Importantly Diarists felt there was an absence of any clear vision from the UK government about how others need to contribute, and this view wasn't really altered by the release of the government's net zero Strategy during the project. **This highlights one of the main tensions for Diarists – although they frequently called for more information to be made available, they were rarely aware of or seeking out information already available.**

In future, our Diarists told us, they want to see clear accountability from a specific government department or minister that sets out a positive vision for a net zero UK that benefits all. They expect a clear narrative and timeline for getting there, with regular reporting on realistic goals, including when these are missed. Bodies like the Climate Change Committee who are currently filling some of these roles were little known and not seen as powerful enough to achieve the urgency required. **Ultimately, Diarists want to see the central UK government act as the leveller by bringing the nation together to achieve net zero, with penalties and incentives to get others acting.** They see government as a catalyst and want to see the same urgency and collaboration that characterised the best of the coronavirus response to prove that the climate is being viewed as an equally important crisis.

Expectations of business

Starting expectations of business were low. Despite understanding the potential of major business to effect large scale change, Diarists were sceptical about their motivation when it might conflict with the desire to maximise profits. Diarists tended to focus on small, local and explicitly purpose-led businesses as most likely to act, with profit seen as incompatible with sustainability.

Once introduced to some sustainable businesses, Diarists began to articulate their expectations for business more clearly. They told us that they expected organisations to have a purpose that went beyond profit, and often talked about the importance of sustainability in the round, with equal consideration for the social and full environmental impacts of business operations. Awareness of greenwashing was high, and Diarists were sceptical of businesses paying lip service to sustainability: measurable targets and realistic ambitions were favoured over vague statements. **Finally Diarists felt that business, like government, had a responsibility to support consumers to make more sustainable choices – few had truly understood their power as consumers before the diaries and were keen to see others empowered to exercise the same influence.**

Expectations of individuals

Expectations of individuals started from a low base for Diarists, many of whom felt they had little power as consumers or citizens and were sceptical about the potential for collective action. Through the process Diarists' sense of agency increased, within limits – and chapter 4 talks more about the changes some reported during the process. While there was in-principle

support for stronger measures to influence behaviour, these rarely stood up to closer scrutiny – Diarists were more likely to support incentives for climate friendly behaviour than penalties.

Towards the end of the process, Diarists felt they had greater individual agency, leading to an increased belief that small behavioural adjustments made on a collective basis could drive big changes. They also highlighted ways in which they had changed their own behaviour, including becoming more vocal advocates for the climate among friends and family. However **Diarists felt most people would need more support to bridge the practicality, affordability and information gaps required to make larger changes to lifestyles**, and found it hard to imagine the ‘public’ making the same journey they had. This led to **greater emphasis on the role of business, and especially government, in setting a clear direction for citizens**, and creating the conditions for change.

3. Reaching net zero in three key sectors: food, energy and transport

Diarists started the project with a basic understanding that these three sectors generated carbon emissions and could identify some changes that might reduce them. However they often struggled to identify which actions were most effective, and felt the same lack of joined up, consistent messaging that was hindering government overall was apparent in each sector.

When it came to **food** Diarists struggled to understand the carbon impact of their choices. Food miles, plastic packaging and food waste were the most common concerns, but there was confusion about whether organic food was also more climate friendly, and an over-reliance on local as a signifier of low carbon. When it came to shifting towards more plant-based diets, Diarists were generally open to some change, substituting meat in some meals for example, but others couldn’t envisage a wholly meat free diet, and weren’t enthusiastic about trying. When it came to action, Diarists were initially reluctant to see individual choice curtailed in what’s generally seen as a private sphere, and were concerned about the impact on low income households of any financial measures. **One of the biggest challenges for climate policy in this area was a tendency to see high carbon diets as the ‘norm’ and any changes as coming at a cost, either in time, money or enjoyment.** The lack of any clear policy on food to tell Diarists about meant they often struggled to see what a net zero food system would be like, and instead focused on nostalgic ideas of local produce, seasonal eating and community education.

In **energy** Diarists were more aware of the key changes needed, but felt the practical barriers were significant. Simple behavioural changes to reduce energy use were widely adopted, but more disruptive changes like replacing heating, insulation or installation of renewables were seen as out of reach for most Diarists. The high-profile failure of recent schemes like the Green Homes Grant were well known, and seen as symptomatic of a lack of support for households. **Energy prices were an ever-present component of any discussion**, and the energy price rises which emerged during the latter part of the project only made these more pressing. **Participants tended to see this price pressure as a reason to accelerate movement away from dependence on fossil fuels, and were strongly supportive of renewable energy**, with more mixed views on hydrogen or nuclear power. Community energy was a new concept for Diarists, but captured imaginations, with many seeing this as a way to break out of the current system in favour of something that benefits ordinary people.

The focus in **transport** discussions was usually car use, something our Diarists recognise as a major emissions source and a priority for change but is one of the hardest areas for them to

imagine acting themselves. While electric cars are seen as a viable option in theory there is a strong belief that they aren't affordable for most people. And while there is recognition (which grew through the project) of the need to reduce private vehicle use altogether, this was seen as **impractical without major improvements to public transport in terms of accessibility, reliability, and affordability**. When it came to aviation, **Diarists were even less likely to feel they could make changes personally**, they struggled to see anything less than one overseas holiday a year as 'normal' and were quick to highlight others who fly more and the global nature of aviation emissions.

4. Communicating net zero: learning from 6 months of conversation

What changed for Diarists: attitudes and behaviour

In line with the UK population as a whole, most of our Diarists started the project expressing considerable concern about climate change. This didn't change over the five months we spent together, but their perception of the urgency and scale of the challenge to reach net zero did, for all groups of participants.

- For our most engaged participants this tended to be about specific topics covered, new information, or being exposed to the views of their peers.
- Those who started with less background tended to describe more significant shifts in attitudes. Some felt they had a greater sense of agency, and were more able to take actions in their own lives that would have an impact.
- Others however felt more pessimistic about the transition overall, now that they had understood the complexity and scale of the challenge.
- Those who were least engaged at the start were more likely to initially talk about the emissions of other countries, or express fatalism about the chance of effecting change. Whilst these narratives diminished by the end of the process, this group were instead most likely to feel that big technological leaps were the only realistic solution, with continued scepticism about behaviour change.

As described in chapter 2, Diarists' views of the roles of government, business and individuals evolved over the course of the project. **We heard from some that they had taken on the role of 'climate activists' within their own families, or communities, talking to others about the things they had learnt**. They were often disappointed to find these conversations more difficult than they expected, which could temper their optimism for shifting behaviour with information and engagement.

Most Diarists reported at the end of the project that they were taking more action in their own lives to reduce their impact on the environment. These varied in scale, according to circumstance as much as enthusiasm, from giving up a car, to reducing the amount of printing in the office. However, there were other changes which felt more difficult as Diarists learned more, from changing heating systems at home (which was seen as difficult and expensive) to changing transport behaviour (where a lack of motivation and perceived alternatives got in the way).

What influenced Diarists most

Through the diaries we heard a number of repeated narratives, which can help us understand how attitudes to net zero are formed, and how communications can be made most effective.

- Discussions of **fairness** were some of the most common across the project, with Diarists strongly focused on the need to protect the most vulnerable in the UK, and future generations. In contrast, while international fairness was seen as important when raised by experts, it rarely formed a significant part of most discussions.
- **Visions of the future** were another common theme of discussion. Diarists told us that they felt central government was failing to provide a coherent and positive vision for a net zero UK. When this gap was most apparent, for example in the context of food, participants often reverted to a rose-tinted view of the past, in which simpler and more local products are sustainable and consumerism is less rampant.
- **Everyone doing their bit** was one of the most common phrases we heard, and was a strongly positive message. Through the project the meaning of this phrase evolved for Diarists, from a simple message about individuals taking small actions, to a more sophisticated picture of a society with all actors pulling in the same direction.
- Benchmarking behaviours against is perceived as '**normal**', such as the number of flights per year people should be allowed to take and what constitutes a 'normal' diet, were also very common and influential. Shifting what is considered 'normal' has the long-term potential to make carbon reduction behaviours more achievable and common-place in the future.

We also heard a few common **misconceptions**, ranging from confusion about the impact of food miles vs food type, and a misconception that 'bans' on gas boilers and petrol/diesel cars would mean having to replace all at once rather than a phase out over time. These highlight the importance of clear and accurate communications about climate action.

During COP26, we heard Diarists with low existing engagement become excited about the level of coverage of the conference. Many felt that this would achieve greater awareness among the public and governments, leading to action. However this initial optimism didn't last, as Diarists understood more about the history of climate policy, and saw coverage die off over the remaining months of the project. **On balance the event did less to increase their commitment to action than other stimulus they saw throughout the process, in particular exposure to experts working in the net zero space, such as academics and business leaders.** As with aforementioned high-profile failings like the Green Home Grants, COP26 may actually have **increased their pessimism in the ability of the world to limit climate change.**

How Diarists influenced each other

We found that an early pattern was established between our different groups that persisted throughout the project. Although moderators ensured that all Diarists contributed to discussions equally, Engaged Citizens and Consumers were, from the start, more likely to 'drive' the discussion and lead on shaping the outcome, whereas participants from the General Public were more likely to voice agreement with points made by others, as opposed to building on what's been said or taking the discussion in a new direction. Interestingly, when sections of this process were private during online diaries, the General Public group tended to be more assertive in their suggestions, suggesting that confidence plays a significant part in how citizens engage on climate change. Throughout, Diarists were keen to share and hear 'tips' or suggestions, suggesting a strong role for peers in influencing behaviour.

Diarists told us they enjoyed the process of hearing other people's perspectives, and in addition to engaging with their peers they very much valued the input from experts and

business representatives. Throughout the Net Zero Diaries process it became clear what made experts engaging for Diarists in terms of format and style. **They valued arguments presented in layperson's terms, ideally as part of a framework, with clear guidelines and implications, easily relatable and brought to life with tangible example.**

We wrapped up the diaries by asking our participants what kind of engagement they would like to see in future, and the vast majority told us they **would like more people to have the opportunity they had, to consider the issues with evidence, and room to share their views.** They sometimes framed this in terms of 'official' or organised processes, but just as often talked about conversations with friends. As one participant closed their final diary entry:

"I'm off for a walk up to my local supermarket tomorrow instead of taking the car. Fancy a walk, chat about this and getting fit too?" (Engaged Consumer)

Chapter 1. Introducing the Net Zero Diaries

Introducing the Diarists, and the research process they took part in between September 2021 and January 2022.

1.1. Why the Net Zero Diaries now?

The Net Zero Diaries was designed to **provide much-needed evidence about people's views on how to tackle the climate crisis**. We began the process knowing that people are worried about climate change, with 85% of the UK population expressing their concern and with this figure remaining relatively stable across different ages and socioeconomic groupings.¹ There is evidence, too, that people are willing to play their part: 84% agree with the statement that “the way we live our lives will have to change substantially to address climate change”². However, **the question of how people might respond to specific measures and policies is more complex**. While there is evidence that people support policies to encourage energy efficiency in the home, as well as a shift to electric vehicles, other policies to curb aviation or reduce meat and dairy in diets have seen lower levels of support³. This leaves us with a question about whether generalised support for climate action will translate into endorsement of specific policies.

At the same time, much of the focus in policymaking and academic research is on the **role of the individual as a consumer making choices between different offerings**. The framing of people as ‘consumers’ is common in government documents. This can be seen in the October 2021 net zero Strategy,⁴ as well as in the Behavioural Insights Unit, a government-sponsored agency popularly known as the ‘Nudge Unit’, who see their role as ‘nudging’ people to make the right consumption decisions. This approach neglects two important and linked insights. Firstly, it ignores that **people's abilities to make the ‘right’ choices depend on the suitable infrastructures and systems that govern economic and social life**⁵. Put simply, you cannot choose to take a bus if there is no bus service, you are less likely to buy a heat pump if it is double the cost of a gas boiler, and you won't send your child out on their bike if there is no safe route. Second, **treating people only as consumers misses the many other important roles they play in their lives**. They are also workers or employees, citizens voting and participating in civic life, and members of communities and families. Each person will have many overlapping roles and ways of participating in (or opposing) the net zero transition, something which also needs to be explored and understood in greater detail.

As this brief overview shows, there is a pressing need to develop a better understanding of how the relationships between people, the government, and other actors including businesses can be navigated. To do this, we need to find out not just about people's likes and dislikes, or the decisions they might make as consumers. We don't want to know only *what* they might think, or *what* they might buy; we also need to know *why*. We need to know how people's decisions, views, values and motivations are influenced by others – other people, governments, businesses, other actors. **Building this far more nuanced picture is essential to understanding how to craft a net zero transformation that UK citizens can get behind.**

The Net Zero Diaries was developed in this context as an alternative way of engaging citizens in the complex and important work of understanding net zero and what it means for the UK.

¹https://www.ipsos.com/sites/default/files/ct/news/documents/2021-08/Ipsos%20MORI%20August%202021%20Political%20Monitor_160821_Int%20use%20only.pdf

² <https://www.ipsos.com/en-uk/reaching-net-zero-awareness-and-attitudes>

³ <https://www.ipsos.com/en-uk/reaching-net-zero-awareness-and-attitudes>

⁴ Willis R, How people are conceptualized within energy and climate governance, forthcoming journal paper.

⁵ Urry 2014, Shove 2010

The project was a partnership between four organisations who all had an interest in the net zero transformation, but who all brought different expertise and priorities.⁶

BritainThinks

BritainThinks is an independent strategy and insight consultancy based in London, UK. The BritainThinks team are the main authors of this report, and the main organisers of the diary events. BritainThinks also happens to be a B-Corp and has committed to achieving Net Zero by 2030. While reducing our own impact on the climate is important, BritainThinks is a small organisation and we believe that we can have even greater impact by employing our professionals skills to provide the evidence to help others act.

Citizens Advice

Citizens Advice is the official consumer body for energy. The organisation uses research and evidence from the people who contact the advice service every day to understand the problems facing energy consumers in Great Britain, and helps to solve these problems by engaging with industry, changing policy and supporting consumers to navigate the market. Our vision of a net zero energy market is that it is inclusive by design and recognises the essential nature of energy supply. It should facilitate and encourage innovation, be accessible by all and treat everybody fairly, regardless of their circumstances.

Climate Citizens project team at Lancaster University

The Climate Citizens project is a five-year initiative funded by UK Research and Innovation, working with the Climate Change Committee, the Energy Systems Catapult and others to ensure citizen voices are heard in the climate policy debate. By being part of the Net Zero Diaries, the Climate Citizens project team at Lancaster University ensured that the Diaries built on the wider debate about public engagement around climate strategy, with findings feeding into this wider initiative with ongoing policy impact. The Lancaster team helped with the project methodology and design, and with the writing of this report.

Ovo Energy

OVO Energy was founded in 2009 and redesigned the energy experience to be fair, effortless, green and simple for all customers. The company has spent the last decade investing in the market leading technology, customer service operations and digital products to help members cut their carbon emissions. OVO is on a mission through its sustainability strategy Plan Zero to tackle the most important issue of our time; the climate crisis, by bringing our customers with us on the journey towards zero carbon living. OVO Energy has committed to being a net zero carbon business and achieve bold science-based carbon reduction targets by 2030, while helping members halve their carbon footprint at the same time.

⁶ Funding for this project was shared between the 5 partners, split as follows: Ovo Energy = 48%; Citizens Advice = 19%; World Wildlife Fund = 12%; Climate Citizens project team at Lancaster University = 10.5%; BritainThinks = 10.5%

World Wildlife Fund

WWF is an independent conservation organisation, with over 30 million followers and a global network active in nearly 100 countries. Its mission is to stop the degradation of the planet's natural environment and to build a future in which people live in harmony with nature, by conserving the World's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

1.2. Our approach: Deliberative research

The starting assumption for this research is that **individuals' willingness to play an active role in achieving net zero is contingent on a range of factors**. These factors include **practical considerations**, such as the cost and availability of measures, e.g. new heating technologies, lower-carbon food choices, or public transport infrastructure; as well as **moral and ethical considerations**, such as whether government proposals are seen as 'fair'. When people are asked for their views on particular questions around climate policy, it has been seen consistently that responses are based on a complex weighing-up of these factors. For example, people's support for proposals to close roads to cars in order to create low-traffic neighbourhoods will depend on practical considerations, such as whether alternative forms of transport are available, as well as judgements on fairness which might include concern for people with disabilities or wanting children to be able to play in the street. The same goes for other issues, such as siting of wind turbines; installation of heat pumps; or shifting to lower-carbon diets.

While survey data is able to provide headline figures about people's support for different technologies or policies, they tell us nothing about how people arrived at their answers, or **how they weigh up these different factors in order to reach a viewpoint**. To get the full picture we also need qualitative and deliberative research which probes the judgements behind headline survey figures, and which **makes people's reasoning or deliberation explicit rather than implicit**. This evidence is vital in order to design future policies and strategies that people support and to help **build a 'social mandate' for climate action**.

Deliberative research methods, which have been employed extensively within the Net Zero Diaries, provide this perspective by allowing Diarists to consider what their role or contribution might be in a range of different situations. Deliberative methods put as much emphasis on **why participants express certain views** as they do on **what those views are**. For example, Diarists were encouraged to talk about the conditionality of their views and decisions – e.g. exploring under what conditions people they consider commuting by public transport instead of by travelling by car. A crucial part of this research is **the learning process itself**, how participants learn from each other, from witnesses or from expert speakers, which in turn influences their views.

Recent years have seen a **growing interest in citizen deliberation**, and specifically, deliberative processes like Citizens' Assemblies, Citizens' Juries and deliberative workshops, which enable citizens to contribute to decisions that affect their lives. Deliberative approaches have been applied to many policy questions, including social care, constitutional issues, housing and novel technologies. This has led the OECD (Organisation for Economic Co-

operation and Development) to proclaim the surge of a **‘deliberative wave’**.⁷ Between 2000 and 2020, at least 105 deliberative mini-publics (or DMPs; see below for definition) were convened across Europe, with environmental issues being the most frequently discussed topic. Recent examples of deliberation on climate include Climate Assembly UK, the citizens’ assembly commissioned by Parliament, similar initiatives at national level in Ireland, France and Scotland, and numerous citizens’ juries initiated by local authorities in the UK, including in Leeds, Oxford, Lancaster, Devon and many others.

Many of these, including the citizens’ assemblies and juries listed, have been formal processes instigated by parliaments or national or local governments. This **indicates a willingness on the part of politicians to learn from citizens, and to embrace democratic innovations**. It also raises questions about the place of such initiatives within the democratic process – questions which have been discussed at length.⁷

What is deliberative research?

Deliberative research places a strong emphasis on **considered judgement** based on **good evidence** and **free and fair collective discussion** (Steiner et al., 2004). Typically, deliberative research brings people together to undertake a structured discussion with a focus on ensuring meaningful participation. The participation charity Involve distinguish three crucial features of deliberative processes – **discussion between participants; working with a range of people and information sources**, and **a clear task or purpose** (Involve, 2008).

In summary, deliberative research generally involves:

- input from expert witnesses and other information sources;
- structured, facilitated and inclusive discussion and deliberation between participants;
- participants coming to considered judgements, linked to a goal or purpose, such as formulating recommendations or a statement.

Thus, deliberative research can be distinguished from other qualitative research methods such as focus groups, participant observation or interviews, which aim to capture participants’ views, but do not necessarily meet these same criteria (Evans et al 2009).

In practical terms, the Net Zero Diaries were designed to be:

Longitudinal: Recognising that people’s views **change over time** and in response to **new information** and **the changing context**. Four waves of research were conducted – each wave consisting of a 5-day online community and 5-hour Saturday workshop – over a period of 5 months between September 2021 and January 2022. Changes to Diarists’ opinions were tracked explicitly by asking in each wave about their present views on and behaviours related to the food, energy, and transport sectors.

⁷ OECD (2020), Innovative Citizen Participation and New Democratic Institutions: Catching the Deliberative Wave, OECD Publishing, Paris, <https://doi.org/10.1787/339306da-en>.

Flexible: It was important to respond to the changing context throughout the Net Zero Diaries process, and so as a result, discussion topics were **not tightly scoped-out in advance**. Instead, each of the four waves was designed, delivered, and reported on in a period of around 8 weeks.

Deliberative: We wanted to give Diarists access to real **knowledge** and **expertise**, as well as **time** to consider this. We therefore included long-form sessions with experts in each wave, with time built in for questions and discussion between Diarists and experts.

Impact-focused: We produced reports **quickly** while the Diaries were running and sought out **opportunities** for participants' views to be shared more widely, including in the **media**, as detailed later in this chapter.

Key topics of discussion throughout the Diaries

Wave 1: Individuals and net zero

In the first online community, Diarists were asked about their **knowledge** of and **views** on net zero, as well as their **behaviours** in the three focus areas of food, transport, and energy.

The first workshop aimed to help Diarists better understand the concept of net zero, starting by introducing what net zero is using tools such as the bathtub analogy and how responsibility should be apportioned. Diarists were then encouraged to consider the sources of emissions within the **food, transport, and energy** sectors and to discuss some of the actions they were already taking to reduce their own impact.

Wave 2: Government and net zero

Diarists were asked about changes to their engagement with net zero and whether their behaviours had changed at all since Wave 1. They were then asked for their opinions on four news articles. These focussed on [looking ahead to COP26](#); [a speech delivered by Boris Johnson at the UN General Assembly](#); [the rise of gas and electricity prices in the UK](#); and [the growing popularity of EVs during the fuel crisis](#).

Responding to findings in the first wave, and given the context of the party conferences, the second workshop focused on exploring the **role of government** in the net zero transition, as well as the topic of **fairness**, on a domestic, international and intergenerational basis.

Wave 3: Business and net zero

Conducted a week after the end of **COP26**, the third online community asked Diarists for their thoughts on the outcomes of the conference, in addition to covering the same tracking questions as in the previous two waves around Diarists behaviours in the three key sectors of food, energy and transport.

The third workshop delved further into the outcomes of COP26, including financial commitments made at the conference and calls from the Prime Minister of Barbados for action on behalf of small island nations, before then focussing on what Diarists perceived the **role of business** to be in the net zero transition, including exploring what a sustainable business could look like.

Wave 4: Bringing it all together

The fourth and final online community asked Diarists to **reflect back** on their own journeys, both overall and in the three focus sectors, as well as asking Diarists to give their views on the changing **energy crisis**.

In the final workshop, Diarists reflected on their collective journey, asking them to consider what they thought government and businesses needed to do to support people to make the changes they now wanted to make. We then dissected the **Government's net zero strategy** in more detail, going on to design their own net zero strategies for each of the three focus sectors.

1.3. The contribution of the Net Zero Diaries

In contrast to formal processes such as the Climate Assembly UK and numerous citizens' juries initiated by local authorities in the UK, the Net Zero Diaries project was not commissioned by a government, parliament or policy body, and so was **not constrained by a particular question or tight remit**. Neither did we ask participants to formulate specific, formal recommendations. Instead, the project used deliberative research methods to **explore wider questions on the responsibilities of citizens, government and business in achieving climate aims**. Since the brief was more flexible, we were able to experiment with creative methods. For example, Diarists were tasked with designing and pitching their own 'sustainable business plans' as well as feeding back on the government's own net zero Strategy and writing their own alternative strategy. As described above, individual contributions through online activities were also combined with collaborative workshops, allowing for the gathering of evidence on people's views and practices through a range of research interventions and techniques.

The Net Zero Diaries did, of course, have limitations. Its very nature as an independent project not commissioned by government or similar means there is not an automatic route to influence or implement ideas or recommendations put forward (in common with much policy research). The subjects covered over the course of the project were very broad, and time was limited. With a narrower focus or where more time was allowed, there would have been opportunities for finer-grained comment and analysis on specific issues such as policy design.

Project media coverage

We established the Net Zero Diaries with the explicit intention of generating media coverage where the citizens involved would speak directly to policy makers and other citizens, helping to normalise the importance of hearing a range of views in conversations about net zero.

Following the second wave of research, in October, Professor Rebecca Willis, one of the partners, and Pearl, a diarist from Leeds, spoke to Radio 4's [Women's Hour](#) about the findings so far.

The Guardian published [pen portraits](#) of three of our Diarists and an [article](#) about Diarists' views that the climate crisis should be treated with the same urgency as the coronavirus pandemic was initially.

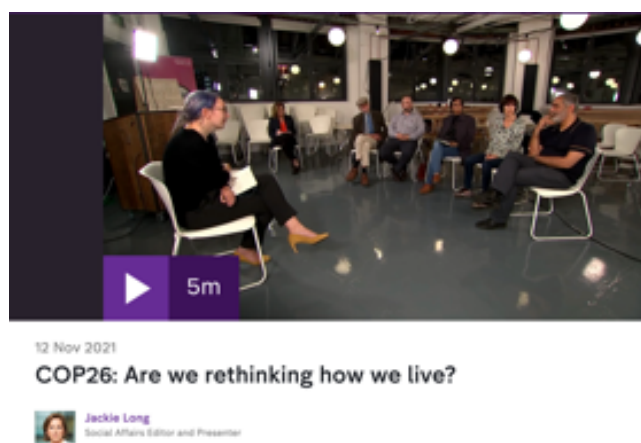
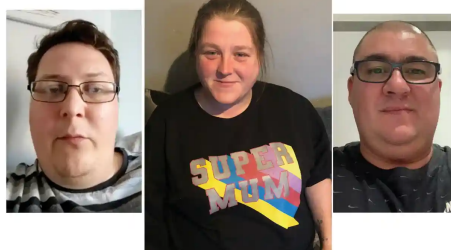
In November, we conducted a focus group with five of the Diarists from Leeds on [Channel 4 news](#), discussing their views on COP26 and net zero more broadly.

Following the third wave, The Guardian also published an [article](#) about Diarists' concerns that politicians' hypocrisy could hamper efforts to tackle the climate crisis.

Net zero diaries: three people on the climate crisis and the UK's response

How should the government approach the issue, and how are they willing to change their own lives?

● Climate crisis 'needs same urgency seen at start of pandemic'



1.4. Next steps for this research

This report sets out the overall findings of Net Zero Diaries. The evidence generated will provide a useful steer for policymakers, business representatives and others who are designing policies and approaches for net zero **to help craft approaches which will be supported, and which will build the mandate for the net zero transition.**

This report provides an overview of a complex dataset, and following its publication, the Lancaster University Climate Citizens team will work with project partners to analyse the data in order to answer further questions including: how do participants' worldviews and political outlooks affect attitudes toward climate change and the role of government and business in climate strategy? What differences in outlook and opinion were there between the different cohorts, such as those who had previously taken part in a Climate Assembly or Jury? Based on this evidence, what are the potential 'flashpoints' in emissions reduction over the next few years? These insights will be published and disseminated separately.

1.5. Introducing the Diarists

For the findings of the Net Zero Diaries to be useful, we needed to have confidence that Diarists would **reflect the views of other citizens across the UK**. At a scale of around 40 people, findings from the Net Zero Diaries are not, and could not be, statistically representative. However, best practice in qualitative research was followed throughout the project to ensure that the people who took part in the Diaries came from a range of different backgrounds and that the way in which we recruited them avoided bias wherever possible.

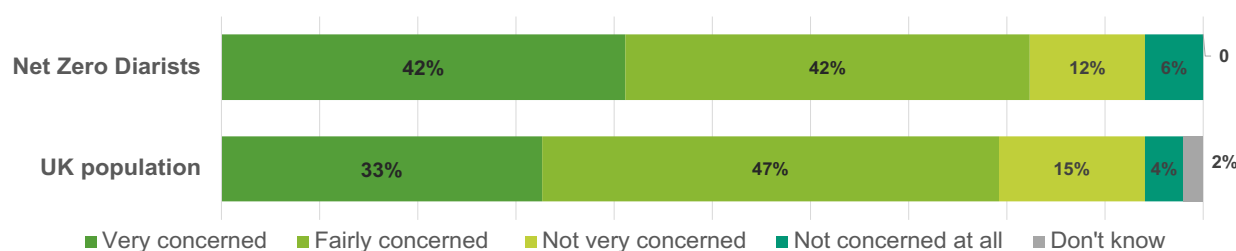
Diarists' demographic characteristics:

We recruited Diarists from three different broad regions of the UK. We used a purposive sampling approach whereby we created a set of quotas to ensure Diarists of different ages, genders, ethnicities, health status and living conditions were included **in similar proportions to the UK's population overall**. The table below describes the Diarists' demographic characteristics as they reported them to us:

Gender	No.	Age	No.	Region	No.
Female	19	18-34	10	Leeds & West Yorkshire	13
Male	21	35-44	3	Glasgow & Central Belt	9
		45-54	14	Oxford & the South East	8
		55-64	7		
		65+	7		
Housing tenure	No.	Ethnicity	No.	Disability	No.
Homeowners	24	From an ethnic minority background	11	Disability or long term health condition	8
Private renters	7	White British	29	No disability or long term health condition	32
Social housing tenants	7				
Other/ not stated	2				
Total					40

Diarists' starting attitudes towards climate change

We wanted to ensure that Diarists represented a range of views on climate change, again roughly proportionate to the UK population as a whole. We asked all Diarists at the beginning of the project how concerned they were about climate change and 84% said they were quite or very concerned about climate change, compared with 80% from the BEIS Public Attitudes tracker in March 2021. This provided confidence that the Diarists were broadly aligned with the rest of the UK.



Net Zero Diaries. I am about to read out some statements. Please could you tell me which statement comes closest to your own viewpoint? Base: All respondents (n=43). BEIS Public Attitudes Tracker. Q21. How concerned, if at all, are you about current climate change, sometimes referred to as 'global warming'? Base: All wave respondents – March 2021 (4,029).

Diarists' previous engagement with the topic of net zero

While it was important to include Diarists with a range of views, we also wanted to explore some more specific questions throughout the Net Zero Diaries, such as how individuals influence one another, and whether their previous experiences make them more influential. To do this, we segmented Diarists and recruited them to have three different types of prior experience regarding climate change and net zero. You'll see these terms (engaged citizens, engaged consumers and general public) throughout the report, whenever we quote an individual Diarists, and in chapter 4 we reflect on how the different groups interacted with each other.

1. Engaged Citizens: Alumni of other climate engagement processes – 7 Diarists

These Diarists had taken part in **previous Citizens' Assemblies or Juries** on climate change across the UK including in Leeds, Edinburgh, Kendal and Lancaster. They brought with them the greatest level of knowledge of climate change policy among the group, as well as prior experience of dialogue on these topics. The rest of the Diarists were informed about these Diarists' prior experiences, and we observed carefully how Diarists *without* these prior experiences engaged with the Diarists from this group.

From the outset, these Diarists saw tackling climate change as an **urgent** priority and understood the need for personal lifestyle change as well as wider structural changes in order to reach the net zero goal. This group began as the **most pessimistic** about the UK's chances of reaching net zero by 2050, due to their awareness of a lack of action and commitment by both the government, businesses and the wider public.

Pen portrait: Pearl – Engaged Citizen

Pearl is 62 years old and lives in Leeds with her husband, daughter and two cats. She owns her home and is retired, and now spends her time cooking, reading and watching TV. Pearl took part in the Leeds Climate Assembly in September 2020.

Already at the start of the Net Zero Diaries, she felt very concerned about climate change and regularly discussed her opinions on the topic with family and friends. In order to reduce her own emissions, she had paid to have solar panels installed, which she initially found expensive but was glad to see a reduction in her electricity bills. She was also already choosing energy efficient appliances when things needed replacing and eating vegetarian meals multiple times a week for both health and environmental reasons. She doesn't drive so has already relied mostly on public transport and walking.

Since participating in the research, she is trying to select products with less packaging and eat even less meat – although she feels she could never be vegetarian. She also hopes to get a heat pump when she can afford it.

When thinking about the UK's chances of cutting its carbon emissions by 2050, Pearl feels pessimistic as she does not think the government, or the UK population are currently doing enough to reach net zero. She believes the government must lead the population in making major changes to their lifestyles to achieve this target.

2. Engaged Consumers: Already taking substantial climate-friendly actions in their own lives – 19 Diarists

These Diarists were recruited on the basis they had already made substantial **changes to their lifestyle** in order to reduce their carbon emissions, including but not limited to installing solar panels, purchasing an electric vehicle, reducing the amount of meat eaten as part of their weekly diet, or paying more for more climate-friendly products even where a cheaper alternative was available. They brought **practical experience** of taking action to adapt their lives to net zero.

This cohort already saw tackling climate change as **a priority** and realised the need for personal lifestyle changes to reach net zero, but were **less aware** of the larger **structural** changes required. Most Diarists in this group were feeling **fairly pessimistic** about the UK reaching net zero by 2050, again due to government and individual inaction, but about **a quarter** feel more **optimistic**, due to perceived growing momentum.

Pen portrait: Bill – Engaged Consumer

Bill is 52 years old and lives in a small town outside of Glasgow with his wife and daughter. He works in a sales role in telecommunications company and is a passionate cyclist in his spare time.

At the outset of the research, Bill described himself as fairly concerned about climate change, particularly when thinking about the future for his young daughter. He was recruited into the engaged consumer cohort since he had invested in a more efficient boiler, was taking active measures to reduce his energy usage at home, had purchased an electric vehicle in September 2021 and used the train or cycled wherever he could. Bill was somewhat aware of the impact of his food consumption on the climate, particularly in terms of transportation and plastic packaging, so he tries to buy as much as possible from his local fruit and vegetable stall.

Having participated in the research, Bill is now more aware of why and how much we need to change our behaviours. Bill has begun actively reducing his meat consumption and is making more of an effort to walk and cycle as much as possible. He is also closely monitoring his energy consumption at home, although this is partly financially motivated given rising energy prices.

By the end of the project, Bill described feeling frustrated that the onus is often put on individuals to act whilst corporations do not reduce their emissions, but on the other hand, Bill is a firm believer in consumers' own power to change business' behaviour. He also described himself taking a far more active role in his interactions with others to raise awareness of the urgency of reaching net zero, and was keen to help people understand more about their own behaviour and ways to change this in order to live a more climate-friendly lifestyle. Participating in the research has led Bill to feel more strongly that the ultimate responsibility lies with the government, given their power to change policy.

3. General Public: Varying levels of concern towards climate change, but no prior experience of climate engagement process - 15 Diarists

These Diarists were recruited on the basis of their concern towards the issue of climate change and were chosen as individuals who had **no prior experience** discussing climate policy within engagement processes or who hadn't made any significant changes to their lifestyles in order to be more climate-friendly. These Diarists started the Net Zero Diaries with a range of views towards climate change, just like the population as a whole, however none of the Diarists reported that they questioned the science of climate change

Pen portrait: Sharon - General Public

Sharon is 47 years old, and lives in Glasgow with her three children. She owns her home and enjoys baking for her children and relatives in her spare time. She worked as a member of British Airways Cabin Crew until taking redundancy in August 2020.

Even though Sharon acknowledges that changes need to be made in order to tackle climate change, she does not feel concerned about the topic. She rarely finds herself discussing climate change with others as she doesn't feel she knows enough about the subject.

At the start of the research, Sharon was unsure of the link between food and carbon emissions, but she knew that excessive packaging was harmful, so made an effort to recycle plastic in her home. She expected she would need to get an electric car in the future due to petrol cars eventually being phased out, but for now she drives a diesel car and does not see alternative modes of transport as feasible options for herself and her family.

Sharon was surprised to learn about the emissions from beef production and is therefore aiming to further reduce her already minimal beef consumption. She is also now taking time to read packaging on electrical goods and choose more efficient items.

Sharon initially felt optimistic that the UK will be able to cut down carbon emissions by 2050, particularly having seen her local council taking action, but has since become a bit more pessimistic, after meeting others who also feel unable to reduce their own emissions. She believes that only the government has the power to bring about change.

Chapter 2. Reaching net zero: whose responsibility is it anyway?

Perceptions of the roles government, business and citizens should play in climate policy and strategy

2.1. Attitudes to net zero: Where Diarists started

Most Diarists began the Net Zero Diaries with little to no understanding of the term net zero. Climate change was a far more well-known term, but there was little in-depth understanding of what net zero specifically involved or how the two related. Diarists ranged from being confused about what net zero was, to feeling sceptical about whether it would really work. Some people focussed on the 'zero' element of the term, imagining that the UK would seek to omit no emissions at all for example, or just had a general sense that it was about doing your bit for the environment. It was clear that very few had a solid understanding of what net zero would mean in practice for the UK, with Diarists who had prior experience of other engagement processes on climate a step ahead, but by no means experts.

"I'm not exactly sure what net zero means, I guess it's for everyone to do their bit by 2050, that's how I see it." (General Public)

Despite the lack of understanding of the term, 4 in 5 Diarists felt at the beginning of the process that reaching the UK's net zero goal of 2050 or sooner was reasonable, saying that the goal felt appropriate given the importance they associated with climate change. For those who weren't sure what net zero meant, their support for the target reflected a willingness to accept any target they responded to the perceived importance of the issue.

Diarists who had taken part in previous engagement processes on climate, and who were more knowledgeable about net zero, were less optimistic about being able to achieve the goal. They had concerns about specific sectors like energy and transport, and more generally that the UK lacked the national infrastructure or commitment to structural change that would be needed.

"The government and the people of this country are not doing enough, and I would include myself and a lot of people I know in this category." (Engaged Citizen)

Diarists tended to spontaneously talk about climate change in terms of the impacts and effects in the future rather than mitigating actions and their impact today. This is highly consistent with the tendency to see climate change as distant from people in the UK today, a common finding in climate research. In line with national polling the majority of Diarists were concerned about climate change, but there was much greater variation in how much urgency they associated with this concern. Well-documented freak weather events around the world and more gradual rising summer temperatures in the UK were the most immediate associations when thinking about climate change. However, for most, this was a passive observation of events that had little tangible impact on lives. Only a handful of Diarists had been personally affected by extreme weather in the UK, most commonly flooding, which led these Diarists to feel greater urgency about tackling climate change.

"I notice changes in the weather, I feel like it's getting hotter earlier in the year." (General Public)

"I'm seeing the level of the ground that new housing is being built on, and I think oh we're going to flood even more. That worries me a lot. I'm of an age where I've seen the climate changing." (Engaged Consumer)

While almost all Diarists expressed at least some concern about climate change, very few had any idea about what could be done to address the issue or whether initiatives that have already been implemented were effective. Diarists were keen to understand whether they could have any real impact as an individual: most had little confidence in their power to affect change as an individual and were sceptical that it could lead to collective action.

At the beginning of the process, many Diarists had already made small changes at home in an attempt to either reduce their energy bills, live a more climate-friendly lifestyle or simply fit in with the wider movement of society towards greener ways of living. However, these changes had much in common, in that they were consistently low-cost and therefore accessible, and were convenient with little impact on daily life. Common examples were recycling waste, using energy saving lightbulbs, avoiding plastic packaging where possible or monitoring utility usage.

“I have cut down on how much meat we eat during the week (as well as for health reasons). I also try to save on electricity etc by making sure things are turned off.” (General Public)

Diarists who had made more significant changes were in the minority, with a small number having installed solar panels or heat pumps in an attempt to reduce energy bills and carbon emissions in the long-term, or reducing the number of cars in their household. Even when Diarists did make more significant changes these were often associated with another event that made the change more convenient and eased the transition (e.g. children leaving home so fewer cars needed, gas boiler breaking down and being replaced). For the majority of Diarists however, these larger changes felt out of reach and were seen as too costly or too disruptive of current lifestyles to be acceptable.

“We’re getting a heat source pump so that we won’t have to rely on our boiler. We recycle our rubbish and we try to buy from local shops that don’t use plastic on their fruit and veg.” (Engaged Consumer)

Diarists’ final key belief at the start of the Net Zero Diaries process was that too much responsibility for combatting climate change has been attributed to individuals in recent years and too little expected of government and the business world. This led to many Diarists, especially those that were more engaged, entering the conversation about the UK’s net zero future with feelings of unfairness, frustration and even despair at the lack of action from those believed to have the power to effect real change.

“I believe that beyond making sure to cut down on plastic usage, recycling and other small day-to-day choices, the onus is really on big corporations and governments to solve this problem. Overall, the average person is powerless.” (Engaged Consumer)

Diarists felt strongly that the allocation of responsibility needs to be reversed, so that government and businesses lead by example, and individuals follow. **At the beginning of the project, almost 3 in 4 Diarists believed that the UK government had both the most responsibility for tackling climate change as well as the highest potential to effect**

change in real terms. However, while Diarists were strong in their conviction, they also struggled to articulate what type of action they were looking for from government.

Only 1 in 5 Diarists felt the private sector had the most responsibility for taking steps to tackle climate change, however all Diarists still expected to see large-scale changes from the business world and were looking for companies to lead their own net zero journeys rather than waiting for government to give orders. For example, restructuring some of the country's largest industries was seen as a necessary step which would need to be led by private corporations, however pessimism about their willingness to disregard profit-orientated goals dampened many Diarists' hope for change.

"I think the only way big companies will listen to the government is if they talk their language. Corporations talk in the language of profit, and so it's up to the government to incentivise these companies." (General Public)

2.2. Attitudes to net zero: Where Diarists ended up

By the end of the Net Zero Diaries, after over 30 hours of engagement over 5 months, Diarists had developed a more sophisticated understanding of and opinions about net zero. Diarists left the process with a clear sense of what they wanted to see from government, business and individuals to reach net zero. Unfortunately, by learning more about what needed to be done, Diarists' optimism about achieving the target consistently decreased.

Over the four waves of research, Diarists became increasingly aware of the urgency and scale of the challenge in reaching net zero by 2050. At first Diarists tended to assume that the lack of action from others was down to a lack of awareness, projecting their own experience of becoming more informed and therefore more motivated onto others. However as the project went on they became increasingly aware of how little seemed to have been achieved to date, for example few had understood that Cop26 was the 26th edition of the same event, and not something new, a fact that left many feeling disappointed after their initial enthusiasm for the publicity surrounding the conference. At the same time, they developed a greater understanding of and appreciation for the competing priorities that are likely to make the transition more difficult for government and businesses. Often this new knowledge seemed to confirm their pre-existing suspicions about government and business: that politicians will prioritise staying in power over necessary action, just as businesses will prioritise profits.

While this cynicism didn't disappear, and many Diarists did feel less optimistic about reaching net zero overall, the news isn't all bad. As the following sections show, when exposed to different business models, perspectives on policy and politics, Diarists developed clear ideas about how they think the political and economic system must change to make the transition. From joined up leadership to more holistic ideas of sustainability, many of these proposals are not radical, but the bar for implementing them effectively is high, and Diarists have little tolerance for continued inaction.

"I have learned from my experiences that we all have a part to play in achieving net zero before 2050 and even with the low expectations from COP26 and the Glasgow agreement from all the world leaders, I'm still positive that even individuals will be able to make a

change in our day to day lives to lead a more environmentally friendly way.” (Engaged Citizen, Aswad)

2.3. Understanding the government’s role in net zero

Diarists consistently labelled the UK government as the key force in the net zero transition, believing them to hold the power to create change as well as the potential to enable and monitor it in others.

From the beginning of the Net Zero Diaries process, Diarists saw government as having most responsibility to provide the framework for individuals and businesses to make progress in the net zero transition, a sentiment which remained consistent throughout the process. As part of this, government is expected to introduce and embed the measures needed across each element of society in the UK to ensure that the necessary action is taken order to reach net zero.

Diarists have low expectations of government performance on climate, combined with low trust that it will act in the best interests of communities across the UK or of the planet overall. All Diarists express scepticism about the government’s ability to play the crucial role required of it in the transition towards net zero. They describe a series of related problems:

- A sense that climate change has been overly politicized and is used as a political bargaining chip, either via overcommitments to attract support, or reluctance to take tough decisions and risk losing it. They feel that politics has got in the way of genuinely prioritising and implementing the most effective measures.
- A strong concern that government will remain mired in party interests and divisions, and as a result will be unable to move past differences to effect real and necessary change in upcoming years via cross-party collaboration.
- Within government itself they feel there a lack of connection between different departments, and of a coherent strategy across different sectors.
- A perception that government strategies so far to tackle climate change have been monitored on an irregular basis and that goals have not been met or tracked, combined with an overall lack of transparency or communication about the country’s progress in the net zero journey.
- An absence of clear signposting for individuals or companies to play their part in the net zero transition, seen as a failure of government to setting the agenda that means large scale shifts in behaviour aren’t happening.

The UK Government’s net zero Strategy

In the final wave of the Net Zero Diaries in January 2022, Diarists were provided with information about the UK Government’s net zero Strategy, released shortly before COP26 in late October 2021. Information presented to Diarists included statements taken from the Climate Change Committee’s independent audit of the strategy, as well as stand-out elements of the strategy and gaps identified by climate specialists who were part of the Net Zero Diaries process.

While Diarists agreed that the areas presented as part of the strategy are important to focus on, there are several key areas which are seen as missing from the government's plans. First, action to improve public transport and enable less car use, and second, providing the necessary funding to improve the energy efficiency of homes across the UK through insulation and heat pump schemes. Diarists also have concerns about how exactly the strategy will be implemented, feeling that a lack of detail suggests plans have not been well-thought through. Many of the problems diarist identified with the strategy reflected common narratives we heard repeatedly.

- **Lack of ambition:** the more informed Diarists were coming in to the process the less confident they were that the strategy was comprehensive enough, they felt it did little more than scratch the surface of what is needed on a national scale to meet the UK's net zero goal.
- **Lack of detail:** Diarists were critical of a perceived lack of specificity in the strategy, and fear this means the strategy won't be followed through (although it's worth noting that few Diarists reported seeking out more information beyond the summary provided by the project team).
- **Lack of support for individuals to make changes:** Diarists questioned how plans that relied on individual action would be paid for, with home insulation and heat pumps the most prominent examples. They felt the proposed grants were inadequate, and pointed to well publicised examples like the Green Homes Grant as evidence that government was unlikely to step up to the level needed.
- **Burden on vulnerable and poorer households:** Diarists, particularly the less engaged, often link elements of the strategy with financial risks for vulnerable citizens. For example, they feel that the strategy doesn't do enough to reduce fossil fuel use, or improve insulation of homes, and connect this with higher energy bills for poorer households. We heard this concern frequently throughout the diaries: people don't want to see new policies (or their absence) increase the burden on vulnerable households.
- **Lack of a clear plan for transport:** As discussed in section 3.3 Diarists felt transport was one of the stickiest challenges for net zero, with few feeling that significant changes in their own travel behaviour were possible (or attractive) beyond the switch to electric personal cars. Several Diarists pointed out that the net zero Strategy had little to say about changing individual travel behaviour, however it should be noted they were not shown – and had no prior knowledge of – the Transport Decarbonisation Plan from July 2021.

Less engaged Diarists, who arguably represent the wider UK public most closely, tended to be more concerned about understanding where the financial investment will come from for the green transition, as well as what impact this might have on ordinary people. Clarity on how plans will be funded is therefore much needed when presenting large-scale strategies to the public. These Diarists are also mistrustful of government achieving targets in the strategy, pointing to other targets, like the government's previous Smart Meter Implementation Plan, which have been missed.

“I still do not fully understand how we will get to net zero by 2030 or even 2050 within the UK. There are so many pledges and promises by government, but are they sustainable in terms of the cost?” (General Public)

“Everyone has to follow, including big multinational companies.” (Engaged Citizen)

Following four waves of research throughout the Net Zero Diaries process, Diarists were clear on the things they expected to see from the UK government to feel that reaching net zero was a serious and important goal for politicians and policymakers. They asked for:

- **A positive vision** for a net zero society, where the ‘net zero UK’ is painted as somewhere that individuals will benefit from living in.
- **A clear narrative and timeline** for progress that accounts for the roles of all individuals, companies and communities in the transition, clearly outlining the roles they will play and their expected contributions.
- **Realistic goals**, which give the sense that the government have thought through their plans, taking into account the UK’s context - including its natural resources, infrastructure, finances and people.
- **Interim targets** – better and more widely communicated where they already exist – to strengthen progress, maintain a sense of capability and achievement, and keep all groups engaged and invested in the journey.
- **Regular, pro-active updates of progress tracking** to ensure the public is kept informed, with information communicated to the public in direct and simple language and widely disseminated across all of sectors of society.
- **Transparency** throughout the net zero transition in order to build the public’s trust and to bolster the collaborative approach that Diarists want to see, including what is being spent, and where, as well as honesty where obstacles are encountered or targets are missed.

In some of these cases, where government are already taking steps in this direction, we see the significant need for a concerted, proactive communication strategy that seeks to inform a public who do not often seek out information themselves.

2.4. What Diarists expect from government in the future

For government to play the role expected of it, Diarists feel a change in both culture and approach is needed. Diarists want to see government taking the goal of reaching net zero more seriously. This means clearly demonstrating and communicating its commitment to the public, and taking a more collaborative leadership approach to the transition.

As Diarists began to understand more about the complexity of the transition to net zero, and the interconnected nature of the political and economic system, they started to focus more on the need for government to act collaboratively to make real progress. They were looking for:

- A unified approach to net zero, with the whole system – including all levels of government across the entirety of the UK – pulling in the same direction

- Collaborative working relationships between departments and devolved nations to share the responsibility and costs of the transition fairly and practically - for example avoiding policies which work towards one goal while hindering another
- Collaboration across political parties, taking climate change off the table as a political football and making it a cross-party priority
- Collaboration between government and business, with government coordinating action and helping different sectors work towards the same goal
- Shared commitments between government and citizens, with each doing their bit (but government going first)

“I’d like to see collaboration across all parties, including the Government, politicians, communities and individuals.” (Engaged Citizen)

Diarists also want to see strong leadership from an explicit group or individual in government to ‘prove’ that the net zero transition really is a priority. They told us they weren’t clear about who in government was driving the net zero transition, with no one minister strongly associated with the agenda, which adds to their scepticism about how much of a priority it really is. Other bodies like the Climate Change Committee are little known. Diarists feel that clear direction about which department and individual was leading the way would give greater confidence. This person should show conviction and urgency to build trust. They also want to know how the government intends to demonstrate accountability if, for example, targets are not reached.

“If you think about this right, the accountability is on us as individuals to suffer if we don’t reach these targets. What is the accountability of the government? If they’re going to introduce these targets, what’s their own accountability? If they don’t reach these targets, what are they going to do? (Engaged Consumer)

Diarists felt from the start of the project that government had the most responsibility and power to act, but struggled to articulate what this could look like. As their understanding of how government interacts with business and the public became more nuanced their expectations of government as a catalyst for action by others grew. Diarists see government’s ability to set and enforce targets as crucial to achieving net zero, as well as its ability to implement changes to decision-making behaviour and business operations through policy.

Diarists expect government to keep businesses in line and on track, incentivising companies where necessary by offering subsidies and grants to those trying to meet net zero targets. They also expect it to penalise businesses if they refuse or fail to engage in the green transition or meet agreed targets (e.g., through a carbon tax). Similarly, Diarists see government as responsible for driving change in individuals’ behaviour. This is primarily by incentivising the public to make climate friendly choices, and putting in place the infrastructure and policy environment to make climate-friendly products and services accessible and affordable for all.

“There needs to be a switch from subsidies for livestock farming, and more help for those experimenting with innovative approaches, such as rewilding, and agroforestry.” (Engaged Consumer)

“Ryanair and its cheap as chips airfare abroad could be stopped overnight by removing fuel subsidies, for a start.” (Engaged Consumer)

Ultimately, Diarists feel it is the duty of the UK government to bring Great Britain and Northern Ireland together and create an environment which will enable long-lasting net

zero changes. At the end of the Net Zero Diaries, some Diarists still feel that achieving societal change on the scale required is an unrealistic prospect. But others point to the recent response to the Covid-19 pandemic as proof that politicians can work across the political spectrum to facilitate behaviour change and provide support to those that need it. However, for this argument to carry weight, Diarists feel it will be crucial for the UK government to raise the response to net zero to a similar level of urgency as seen in the early response to Covid-19.

In the online community for wave 2 our diarists were asked for their opinions on a BBC news article covering a speech delivered by Boris Johnson at the UN General Assembly. Their responses illustrated some of the key themes around the role of Government in the net zero transition.

The point of view of a participant from the general public cohort:

In three words, how would you describe this article? Interesting. Unrealistic. Unachievable.

Please tell us about the things in this article that you agree with / that you like: Four areas needed tackling - "coal, cars, cash and trees". I agree with this as they are the major contributors to climate change and these are the areas as a nation we need to work on. I also like the fact about how they relate Covid to the article and the phrase that scientists were right as Covid is a real example of this where everything changed.

Please tell us about the things in this article that you disagree with / that you dislike: I disagree with the to allow only zero-emission vehicles to be on sale across the world by 2040 as can people afford to buy zero emission cars - the public needs time or grants.

What do you think this article means when thinking about the UK's net zero target? They are trying to achieve it and different pledges are available.

If you needed to write an article about Boris Johnson's UN General Assembly speech, what is the main message you would communicate to the UK public? Four areas needed tackling - "coal, cars, cash and trees" - these are the major contributors and we need to work on them to reach our target.

The point of view of an engaged participant:

In three words, how would you describe this article? Words, no action. It's all hot air from Boris, a speech with no substance on how to achieve the change.

Please tell us about the things in this article that you agree with / that you like: Making change is good, targets are good.

Please tell us about the things in this article that you disagree with / that you dislike: No point in making change and talking targets without actions and investment to make it happen. Also annoyed that opening coal unit while saying it will stop. Too much of saying what we want to hear without the backbone plan to support it.

What do you think this article means when thinking about the UK's net zero target? He's talking about the results to achieve and needs to happen now.

If you needed to write an article about Boris Johnson's UN General Assembly speech, what is the main message you would communicate to the UK public? Don't discuss the muppets by a puppet! Makes him lose any respect, if he had any he could make it happen. Makes it all sound like a political joke. Not focus on the seriousness of the situation.

The point of view of an alumni participant:

In three words, how would you describe this article? Critical. Factual. Limited.

Please tell us about the things in this article that you agree with / that you like: The critical analysis in the article is a reminder of the ways that Boris Johnson has been hypocritical about climate change policy in the UK. It sounds like he is a crusader for climate justice, but in reality, his words do not match up with the UK's record on cutting emissions, which has been appalling.

Please tell us about the things in this article that you disagree with / that you dislike: The article is sobering, because the situation is dire, but there is no mention of the responsibility of people in all sectors of society, mostly a focus on industry and world leaders. It would have been good to include some critical analysis within the main body of the article, rather than at the end. I'm not sure why the article included a joke made by the PM, it seemed irrelevant.

What do you think this article means when thinking about the UK's net zero target? The article mentions net zero, but doesn't explain it.

If you needed to write an article about Boris Johnson's UN General Assembly speech, what is the main message you would communicate to the UK public? I would communicate that the situation is an emergency, but I would include more hope that achieving net zero, whilst looking unlikely, is possible. Because people need hope that a problem can be solved, to engage with the issues actively and see themselves helping to solve it.

Communicating progress and urgency

Diarists frequently told us they wanted to see thorough and consistent tracking of progress towards the net zero goal, with accountability for missed targets (something they feel has been lacking to date). They want government to share regular updates with the public in an easily digestible format, prominently displayed. However, this desire for more information needs to be understood in context. While some of our most engaged Diarists were regularly following climate policy news, the vast majority of Diarists continued to be unaware of announcements, updates and policy commitments made during the period of the project. The most notable example of this were the minimal spontaneous discussion around the launch of the net zero Strategy in October 2021, however it is not the only instance of government action going unnoticed during the fieldwork period; both interim reporting / updates on targets (e.g. HMT's net zero Review) and previous seminal announcements (e.g. the Transport Decarbonisation Plan) were not touched upon by Diarists in any part of the process.

This suggests that even when people were primed to look out for climate news, and were highly engaged in the discussions we held, they were rarely picking up on (or seeking out) information or news on climate. This exemplifies the challenge of communicating effectively

about climate change and highlights opportunities to build support through work already being done through poor communication strategies, whilst still offering a caveat to the stated preference of Diarists for more extensive information provision by government.

“We're the ones that are going to give back and to trust the gov we need to know the information and be informed on things. They need to get it out further and go wider, as we are going to be affected by it.” (General Public)

Diarists also told us they wanted to see more reporting on progress and more emphasis on successes, which they think will be motivational and inspiring to citizens. Diarists show high levels of concern that the UK won't meet targets set out in the net zero Strategy in time, a prospect which is distressing and also demotivating. To increase motivation for individuals and to encourage businesses to keep up momentum in the green transition, Diarists call for the introduction of interim targets so that large-scale strategies can be broken down into smaller “wins”.

2.5. The role of business in the net zero transition

While Diarists view the government as ultimately responsible for ensuring net zero targets are met, the business world is felt to have both a significant ability to contribute to net zero as well as a responsibility to do so. Over the course of the project Diarists moved from a highly sceptical and quite pessimistic view of businesses to a more nuanced one, with change seen as difficult but not impossible.

Diarists see big businesses, particularly those which are multinational, as some of the main contributors to climate change through their carbon emissions and environmentally unfriendly business practices. However, Diarists weren't always quick to connect these high emissions with the low costs and expansive choice of products and services they enjoy, and they tended to see correspondingly limited scope for them as consumers to influence businesses.

Diarists initially struggled to see how large carbon-reliant companies would be able to shift away from profit maximisation towards a more balanced set of objectives and feel that most businesses will not be amenable to this. Intuitively, Diarists think of businesses as either profit-driven and unsustainable, or sustainable and purpose-led but not particularly profitable. They further assume that more sustainable practices are associated with short term losses, higher costs and less market share. Profit and sustainability are seen as constantly in tension, with prioritising net zero seen as incompatible with climate and growth. Without examples of successful sustainable business to draw on, Diarists tended to be sceptical of market-based solutions.

“Large companies such as Amazon for example will never put the needs of the planet before their need to make lots of profit. It's greed that stops carbon emissions being cut in this Country.” (Engaged Consumer)

In this context, significant changes to business practices were felt to be unlikely without government intervention, and while some Diarists could see potential for business to thrive sustainably, most do not feel they can be trusted to do this if left to their own devices, or to be honest about their environmental impact. This tended to mean an instinctive focus on regulatory measures from government or even nationalisation of key sectors.

Diarists instinctively feel that smaller, purpose-led companies are better able to act with sustainability at the heart of their business strategy than larger, multi-nationals. They assume that these businesses will be more locally and community oriented, more willing and able to rapidly adapt and innovate, more likely to be transparent and accountable about their progress, and less beholden to shareholders. Purpose-led start-ups are believed to be in the best position to make decisions primarily with net zero in mind, building locality and sustainability into their business models. Diarists also have the most faith in alternative and climate-oriented structures like community collectives, which are seen as the most genuinely sustainable business model.

Although the role of business was hard for many Diarists to grasp at first, **seeing real life examples gave them confidence that business could be more than grudging actors in the transition to net zero.**

Diarists heard from 6 businesses:

- **Ripple Energy**, a co-op which offers customers a chance to co-own a wind farm to provide energy for their home.
- **Xero**, a company offering 100% sustainable, emission-free deliveries across the UK via bicycles, electric mopeds, and vans.
- **Finisterre**, a clothing brand creating functional and sustainable clothing items for surfers, using renewable, recyclable, and biodegradable fabrics, also providing repair and trade-in services for old clothes.
- **Scottish Widows**, an insurance company offering sustainable pension plans through ethical investing, with the aim of decarbonising all investments by 2050.
- **Hubbub**, a charity running campaigns that tackle social and environmental issues, focusing on practical ways to cut waste and save money and working with organisations.

Diarists did however recognise some of the challenges that a focus on small businesses to address climate change implies. Diarists acknowledge that smaller businesses are less able to keep costs and prices down via economies of scale, and that they are less accessible than the ubiquitous chains and large-scale retailers. Others were concerned that current SMEs won't have the funds to adapt to green regulations and initiatives, fearing this could ultimately lead to a loss of competition and choices available to them. Diarists are also inclined to think that sustainability will inevitably decrease as the businesses expand and become increasingly focused on profit and growth. They are also felt to have a lower overall ability to impact climate change, with a much smaller scope and reach than big business, and marginal changes at best.

"I can see a danger where all these green initiatives, directions and regulations are going to cause small businesses to go out of business. Leaving us only with corporations and we could end up with one corp ruling everything." (Engaged Citizen)

The industries which Diarists believe have most potential to bring the UK closer to the net zero goal are the energy and transport sectors, also sectors which individuals feel they have limited ability to create change in themselves.

2.6. What Diarists are expecting from businesses in future

To help uncover their expectations, we split Diarists into 6 groups and tasked them with coming up with business plans for fictional sustainable businesses of their choice. We asked for details of how the company would succeed, grow and thrive, as well as how it would contribute to reaching net zero.

Diarists surprised us by creating plans for purpose-led enterprises embedded in communities with broad views of sustainability. The common features of the 6 plans were a focus on:

- **Purpose**
- **Measurable goals**
- **Social benefits**
- **Broad environmental impact**

Whatever the format or sector of their business, Diarists tell us that a sustainable business should:

- **Maintain credible and authentic purpose beyond profit.** Diarists were keen to see businesses working towards an environmental or social purpose rather than maximising profits, with the B Corp and co-operative business models (introduced by expert speakers as examples) standing out in particular.
- **Have a clear plan to create a demonstrable impact.** Businesses should be able to show both their short and long-term visions for how they are planning to be carbon neutral, or even carbon negative, in the future.
- **Develop propositions that are beneficial for all.** Diarists would happily buy into businesses that make their sustainable products or services simple and accessible without alienating or negatively impacting vulnerable groups.
- **Consider end-to-end impact.** They also feel that businesses need to take responsibility for their supply chains, and not just pass the buck on environmental sustainability.

Case Study: Diarist Sustainable Business Plan

[might need a bit of context – how did this Plan emerge? Details of exercise]

GreenGo – Go Green from your Home

An app-based delivery business delivering packaging-free food and household goods sustainably by electric vans. Regularity determined by demand, starting twice a week, increasing to once a day if enough people sign up, with the option to follow the vehicle on the app and see what's available.

It seeks to promote a sustainable and affordable diet by offering seasonal food, zero packaging, operating a 'pay what you feel' system, and collecting and delivering surplus food from supermarkets.

The business aims to bring the community together. The customers will build a relationship with delivery driver and there will be a social café when the van visits an area, with street food and cooking demonstrations to showcase products. There will also be a loyalty scheme in place for regular customers.

Other sustainable features include:

- **Reusable / no packaging**
- **Deposit scheme** whereby 'messy' goods filled up in the warehouse, customer gives back messy pot, gets cleaned and re-used.
- **Warehouses** held to environmental standards, with **solar panels** and **wind turbines** (putting energy back into the grid)
- **Full transparency** around sourcing, with customers updated on the environmental impact of their purchases.
- **Co-op structure**, where profit goes back into the business and towards supporting people in food poverty in the community, communities are involved in decision-making, and benefit from cheaper goods.

The business is expected to be community-owned, funded by initial investment from users (like Ripple), and a certified B-Corp.

Diarists' starting assumption, as demonstrated in their business plans, was that sustainability must to be at the core of a business's objectives to be credible – but honest communication about impact can shift this view, and despite the focus on purpose, Diarists were willing to accept that actions, even if impurely motivated, are what counts for net zero.

We heard scepticism from Diarists throughout the research about greenwashing, with businesses acting on net zero in a cynical attempt to grow their profits by appealing to the 'green' market, but better understanding of businesses and their practices created a shift in opinion, with positive impacts starting to take precedence over motivations. Learning more about the role of business in reaching net zero, and the interplay with government and individuals has made some Diarists less sceptical overall, leading them to start questioning the assumption that businesses have to be altruistically motivated in order for their actions to be worthwhile.

"I wasn't sure about how businesses were rising to climate change, I think I was sceptical and a bit cynical about the business industries in general before." (Engaged Citizen)

In this respect, businesses appear to be judged less harshly than government, because expectations are lower, but there is a limit to what Diarists are willing to accept, and trust and faith can be fragile. Green practices, products and services must be genuine, transparent and accountable. When this is achieved, even sceptical Diarists feel optimistic about the net zero potential of business; but failing to deliver risks sustainability being viewed as 'insincere' and 'lip-service'.

Going forward, Diarists want to see companies taking all elements of sustainability into account, with a responsibility to focus on controlling carbon footprints from source to sales, as well as to enable and encourage consumers to change their behaviour.

Some Diarists go further and expect companies to make amends for previous damage to the environment, e.g. through carbon offsetting (although many more engaged Diarists had concerns about this, fearing if not done right it would just be more greenwashing), or specific

targeted schemes that could compensate for earlier shortcomings e.g. oil companies offering low-cost insulation for customers who need it.

“It’s funny that big business are ok to pollute us consumers but then want us consumers to pay higher prices for more energy efficient products.” (Engaged Consumer)

Just like expectations of government, there should also be a clear plan for achieving carbon neutrality / carbon negativity, with tracking and regular targets, and a willingness to share data and communicate honestly and accessibly with customers about goals, achievements, and obstacles. Companies are also expected to take responsibility for supply chains and end-to-end sustainability, including issues like workers’ pay and rights, with manufacturing, transport etc. all carefully considered and close attention paid to practices that may seem sustainable on the surface, but come with their own concerns (e.g. EV batteries and lithium mining).

“The business that make an impact and have shown actions are the ones that will make change towards the net zero goal.” (General Public)

Key criteria for climate friendly businesses aren’t just about climate. Diarists take a wider view of sustainability, with a desire for companies to demonstrate social purpose and motivation alongside profit and growth.

Diarists’ inherent mistrust of big business is amplified by their instinctive association of ‘local’ with ‘sustainable’. This adds further weight to the argument for small local businesses which Diarists feel intuitively should have lower emissions. While products automatically being sustainable because they are bought locally may be a misconception, this is a strong belief for Diarists. This means it is tougher for big businesses to win Diarists’ trust and loyalty. However, building connections with and materially contributing to the places in which big businesses operate is seen to demonstrate real commitment to a more sustainability-led business strategy. Where possible, there should be a local production and hiring focus, with companies connecting with the communities where they are based and giving back directly to those communities. Purpose-led models with new ways of working should be considered that centre community at the heart of business and actively engage people in the area.

Diarists also expect a fair approach that prioritises the need to protect vulnerable groups, e.g. those on low incomes, from higher prices and ensures accessibility and affordability of services and products for those least able to pay / access them.

Diarists also highlight the need to enable and encourage consumers to change their behaviour, with this providing another way for companies to be trusted as a climate friendly business. But this trust is fragile and needs to be rooted in action.

Affordability and accessibility of products and services are Diarists’ primary priority, and almost all Diarists factor in the need to make sustainable choices more widely affordable. They are conscious from their own experiences that climate friendly products tend to carry higher costs, and so accept that companies do not always need to have the cheapest options. However, Diarists strongly feel that products and services should be priced fairly and accessibly, innovating to keep costs down and carrying some of the burden for those least able to pay.

Diarists would also like to see businesses take the lead on educating individuals about how to make more climate-friendly decisions. Diarists believe this would involve being transparent about the sources of their materials and products, including explaining the impact of how they reached their end destination on the shelf. A popular diarist-led idea was that of ‘climate

dashboards', akin to the traffic light dashboards which explain the nutritional values of food items. This kind of system was seen to have the potential to help consumers make greener decisions across many areas of life, as well as help to mainstream the idea that the environmental impact of the products we buy is something we should be considering.

Finally, many Diarists focus on the need for businesses to help drive a cultural shift from 'throw-away' to 'recycle or repair'. This would help to decrease overall levels of consumption and reduce waste by ensuring that products last longer, a trend which has already gained support within the food sector through popular apps such as 'Too Good To Go'.

By the end of the net zero Diaries, Diarists were very clear on the changes they wanted to see in the business world, as well as how they wanted businesses to communicate with individuals in future.

We identified a set of recommendations developed by Diarists throughout the research process:

- **Lower the prices of climate-friendly materials** so that products can be built by companies and purchased by consumers at more affordable prices with less impact on the planet.
- **Educate individuals on how to make sustainable choices** and empower them to recognise the power they have to influence which climate friendly products are on the shelves.
- **Set concrete goals of how businesses will act** in the interests of the planet and report publicly on progress against these goals in clear customer-facing language.
- **Prioritise innovation in their field** in order to help keep costs down and take responsibility for the impact on those least able to pay so that no one is priced out of sustainable choices.
- **Build connections with communities** in which companies operate.

2.7. The role of individuals in reaching net zero

With increased knowledge of the scale of the challenge to reach net zero, Diarists' commitment to individual action increased. They express greater determination to make changes in their own lives and contribute to the net zero transition with a collective outlook. However, this increased awareness did little to tackle the concern that individual behaviour would have little impact unless done on a wide scale, and individuals are ultimately seen as having less capacity and less responsibility to take action against climate change than Government and businesses.

Diarists feel that, similarly to businesses, most individuals would likely not be motivated to make sufficient changes without incentives or penalties. At the beginning of the process, more than 2 in 3 Diarists said that individuals may need to be forced to cut their carbon emissions and supported forced change in principle. However, when spontaneously considering mechanisms for this, push measures (e.g. taxes, bans and penalties) are highly unpopular.

While some Diarists do still want to see the government take action by banning unsustainable choices or making them less affordable, the vast majority of Diarists **prefer incentives that encourage individuals to make sustainable choices or adopt sustainable behaviours**, with a focus on making climate-friendly action easier and more cost-effective than alternatives (e.g. subsidised public transport, grants for energy efficient home improvements)

Diarists feel that greater leadership is needed from government to ensure net zero deadlines are not missed, however a balance needs to be struck between engaging citizens and ensuring everyone is able and willing to do their part, and alienating citizens through unreasonable demands and expectations.

Almost all Diarists have increased their estimation of individual agency and have become more confident that individuals can make a difference, with greater understanding of and appreciation for the compound effect of large-scale individual actions, and a sense that collective action can yield change.

“The role for Britain should be that of a torch bearer and the road towards net zero Targets should take into consideration individual, community, corporate and government level.”
(General Public)

While most Diarists agreed by the end of the process that **action on a collective basis can achieve great consequences**, there are a **small handful** of Diarists who are **less likely to feel it is their responsibility** to take action. These Diarists tend to have started the Net Zero Diaries process with little knowledge about climate change or net zero to begin with, and remain wedded to what is a widespread view that actions on an individual scale will continue to hold little value until other actors with greater potential commit to the cause.

Some of the particularly engaged Diarists who had partaken in prior engagement processes on climate change also felt less optimistic about the potential of widespread individual action, and **focus instead on the systemic issues and wider structural changes** that they perceive to be necessary, emphasising the responsibility of government and private companies in taking action.

What Diarists are expecting from individuals in future

As a result of increased knowledge, many Diarists are now altering their consumer choices where this is convenient and affordable, and encouraging others to do the same.

Small, gradual changes that don't cost much or take up too much time are felt to be reasonable by Diarists, and most report making some sort of change to their daily routine, e.g. walking or cycling instead of using the car, reducing meat consumption, buying food on apps that reduce food waste (e.g. Too Good To Go), avoiding plastic packaging by recycling or using refill stations, buying local produce where possible, getting involved in local sustainable farming, buying second-hand clothes and donating / recycling old clothing items. These actions are broadly seen as **low-effort** and Diarists are enthusiastic about making **small changes** that could potentially have a **positive impact on their local community**, if not the climate.

Some participants, especially those who are more engaged, have made more drastic changes to their lifestyles and homes, e.g. installing solar panels or heat pumps, selling or reducing their number of household cars, committing to cutting out long haul flights.

While protesting is considered one of the more powerful civic actions, Diarists are divided on how to go about it, with some seeing it as an effective form of collective action and pressure, and others expressing concern over triggering opposition through controversial approaches. Diarists widely associate protesting in the arena of climate change with **large-scale protest groups** such as Extinction Rebellion or Insulate Britain. They are seen to take extreme forms of action that draw attention to the cause, cause mass disruption for other members of the public and ultimately grab headlines.

“Really impressed with the protest groups and people willing to stick their necks on the line for what they believe in.” (Engaged Citizen)

Some Diarists think that raising awareness of climate change **by any means necessary** is, on balance, a positive thing to do. For these Diarists, using extreme measures that risk generating opposition to the cause is justified if it **engenders increased conversations** around climate change. They compare these protests to other historically divisive forms of civic action, most commonly the Suffragettes, that achieved significant societal and political shifts despite being perceived negatively at the time.

*“No change has ever happened without protest and wake up calls as far as I know.”
(Engaged Consumer)*

Reactions to September 2021 Insulate Britain Protests

The high-profile Insulate Britain protests took place in September 2021 and were therefore on many Diarists' minds during Wave 2 of the research at the start of October.

A few expressed concerns about their methods, advocating instead for more peaceful action.

“The way they are doing it is not the right way of doing it, they go to the motorways and glue themselves there [...] It's very selfish in a sense to stop someone from getting to hospital. They should be going to MPs or knocking at number 10, go to the people that have the real power rather than creating lots of noise and disrupting the whole country.”

– Bee, Engaged Citizen

However, more Diarists applauded the disruptive efforts of the protesters, seeing their actions as necessary and successful in raising awareness of the problem.

“Insulate Britain have been really successful. Most people hate it because they're selfish and fossil fuel addicted, but [Insulate Britain are] raising awareness, and they're asking for the right things, I like that they're ruffling feathers.”

– Adam, Engaged Consumer

“Surely if they are now doing this, they have already tried those other things we've mentioned. Once it impacts your own life, you do start to think about what they're doing.”

– Tessa, Engaged Consumer

However, many other Diarists fear that resorting to extreme measures as part of protests **can be counterintuitive**, creating undue negative media coverage and alienating people from the climate cause. They believe this is especially true in cases where civic action causes

significant disruption to ordinary people's lives, and therefore feel a balance between efforts to grab attention and consideration for smooth running of daily life must be sought.

Diarists do agree that **only a minority of the population are currently fully on board** with the climate change, driving the necessity for those in this minority (which most Diarists now view themselves as part of) to be more vocal moving forwards. However, **choosing the correct form of action** is felt to have particular importance, and most Diarists would prefer there to be a focus on measured and peaceful strategies to win over those not yet convinced of the transition's urgency.

However, there are clear boundaries for Diarists when it comes to their own role in a just transition, and willingness to make small changes does not necessarily translate to an acceptance of making large sacrifices. Individual selfishness and greed (even though this is generally seen as that of 'others') are perceived as key barriers to achieving fairness in the net zero transition. Diarists, especially those who are less engaged, find it easy to revert to a more individualistic viewpoint when faced with current trade-offs and any potential impact on quality of life as a result of such changes.

Whilst our Diarists believe that 'everyone will be winners' by the end of a just transition, they are also heavily influenced by the narrative that the transition to net zero is going to require weighty sacrifices and be costly in the short term. They generally perceived the general public (of which they may or may not see themselves as part of) to be either unwilling or unable to do this off their own back, driving the need for government policy to mandate it (as discussed in section 2.3). Furthermore, while Diarists tended to feel motivated by the need to avoid passing on problems to future generations, they could also become easily caught up in the difficulties of acting now and revert to calls for education and generational change.

This shift towards a stronger feeling of individual responsibility among Diarists themselves wasn't always accompanied by confidence that others could make the same journey without significant interventions from government and businesses. Interestingly Diarists rarely felt that their own experiences would be widely applicable, even though many of them had started from similar positions of disinterest that they felt is widespread within the general public, driving concerns that higher levels of engagement may not be sufficient alone.

Consistent barriers to this were identified across different sectors: a lack of understanding of which choices are really '**worth it**', reluctance to accept **too much disruption** to current lifestyles, and concern about the **impact on the poorest in society**.

To overcome these, Diarists see the need for interventions – particularly from the government – to act as a 'leveller' by helping those who are unable to act with grants and support, whilst penalising those who can act but refuse to. However, there is a great deal of ambivalence among Diarists about how the application of this principle:

- As we will discuss in section 4.2, perceptions of 'normal' have a strong influence on views about what can and can't be reasonably expected of individuals. Where Diarists felt they were being asked to go above and beyond the norm they became reluctant, for example when it came to flying they tended to see one foreign holiday a year as the minimum that 'normal' people should expect.
- Diarists also tended to believe that penalties are less effective than incentives (as discussed in section 3.1 on food, this belief persisted to the point that Diarists

doubted the efficacy of highly successful policies like taxes and restrictions on tobacco).

- And they were much more likely to support policies to penalise organisations than individuals. For example, Diarists wanted to see taxation used to shift commercial transport towards greener options, but preferred incentives like subsidised public transport for individuals.

“If there were government rules/funding/incentives for public and private sectors, and the public to be emitting less carbon there would be a change for the better.” (General Public)

Whilst push measures for individuals received slightly more support amongst Engaged Citizens and Consumers cohorts, there was still no unanimity for which parts of life they would be most willing to see changes imposed. The individual behaviours they were most willing to change was predicated on what they viewed as a ‘luxury’ vs. a ‘necessity’, creating conflicting views on the extent to which things like cost of travelling by car or consuming meat could be penalised in the future. However, there was more widespread agreement amongst Diarists that penalties on areas such as home heating, which currently have fewer viable or affordable alternatives, should be avoided until comprehensive support can be provided for those less-financially able to shoulder the financial implications of making changes.

As understanding of the three main actors grew, i.e. government, businesses and individuals, Diarists began to attribute less responsibility to individuals and more to businesses. This came with greater belief in the power that businesses have to drive sustainable consumer choices, and a higher expectation for them to do so.

There is a strong feeling amongst Diarists that they would like to make climate friendly consumer choices in most aspects of their lives. However, they do not feel that businesses are currently providing adequate opportunities to do so, nor do they believe that current solutions are as effective as they could be.

As discussed in section 2.4, they currently see the higher costs and reduced accessibility associated with sustainable consumer choices as being prohibitive for most in the general public. They feel this will limit the ability for individuals to contribute to the net zero transition in the future until it has been resolved by businesses themselves (with the support of English, Welsh and Scottish governments).

Chapter 3. Reaching net zero in three key sectors: food, energy and transport

3.1. Food consumption and net zero

Food: What Diarists are already doing to reduce the climate impact of their diets

Most Diarists were aware at the beginning of the project that food production contributes to climate change, but only a basic understanding of the varying environmental impact of different food choices/ consumption. Buying locally sourced or organic products, cutting down on food waste and avoiding excessive (plastic) packaging were widely cited as important aspects of an environmentally friendly diet. Choosing plant-based rather than meat-based options was also acknowledged, but less consistently.

Many of the **engaged Diarists are already making what they perceive to be more environmentally friendly food choices**, typically buying local or organic, buying from surplus food outlets (e.g. 'Too Good To Go) or zero-waste food shops and adopting a vegan or vegetarian diet.

Less engaged Diarists also express a desire to buy more local and organic as well as more plant-based food, **but often say that cost is a barrier**. An environmentally friendly diet is seen, by default, as one that is going to be more costly, with few feeling that a diet centred around local, seasonal, plant-based produce can easily be achieved on a tight budget. An actively environmentally friendly diet is not seen as the 'norm' by most Diarists, and there is an assumption that there will be challenges or sacrifices.

"I want plant-based food to be more accessible. It's so expensive now. It could be just as cheap as normal, everyday food but they hype it up because it's healthy food and good for the environment. That applies to organic food as well." (Engaged Citizen)

Most Diarists are reluctant to consider switching to a *completely* plant-based diet, considering this too big a change, and too big a sacrifice for the taste buds, however they are willing and happy to substitute a proportion of their meat-based meals for non-meat alternatives (and many already do).

To facilitate this shift they express a desire for **more direction and education** with regards to what a healthy, climate-friendly diet looks like. Many feel instinctively that the array of processed, heavily packaged, vegan 'alternatives' on offer in supermarkets might not be the right way forward but don't feel they know enough about what the real alternatives are.

"When I go to my local supermarket and see the plant based ranges on a big display, they're very heavily packaged and they look exactly the same as the meat products do. I'd like to see people more encouraged to have more pulses and fresh vegetables rather than over produced fake meats that are heavily packaged." (Engaged Consumer)

Directional guidance is seen as necessary to inform individuals about alternative protein sources and plant-based meals that are still cost-effective. Even Diarists who have been committed to vegan diets in the long-term feel very little is currently being done to entice or widen the pool of knowledge so that more individuals are inspired by the potential for tasty, flavourful, and affordable climate-friendly meals.

At the start of the process, the idea of taxing environmentally *unfriendly* food items didn't gain much support. Diarists typically perceived it as too heavy-handed a response to what, ultimately, are very personal lifestyle choices, and were resistant to the direct impact on household finances.

As a starting point, our Diarists assume that **higher taxes on environmentally unfriendly food would lead to higher food bills overall**, because households either won't, or can't, change their diets to avoid them. They see this as particularly punishing for those on tight budgets, especially given their - and they assume many others - lack of understanding of what constitutes a more environmentally friendly diet over and above local or organic. For those who see a climate-friendly diet as less desirable there is a further concern that people on a low income will be stuck with a 'worse' diet, while those with more disposable income can continue to consume at will.

Case study: Sharif – Engaged Consumer

Sharif was already aware that his food consumption had an environmental impact, although he was uncertain exactly how. He was taking some steps to reduce his food waste and eat less meat and ranked eating more fruit and vegetables and less meat as the second most impactful action he could take to reduce his own carbon emissions. He has bought his fruit and vegetables in plastic packaging since the start of the COVID-19 pandemic, due to concerns about virus transmission, but hopes to return to buying loose produce soon.

The food expert presentation in Wave 1 – in particular information about methane emissions from cows and the impact of transporting food – led Sharif to start making a more conscious effort to buy more locally-grown fruit and vegetables, as well as substitute more of his meat meals for plant-based versions. For example, he has been making vegetarian lasagnes, motivated also by the health benefits of this switch. He has also been introduced to the 'Too Good to Go' app by a fellow participant, which offers cheap food bags and reduces food retailers' waste. Sharif would like to see a local fruit and vegetable delivery scheme in his area, which includes recipes on how to use the food delivered and minimise waste.

Food: What are Diarists willing to do and what do they want to see

As Diarists learnt more about food and climate, they came to see the environmental impact of food production and consumption as a complex system that they don't feel well equipped to navigate.

While Diarists did, with some prompting, start to appreciate the power they can have as consumers they **don't feel that the food industry is making it easy for them to make the right choices**. They tend to focus their criticism on what is clearly visible to them as consumers, i.e., the products they buy and where they buy them, as opposed to issues that are 'hidden' further down the supply chain: emission from agriculture, or the impacts of land use change such as deforestation, for example.

Most Diarists had little understanding of the carbon footprint of different foods, and tended to conflate this with ‘food miles’ - fuelling the perception that locally produced food is the most climate-friendly option by default. They found it difficult to figure out how to balance the different impacts, for example whether locally sourced meat was ‘better’ for the environment than air-freighted vegetables. And when making the right choice felt difficult, it was easier to disengage, make the easy or habitual choice, or blame other actors.

“We would be without so much if we had to live only on locally grown food with low carbon footprint.” (Engaged Consumer)

In this context there is a strong desire for a **more tangible ‘labelling’ of the environmental impact of food** items for sale to aid decision-making (similar to the sugar/ fat/ salt nutritional labelling already in place) and allow individuals to make more informed choices.

“People need to be informed that buying locally produced food isn’t necessarily going to be the least carbon kind way, some of it is grown through very intensive practices, and therefore it might be less carbon-intensive to buy food that’s growing further afield. I think we need to have a system whereby we kind of rank, the total carbon cost of any activity so that it puts it in a kind of an understandable format for everybody.” (Engaged Consumer)

Supermarkets are top-of-mind target for criticism with regards to achieving net zero in the food sector. These are the most visible actors in the food system, the centre of most Diarists food routines and are often singled out for criticism in the media.

The Diarists’ criticism tends to be centred around the use of what Diarists perceive as an unnecessary amount of food packaging, a real bug bear, and supermarkets are seen to have a key responsibility in reducing the amount of plastic associated with purchasing food. This is assumed to have a significant climate impact, as well as being more generally wasteful and harmful to biodiversity. Although few Diarists are able to articulate in detail the mechanism by which plastics are harmful, they refer to high profile news stories and documentaries, with references to animals particularly motivating. The plastic bag charge is seen as a real success story in changing behaviours, and Diarists often call for this to be replicated, although are less clear about the mechanism.

Misconceptions and contradictions: taxes, charges and restrictions

Diarists rarely felt positive about schemes to change behaviour via negative reinforcement such as taxes, charges or other pricing signals. Part of this reluctance, as described above is because of the perception that these charges are regressive and will affect those on the lowest incomes most. However they also tend to assume that these measures are ineffective – sometimes in the face of significant evidence to the contrary as with smoking. There are also examples of schemes they see as successful, like the plastic bag charge, which are in fact based on costs to consumers. This poses a significant challenge for policy makers wanting to prioritise the most effective measures.

Diarists see the responsibility for reducing plastic packaging lying with the **retailers** themselves as well as the **government**, as the key players who have the power to bring about

these changes, with the plastic bag charge seen as a successful example. Implementation of **deadlines** is seen as a reasonable tool in order to speed up this process.

A widely supported solution for decreasing plastic usage is **refill stations** which many Diarists across all groups are keen to see more of. They believe refill stations should be more widely within communities, including within online grocery shopping tools. Some Diarists question why large chain **supermarkets** are not also able to offer refill stations within their stores, rather than this responsibility falling solely on independent stores.

Imagining a sustainable food system: nostalgia and tradition

When tasked, in Wave 3, with creating a sustainability plan for a fictional business a most Diarists decided to focus on food centred businesses. These businesses' focus ranged from a local recycling scheme to a sustainable food delivery business but there were a number of common themes:

- Zero-waste/ refill models
- Locally produced and seasonal goods
- Zero carbon operating models (inc. transportation)
- Not-for profit/ co-operative business models with a strong emphasis on the business having a role in the local community

Diarists presentations of their business plans often focused on the values of the business, the role in the community and in the lives of local people, and the knock-on effects such as education and social cohesion. They implicitly, and sometimes explicitly, referred back to imagined historical practices, in one case going as far as proposing delivery by horse and cart, despite the only example of a food business given in the stimulus being a zero emissions farm using technology to reduce emissions. This sense of nostalgia for a simpler lifestyle was presented as an ideal, but in other conversations through the process it was acknowledged to have drawbacks, and to be unrealistic. This ranged from the desire for convenience for busy people, to the acknowledgement that seasonal diets could be restrictive

In contrast with energy and transport, where technology was seen as an important part of a net zero future, high-tech and innovative food products were seen as suspicious and not appealing. There were significant practical challenges that participants struggled to overcome, such as the space constraints for local agriculture in urban and suburban areas. Coupled with the perception of food choices as more firmly in the private sphere, and the absence of any distinct government policy on the environmental impact of food, Diarists seem to fill the gap with a vision of a golden era, which may be dangerously unrealistic.

However, the most popular of the business plans, according to a show of hands from Diarists, was a compromise where sustainable, local produce and unpackaged staples were delivered by zero emission vehicles on the same timeframes as major retailers. This shows that there is a space for new narratives about food to emerge, which are both attractive to consumers in the real world, and more sustainable than current systems.

As Diarists heard more about the role of taxation in the food system from experts in Wave 4 of the research Diarists began to see it as a potentially important lever. The idea of increasing taxes on environmentally unfriendly food - to more accurately reflect the inherent cost of the impact on the climate - and use the money raised to make climate friendly food more affordable chimes with our Diarists. Many have come round to the idea that a change needs to be made and that individual consumers need support in making it.

"If this a change that needs to be made, then it has to happen at some point. You will have to push for some people to change by making it less of a commodity. If it was more expensive, even your TV chefs would be doing recipes without meat." (Engaged Consumer)

Another area where Diarists - across both urban and rural locations - want supermarkets to do more is to ensure that their **home deliveries** are being completed in a **sustainable** way with electric or hydrogen vehicles. Post-Covid-19 is seen as an opportunity for supermarket brands to **leverage** the public's increased **reliance on home deliveries**, and reduce the number of individual journeys being made as well as the stores' carbon footprint.

Food: What are the challenges and areas Diarists are resistant to change

Whilst there is some resistance to making wholesale changes to food consumption amongst Diarists the main issue isn't reluctance but rather the fact that the food system's impact on climate is a far more complex topic to grasp than our Diarists initially assumed.

The lack of information and clear sign-posting (e.g. through labelling of products) and the perceived failure of food producers/ manufacturers and retailers to promote and offer more climate-friendly food products in a more climate-friendly way (i.e. less packaging, less waste etc.) is a source of frustration, with many feeling that a climate-friendly diet is currently too costly and too effortful for widespread adoption. Last but not least, there is - especially among the less engaged Diarists - **a persistent reluctance to completely overhaul one's food consumption** in the quest to contribute to the path to net zero. Specifically meat and dairy consumption is contentious with many being open to considering cutting down, but not giving up completely.

"I'd like to see a food label that gives points for locally produced environmentally safe products." (General Public)

3.2. Energy and net zero

Minimising energy use at home and **changing the way they heat their homes** are felt by the Diarists to be two of the **most effective** actions to reduce their own carbon footprint.

All Diarists are already taking **small measures** to **conserve energy** at home, although these are often **financially** rather than environmentally motivated, particularly since the start of 2022. A smaller number have made or plan to make changes to the fabric of their homes such as **installing heat pumps or solar panels or improving insulation**. Most others are very open to making these changes in theory as they like the idea of having an eco-friendly home and do not perceive this to require any **sacrifices** to their lifestyle. They tend to cite **practical barriers** such as the **expense**, insufficient or difficult to navigate **government grants**, or their property being **unsuitable**. **Financial** barriers, **ambiguous information**, and **exaggerated perceptions of the complexity of the process** are also preventing Diarists switching to **renewable energy providers or tariffs**. For Diarists to take substantial actions to the reduce or decarbonise their household energy consumption, these actions must be made **affordable and straightforward**, with information made easily accessible. Diarists also tend to see this transition as **gradual** rather than immediate; many are resistant to replacing their existing gas boilers until they **stop working** or are particularly inefficient, expressing concerns about their **disposal** as well as the **upheaval** involved.

In terms of energy policy, Diarists would like to see an **end to fossil fuel subsidies** and more government **investment in renewable energy production**, although there is less certainty around nuclear and hydrogen power. Diarists are particularly enthusiastic about **community-based initiatives**, such as community-owned renewable power generation and community heat sources, to ensure **greater inclusivity** in the net zero transition. **Tighter regulations** to ensure **new builds** are energy efficient, **energy audits** for original homes, and substantial grants for retrofitting are also felt to be important actions. **Responsibility** in the energy sector is predominantly felt to lie with **government**, to invest and regulate, but Diarists would also like to see both **energy and construction companies** doing more.

Energy: What Diarists are already doing to reduce their own energy use

Most Diarists are making small behavioural changes to reduce household energy usage, but this is not always environmentally motivated. The proportion of Diarists making these changes increased through the course of the project.

At the start of the research, those Diarists who were very engaged with the issue of climate change were already taking measures to **limit their energy** consumption at home with the primary aim of reducing their environmental impact, such as purchasing **energy efficient appliances** or **heating only when necessary**. Many general public Diarists also already made some **efforts not to waste energy**, for example always turning off lights when they leave a room, but they tended to cite **financial motivations** or their **'upbringing'** as the

reason for this, or were simply following a more general **social norm** around not being **wasteful**.

“I make sure lights are only switched on when necessary same with the electric cooker. I always do this as this is how I’ve been brought up.” (General Public)

Discussing the efforts of fellow participants in this area, and, to a lesser degree, learning from experts about the climate impact of home energy consumption, has led engaged consumers and general public Diarists to make **more** changes to conserve energy in their homes. They are still making fewer, or less significant, changes than engaged consumers, but actions include:

- More actively **saving electricity** through switching off lights, not leaving devices on standby, and only boiling the necessary amount of water in the kettle.
- Using **smart meters** to monitor their own energy usage, which leads Diarists to feel ‘challenged’ to reduce their energy consumption.
- Choosing more **energy efficient appliances** when it comes to purchasing, for example, fridges, dryers, and lightbulbs.
- **Cutting down on heating** by only heating one room in house or wearing more layers.

It is important to note that these actions are still **not solely environmentally motivated**. In the third wave of research, in November 2021, over half of the Diarists cited a concern about climate change as the main reason for taking these measures, and a further third cited a combination of cost and environmental concerns. However, in the fourth wave, in January 2022, actions to conserve energy are **solely financially motivated** for almost a third of Diarists, and again a third cite a combination of environmental and financial motivations given **rising energy prices**.

Some more engaged Diarists had already chosen to switch to energy suppliers offering renewable energy, with a further few now investigating the possibility. Several of the more engaged Diarists report either having already switched to renewable energy suppliers or to be investigating the possibility since participating in the research. This is purely motivated by a desire to reduce their own carbon emissions, as there is no reported financial benefit of switching to a green tariff.

A smaller number had already installed solar panels, heat pumps, or insulated their homes prior to the research. A number of Diarists already had solar panels or a heat pump or had improved the insulation of their homes prior to the start of the research. For a minority of passionate individuals, this was a conscious action to reduce their own carbon emissions, but for others there were often a combination of factors at play, including:

- Looking to **save money**
- Taking advantage of a **grant**
- Insulating a particularly **old, cold** house
- The house **already having a heat pump** when moving in
- Living in an area where **gas is not available**

Those who have already made one or two changes to the fabric of their homes are more likely to seriously consider further alterations, although it is unclear whether this is as result of their experience or their financial and living circumstances.

Case study: Tessa

Tessa is retired and lives with her two cats in rural South Wales. She is very informed about the issue of climate change and makes efforts to reduce her carbon footprint in several aspects of her life, believing that it is her responsibility to do as much as she can.

2 years ago, Tessa moved into an old, stone-built cottage, with little or no insulation. The heating system consisted of an old and inefficient set of electric storage heaters and an electric immersion heater for hot water. The house was therefore very cold in the winter and autumn months.

Tessa wanted to make the house warmer and more comfortable to live in, whilst also reducing heating bills, and to do so in the most environmentally friendly way possible. She first insulated the stone walls with wood-fibre and lime plaster, followed by the loft with sheep's wool. In October, she replaced the storage heaters with an air-source heat pump, which provide heated radiators and hot water from a renewable, emission-free source.

Although not a key motivator for making these changes, Tessa was glad to find out she would be eligible for the Renewable Heating Incentive and is disappointed that this will end in March, with no planned replacement.

Energy: What are Diarists willing to do and what do they want to see

Diarists want to see a diversification and eventual decarbonisation of the UK's energy resources

Almost all Diarists believe the government should be **investing substantially in renewables** and in particular taking advantage of the UK's position as an **island**, with tidal power, hydropower, and offshore wind farms. For some, this is tied to mounting concerns about energy insecurity and rising prices, detailed at the end of this section. Other sources, such as **nuclear and hydrogen**, are **more contentious** among the Diarists, again detailed later in the section. Simultaneous with this investment in alternatives, a few more informed Diarists highlight – and other Diarists agree – that the Government must **remove fossil fuel subsidies** urgently.

The 2035 target for energy production to be 100% renewable is seen as a **necessarily ambitious target**, although there is some scepticism around whether this will be reached. As evident in discussions about other sectors, Diarists want to see more transparency and accountability to ensure this target is met.

Whilst the **government** is seen as **primarily responsible** for this aspect of energy policy, both in terms of investment and regulation, **energy companies** are also felt to have a role to play in diversifying their sources, as seen in the business plan below.

Case Study: Business Plan for a big six energy company

Following the Wave 3 workshop which focused on the role of business for meeting net zero, some of the Diarists designed sustainable business plans for well-known big businesses.

One of the more engaged Diarists proposed that one of the big six energy companies, under the new slogan 'Powering up the Future', should:

- Move to 100% renewable energy.
- Grow the business by investing in the development of more energy-efficient, affordable white goods.
- Retail and repair products such as ground/source heat pumps and PV tiles.
- Invest in community energy schemes.
- Share their profits with developing nations.
- Protect the poorest from unaffordable price hikes.

Diarists show a particular enthusiasm for community-based approaches

There is appetite among Diarists for more community-based approaches to energy. A few had prior experience of these in their local area, but the majority of Diarists were introduced to the possibility by those Diarists with experience as well as by a presentation detailed below from Sarah Merrick, from Ripple Energy, detailed below. These ideas gained **significant traction** amongst the Diarists, and proposals included:

- A **community heat source**, possibly using a brownfield site.
- Developing **community-owned** renewable power generation, including like that described in the box below, presented to the Diarists by Ripple Energy.
- Installing **solar panels across terraced houses**
- Local authorities **retrofitting groups** of houses at one time

Expert Presentation: Ripple Energy

Sarah Merrick presented to the Diarists the concept of Ripple Energy, which allows individuals to part-own a wind farm to power their homes. Consumers can purchase shares in the wind farm, owned by a co-op society, worth anywhere from £25 to the whatever would generate 120% of their annual electricity consumption. Then, once the wind farm starts operating, their homes will be supplied with electricity from the wind farm, at a cheaper rate than average energy tariffs. This was a very popular suggestion among the Diarists, although there were some concerns about the accessibility of this for lower income households.

"I am very interested in this - how do I invest?" (Engaged Consumer)

*"Why is this not out in the public domain for people to access and utilise?"
(General Public)*

“What about if you cannot afford to be an owner? The poor are not being thought about?” (General Public)

Driving this community focus is a desire for **greater inclusivity** and **collectivism** in the net zero transition in the energy sector. The push for heat pumps, for example, is seen to **exclude the poorest** and those whose accommodation is unsuitable. There is also a sense that if local communities benefit, there will be **more support** for infrastructure for renewable energy generation.

“It's good to get together as a community and do things like that, I think it's absolutely great. It's a shame when the energy goes back into the grid and someone else gets it when you produced it [...] It is about being inclusive.”
(Engaged Consumer)

Net Zero Strategies for the UK's Energy Sector

Following a discussion of the Government's net zero Strategy, and building on all the discussions from previous waves, in the final wave Diarists designed their own net zero Strategies for the food, energy, and transport sectors. These were two groups' strategies for the energy sector:

Net Zero Strategy: Energy 1

1. Move towards **sustainable, cleaner** energy and away from fossil fuels, define the future role of nuclear power, and establish local **community** schemes for sustainable energy.
2. All **new builds** to meet the highest standards of energy efficiency.
3. Avoid **energy waste** through storage and clamp down on energy theft.
4. **Energy audits** to understand how much needs to be done on existing households and determine a strategy. Install compatible **smart meters** in every house and local authorities to **retrofit** homes where possible and cost-effective.
5. Energy **subsidies** or **income-assessed energy prices** for businesses and individuals, recognising that this is complex.

Net Zero Strategy: Energy 2

1. Take advantage of our unique position as an island, and become world leaders in **wind, wave and tidal** energy.
2. Make changes to **buildings** so they require less energy to run through retrofitting, insulation and holding housing developers to higher standards.
3. Invest in our **energy infrastructure network** and ensure this works efficiently to distribute and share energy across the country.
4. Reduce the subsidies provided to **fossil fuel companies** and increase regulation against them.
5. Create a system which makes it easier for individuals to **understand** their own carbon emissions, and hold private businesses to higher standards by forcing them to be **transparent** about their energy use and **accountable** for reducing it.

This is consistent with Diarists' perspectives towards other aspects of the net zero transition, such as the appetite for **community allotments** and **food waste reduction projects**, as well as the finding in the Climate Assembly report that **80% support local solutions**.

However, Diarists do not tend to consider the finer details of these propositions, such as who would operate these schemes, how they would function in practice, and how they would be scaled.

Diarists want to see regulations for new homes to be more energy efficient, although they do not tend to be aware of any particular standards to measure these by.

Another recurring suggestion is for **tighter regulations** on **housing developers** to ensure **new homes** are built with better insulation and even solar panels. This is seen by Diarists as a missed opportunity and another simply strategy to reduce carbon emissions from energy at home. There is also significant appetite for government investment in **energy audits** and **retrofitting** older homes. However, there is little discussion about **funding and feasibility**, and Diarists tend to over-estimate the potential impact this would have given how few houses are built each year relative to existing stock.

Energy: What are the challenges and areas Diarists are resistant to change

Most Diarists would like their home to be more energy-efficient, and **do not** perceive more major changes to their energy consumption at home as requiring **significant sacrifice** – unlike giving up meat or flying. However, they identify various **practical barriers** to implementing changes to their energy consumption at home, as well as perceiving the processes involved to be **complicated** and **difficult to navigate**.

- **Make physical changes to their homes**

Despite limited knowledge among most Diarists at the start of the research, many have become more aware of the emissions-reducing potential of retrofitting measures including heat pumps, solar panels and improvements to insulation. Conversations with other participants as well as with experts have led Diarists to feel more open to and interested in making these changes to their own homes, though none have taken the step as of the final wave. Whilst a few highlight the potential **disruption** these changes may cause, most cite **practical barriers**, such as:

- **Prohibitive costs**, including indirect costs such as of **redecorating** after the installation. These concerns are exacerbated by the current cost of living crisis.
- The **Government's Green Homes Grant** and its replacements are thought to be **insufficient** and **complex**, and the **delay in payback** is especially unattractive to Diarists. These concerns are even raised by those who have not actually contemplated making the changes themselves, suggesting the shortcomings have been particularly **visible and impactful**.
- Although some would like to see means-tested forms of support, two Diarists report being disappointed to find out they are **not eligible** for grants due to **not receiving social welfare payments**.

- Not all houses are suitable, for example due to being in a **conservation area** or **facing the wrong way** for solar panels to be effective.
- Living in **rented accommodation or social housing** and therefore being unable to make these changes.
- Uncertainty about staying in current property **long term**.

"I wanted to install solar panels from the same company who installed ground heat pumps, but when I looked at the payback it was going to take me 7 years. I will be 80 years old in 7 years, and thought I would save that for dementia care or something." (General Public)

"If people are paying say £2,000 for a normal boiler, to get it fixed, how could we upgrade to something [a heat pump] that is beneficial to the climate but that could be double that price, how would you get someone to invest in the future if it costs so much money to start with." (General Public)

Switch to renewable energy providers

Many Diarists, mostly commonly those who are more engaged, would like to have more control over their own energy supply and for their energy to come from renewable sources, but relatively few have made the switch to renewable providers or green tariffs. For most, this is due to **price and reliability** being the primary factors in choosing an energy provider and green tariffs are often more expensive. Additionally, it seems the information available online is **ambiguous** or the process of switching **difficult to navigate**. For example, one diarist erroneously believed accessing these suppliers was **geographically constrained**, whilst another had a negative experience of being **overcharged**.

There are also concerns about **transparency** and **accountability** of these energy companies, and **scepticism** as to whether they are sourcing energy from where they claim to be.

"Shopping for energy is damned difficult. A lot of companies are saying their electricity is green and they only get electricity from renewable sources and how the heck does anyone know that? We were signed up with one of these providers [...] by the time they went to the wall they owed us hundreds of pounds because they'd been charging us too much." (Engaged Consumer)

"Unfortunately a lot of this information is either not available or is not presented in a clear manner (i.e. the actual electricity used in the house could come from any source - it is only that the supplier pays for a certain amount of generation from specific sources)." (General Public)

Energy: What are the challenges and areas of resistance to change

Unlike with food and transport, the Diarists are not **actively resistant** to making the changes necessary to reduce the carbon emissions from their energy consumption at home. There is a sense that if even the more substantial actions like installing heat pumps were made cheap and hassle-free, Diarists would be willing to do them.

"It's a bit of a grey area at the minute with regards to changing the boiler, do we go for a more efficient one now or hang off until heat pumps become more affordable via a government grant scheme." (Engaged Consumer)

There are, however, some areas of energy policy the Diarists agree on less:

- There is uncertainty around some specific low-carbon energy technologies which are perceived to be 'risky', detailed in the box below.
- The Government's commitment to **end the sale of gas boilers by 2025** was misunderstood by a few Diarists – or possibly distorted in the media – as meaning gas boilers need to be replaced by this date. There are concerns both about the **disposal** of these gas boilers and the **cost to individuals** of having to install heat pumps, therefore indicating that **a lack of clarity may hinder support**.
- Relatedly, the shift is often seen as generational or **long term**, rather than more urgent; Diarists are **less willing** to replace their **existing boilers** until they stop working or are particularly inefficient.

Energy Technologies

Various energy technologies were debated as part of discussions about party manifestoes and the Government's net zero Strategy. There is substantial literature that has explored in greater depth the acceptability of these technologies among the UK public, including the 2020 [Climate Assembly UK Report](#) and a recent [Public Dialogue on Advanced Nuclear Technologies](#). However, the following themes emerged amongst the Diarists:

- Nuclear power is **polarising**. Several are in favour of investment in nuclear energy, as a lower carbon alternative to fossil fuels that is potentially **more reliable** than renewable energy. Others express concerns as – or on behalf of – **local residents** and around **waste**.
- Whilst some Diarists are **optimistic** about the potential of **hydrogen power**, following related Government commitments or experience of living near a hydrogen power station, others question the **timescale** and highlight technological and infrastructural **limitations**.
- There is some **enthusiasm** for **carbon capture technology** among the very few aware of this.

There is **limited knowledge** on all three technologies and many Diarists feel unable to comment.

The **renationalisation** of energy resources is another polarising issue. A number of Diarists are strongly in favour of this, to ensure environmental good is prioritised over private profit, whilst others are more resistant, due to the perceived cost to the government, as well issues with state-owned enterprises in past.

Despite in-depth discussions about renewable resources, heat pumps, and housing regulations, the most top-of-mind concern around energy policy for the majority of Diarists right now is ultimately rising prices, with their thoughts detailed in the box below. **In total, sixteen of our Diarists, typically those who are more engaged, spontaneously perceive the energy crisis as a further reason for the Government to accelerate investment in renewable energy production and / or retrofitting homes.** On the other hand, by the time

of the final wave in January 2022, no Diarists were calling for a return to an increased reliance on fossil fuels in order to reduce energy prices either, demonstrating their persistent desire for the government to be future facing in its response to the crisis.

Energy Crisis

During the second wave of research, in early October 2021, Diarists read and responded to an article from Sky News about rising wholesale energy prices. For most, this was new and alarming information, although some were sceptical and felt the article was fearmongering. Diarists generally felt it indicated the need to find alternatives and end reliance on fossil fuels, and if writing the article themselves would urge the public to consume energy more wisely.

The final wave of research took place as energy prices began to soar, in January 2022. Diarists responded fairly consistently when asked about their experiences of and feelings towards the energy crisis:

All express concerns about the impact of the rising prices on themselves or other groups in society, particularly the elderly and those on low incomes who they fear may be forced into an 'eat or heat' situation.

To varying degrees, all report taking action to conserve energy (most frequently gas) in their homes, including:

- Turning the thermostat down and wearing more layers
- Heating only one room
- Minimising number of times they cook in a day

If prices remain high, most Diarists plan to cut back on luxuries and budget better, whilst several foresee needing to take on more work or even go into debt. There is appetite for government action among most Diarists, with some variation on what form this should take:

- Most propose a price cap on energy companies so that shareholders rather than consumers bear the brunt of the rises.
- Many would also like to see more direct support for those on lower incomes, including to improve insulation.
- Unsurprisingly, those who are more engaged with climate change see the crisis as further reason for investment in renewables and grants for retrofitting. However, many others do not connect the energy crisis with decarbonisation, focusing solely on the immediate financial difficulties it poses for themselves or others.

Many are uncertain about the impact of the energy crisis on the UK's net zero goals, but Diarists generally foresee either:

- A positive impact given that people are consuming less energy to save money.
- A negative impact as higher outgoings on energy may prevent people purchasing solar panels, heat pumps, and electric vehicles.

3.3. Transport and net zero

Transport: What Diarists are already doing to reduce the climate impact of their travel

A reduction in car usage is front and centre when it comes to what Diarists believe they can do to contribute to the path to net zero. But it's also one of the most difficult things for most Diarists to imagine for themselves.

Throughout the research, **a considerable number of Diarists changed their habits regarding transport**, with many becoming more mindful of their car usage. While many Diarists (including less engaged participants) had reduced how much they travelled due to the Covid-19 pandemic (e.g. less commuting), they had also reduced their car usage during the research period by being mindful of walking and cycling more often.

Some participants also began to use public transport more frequently where possible, as well as introducing car sharing as a transport option in their lives.

However, the majority of Diarists felt that it would be difficult to wholly give up on car usage in favour of using public transport, car sharing, cycling etc.

The main barriers perceived were linked to the **perceived unreliability of public transport** infrastructure outside of London and **the cost of public transport**, particularly the cost of train fares. **The convenience afforded by cars** is something that many are reluctant to give up on and for some **the safety aspect** of cars - compared to public transport or walking - is an important factor. The provision of cycling lanes is seen as highly variable depending on where you live and therefore not an option available to everyone.

Case study: Natalie – Engaged Consumer

Natalie is a passionate environmentalist. She gave up her old, polluting car in April 2021 with the intention of waiting until there were affordable, greener options available. She was walking as much as possible and using public transport, taxis, or car sharing when necessary. At the start of the research process, in September 2021, she was already frustrated by the inconvenience of not having her own car, such as the lack of coronavirus safety measures on the bus and not being able to take things to the dump. In January 2022, she 'caved' and bought a second-hand car, due to the unsafety, unreliability, and uncleanliness of alternative modes of transport.

Diarists have widely accepted that the future of transport includes a societal-wide move to using electric vehicles and phasing out petrol and diesel cars, with more engaged consumers most likely to have switched to using electric vehicles.

Those that have made the switch to an electric or hybrid vehicle are generally happy with their choice, however, some niggles in terms of provision of charging points, i.e. not sufficiently rolled out (yet).

For those yet to make the change the movement towards electric vehicles comes with two main concerns:

- The largest and most difficult barrier to overcome is the **cost of purchasing an electric vehicle**. EVs are seen as out-of-reach for most households due to their high upfront cost. Grants and funding schemes are seen as crucial to ensuring individuals from all walks of life are able to partake in this change.
- There is also widespread concern about the **emissions created by manufacturing** electric vehicles in the first place, as well as the **mining involved** in the creation of EV batteries. Until manufacturing can be carried out in a more sustainable way, many Diarists see the movement towards electric vehicles as counter-intuitive.

Air travel, whilst less frequent than car usage, is seen as a more contentious category of travel for cutting back on. Many of our Diarists feel quite strongly that the occasional holiday to a destination reached by air isn't too much to ask for and are reluctant to cut out flights completely.

A **systemic change** is seen to be needed when it comes to air travel, with a strong belief from some that planes will continue to fly with or without passengers on board (at least unless significant numbers change their holidaying habits - which the majority is reluctant to do).

Transport: What are Diarists willing to do and what do they want to see

Our Diarists are in favour of a timed phasing out of petrol and diesel cars, understanding that the shift cannot happen overnight.

Taking into account their understanding of emissions created in the manufacturing of vehicles - both conventional and EVs - Diarists buy into the idea that there should be a phased stop to using petrol and diesel cars.

"I believe the diesel and petrol car [aspect of the Government's NZS] is a really good one because it gives a really realistic timeframe of transitioning. Because the worst thing we could do for vehicles at the moment would be to dump all of our engines and move to electric cars." (Engaged Consumer)

To aid the transition to a situation where all cars are zero-emissions capable they call for more grants/ funding schemes to ensure that the move is fair and takes into account those on limited means. Given the current perceptions of EVs being out-of-reach for most households due to their high upfront cost our Diarists are strongly in favour of more mechanisms to make EVs affordable more broadly. The mention of grants to subsidise electric cars in the Government's NZS is welcome but scepticism still abounds as to the extent this would make EVs affordable to all.

"Further funding of 620 million for grants, for who? Grants to whom, for whom?" (Engaged Consumer)

The mention in the Government's NZS of investment in electric charging infrastructure is welcome amongst those who already have an EV and have experienced the occasional hick-ups with charging.

Throughout the NZD process there is a realisation amongst the Diarists that whilst EVs are part of the solution there is a broader need to address the reliance on cars and change our society's the car centric culture.

Car usage - and ownership - is very much **seen as the norm** amongst our Diarists and many struggle to see how they would cope without their car or simply feel reluctant to make the changes to their lifestyle that not having a car would entail. Although, on the flip side, there is a realisation, amongst some, that not being so dependent on cars can have benefits not just for the environment but also for the individual's health and wellbeing.

"Getting people out of cars is going to be a massive struggle. It's almost engrained that as soon as you turn 17 you get your license and get a car." (Engaged Consumer)

There is a strong sense that **alternatives to individual car usage/ ownership aren't up to scratch** and our Diarists perceive that a move away from cars needs to go hand in hand with improvements to public transport and better environments for pedestrian and cyclists.

"We need better public transport! And in terms of cycling, our council says it's made things better for cyclists in Leeds but from what I've seen, it's a mess. They've done one on a residential road where cars are parked on the cycling lane!" (Engaged Consumer)

With the input from experts our Diarists also realised the importance of considerations around transport when **planning for new builds and local planning**.

"House builders also often build houses anywhere with no consideration for transport links, leading people to be forced to buy cars." (Engaged Consumer)

Case study: Fiona – Engaged Consumer

Fiona is 71 years old and lives alone in Hebden Bridge, a rural village in the Pennines. She limits her consumption in most aspects of her life, such as through buying only second-hand clothes, eating a home-cooked vegetarian and vegan diet, and avoiding plastics wherever possible. However, she confesses that one contradiction to her 'simple life' is her beloved campervan, which she uses to travel all over the UK. Despite how much joy she gets from her travels, she feels a huge amount of guilt owning this 'luxury item' that it runs on diesel. Whilst participating in the research, she began contemplating how feasible and affordable it would be to explore remote parts of the UK without her campervan but did not decide to give it up, as she fears she would feel too trapped without it.

There was a reluctance, amongst Diarists, to properly engage with the environmental impact of air travel and what this might mean for their future holiday plans.

As with car usage/ ownership, **taking a flight to go on holiday is seen as the norm** and most of our Diarists are unwilling to cut this out of their lifestyle, even when presented with evidence of the level of emissions this type of transport entails.

"Did I hear correctly that one flight to Spain is the equivalent of a year's driving?" (Engaged Consumer)

Our Diarists are by and large **sceptical that innovation** in the way air travel is delivered is going to allow us to keep up with our current habits and practices, having seen and heard very little evidence that a substantial shift is going to be achievable.

Responses to air travel-related measures in NZS

The target in the UK government's net zero Strategy for 10% of aviation fuel to be sustainable by 2030 was met with surprise and disappointment among Diarists, for reasons including:

- 10% is felt to be a very low figure given the well-known, significant greenhouse gas emissions produced by aeroplanes.
- There are concerns about higher prices for 'sustainable flights' which deter customers who cannot or do not want to pay extra.
- This does not address the root of the problem as it does not seek to reduce the actual number of flights; there should instead (or additionally) be a target to cut down

Whilst not as top-of-mind as individual transport usage, our Diarists perceive that air and road freight is an important area to address, although one that they struggle to understand the 'ins and outs' of.

The most common response to what could be done to address the impact of freight is simply to cut down on the amount of goods being transported and to cut the distances covered (e.g. by buying more locally produced food).

There is little further understanding of how a reduction in emissions from freight could be tackled and there is low awareness that some lorries are beginning to use more climate-friendly fuel sources, e.g. hydrogen.

What are Diarists willing to do in the future regarding their own transport habits, but don't feel able to?

The cost of an electric vehicle, compared to a conventional one, is a real sticking point and most Diarists feel that EVs are out of reach for them. Whilst grants and subsidies are welcome in theory, in practice most of our Diarists still believe that an EV would be too much of an upfront investment to stomach for their household finances.

"I would love an electric vehicle but on an income usually under £10,000 a year I can't see it happening." (Engaged Consumer)

There is a strong sense amongst our Diarists that whilst they'd be willing, in theory, to switch away from cars, they wouldn't be able to since the provision of alternatives isn't up to scratch.

Many of our Diarists perceive that the UK has prioritised transportation by car for so many years that transitioning to a different model is going to require a real shift and serious investment in local - and national - infrastructure. They are, by and large, not willing to give up

on convenient and easy travel afforded by cars without evidence that switching to alternatives isn't going to have a detrimental impact on their day-to-day lives.

Transport: What are the challenges and areas of resistance to change

Our Diarists are largely sceptical as to how transport - especially when it comes to individuals' day-to-day lives - is going to become more climate-friendly without a wholesale shift in attitudes and societal norms.

Cars are very much front-of-mind for our Diarists and whilst electric vehicles are seen as a way to shift to a more sustainable car-enabled society the Diarists realise, with ever greater clarity throughout the NZD process, that EVs come with their own emissions price-tag, and that the future is likely to mean less car ownership overall. They are, however, by and large not convinced that there is enough focus on alternatives to ensure that individuals' day-to-day lives can function as smoothly as they currently do, and many will hold on to their cars for as long as they can.

*"People get used to and rely on cars, it is very difficult not to use them."
(Engaged Citizen)*

Chapter 4. Communicating net zero: learning from 6 months of conversations

How our Diarists views, and behaviour, evolved in response to new information, and the influence of their peers

4.1. What changed for Diarists over the life of the project:

Optimism and agency

In line with the UK population as a whole, most of our Diarists started the project expressing considerable concern about climate change. This didn't change over the five months we spent together, but their perception of the urgency and scale of the challenge to reach net zero did, for all groups of participants. While concern about climate change is a widely used measure, there is an argument that having reached consistent levels of 70% it is no longer a useful differentiator of attitudes: within the 'concerned' members of our study we found widely varying attitudes and behaviours.

In general the change in levels of perceived urgency follows a logical pattern – ranging from a small shift for Engaged Citizens (who already had a greater awareness of the issues because they had taken part in a previous process) to a more transformative experience for more Engaged Consumers (who were taking individual action) and General Public. However, there was variation between individuals based on both experiences during the research, and what was going on in an individual's lives outside.

In general, Engaged Citizen Diarists were more likely to pick out specific, isolated instances where their opinions and understanding evolved during the course of the Diaries (e.g. how businesses are attempting to rise to the challenge of net zero). Engaged Citizens also showed a greater ability, throughout, to engage with, grasp and recall some of the more complex issues raised in the process. This is indicated by their higher likelihood to discuss things such as the just transition in later waves and the complex trade-offs involved with EV batteries.

“Using electric vehicles in the UK will significantly reduce emissions, but mining the lithium for required batteries will cause significant pollution and health risks to the countries where it is mined.” (Engaged Citizen)

Comparatively, other audiences went through a more transformative experience when it comes to their understanding of the urgency and scale of the challenge. At the start of the process, while some Engaged Consumers and the majority of General Public were aware of climate change this tended to be limited to a more general sense of the issue. For instance, whilst they were aware of the global nature of the problem, they often honed in on references to direct but minor impacts on their lives (e.g. weather during the UK summer).

They were also more likely to discuss delay narratives that they had heard through the media and conversations with others over the years, notably “whataboutism” – the UK's total carbon footprint being trivial in comparison to other, rapidly industrialising countries (e.g. China, India) – and “doomism” – any mitigations being too little, too late.

“I think for any viable change we left it too late, changes are already well underway, and unless China etc. really do it on a huge scale then it's useless, the UK is a tiny part of a large world.” (Engaged Consumer)

These tendencies to want to redirect responsibility and diminish the opportunities for mitigation were more prevalent amongst Engaged Consumers and the General Public during earlier sessions. During the later phases of the process, these Diarists had come to see that there were potential routes forward. They still believed these were predicated on global collaboration and had begun to doubt whether the current appetite for change matched rhetoric seen during

COP26, but they felt that irreversible damage is not inevitable if appropriate action is taken now.

Interestingly, these first delay narratives were replaced by others amongst certain Diarists in the General Public cohort, notably “technological optimism” – suggesting that efforts should be focussed on current and future technologies to address climate change, rather than seeking ways to change behaviour. This is particularly true of those Diarists that had their ‘eyes opened’ by this process having started it with low engagement and some scepticism, but still found it difficult to substantively change their own behaviours in the ways they would like to.

“I am praying that as the new technologies come in this will help because at the moment we are in big trouble. Nuclear fusion been an example and hydrogen once they get some of the problems with it sorted out.” (General Public)

Overall, Diarists across the board were very positive about their experiences during this process, and felt that being part of the Net Zero Diaries massively developed their knowledge and understanding of climate action on a conceptual and practical level. This increased knowledge and understanding is at the core of their own increased agency and motivation to make changes.

“[What have you learned during the process?] There's more we can do than we think.” (General Public)

However, as discussed at length previously in this report, they also became increasingly aware of challenges that they feel may be insurmountable unless there is a concerted, joined-up and systemic global effort to tackle the crisis. This tended to focus on two key areas:

- The scale of the task on a global level, and the difficulties created by needing conflicting countries and ideologies to pull in the same direction. However, they feel that the UK should be well placed to lead on this, and indeed has a responsibility to do so – along with other rich, industrialised countries – based on the country’s historic carbon contributions.
- The absolute need for urgency, and the nagging concern about whether we have enough time to reverse the negative global impacts in the current climate.

Additionally, and as we’ve discussed in 2.3 and 2.4, the more Diarists were exposed to the complexities associated with the net zero transition, the more they began to realise that raising awareness wouldn’t solve all problems.

This more sophisticated understanding of net zero that Diarists left the process with included a very clear picture of what they thought responsibility for the transition looked like in terms of government, business and individuals. However, this was a source of pessimism for a significant number of our Diarists. By the end of the 6-month process, they had become far more adept at questioning whether the current systems in place are adequate for the change that will be required.

From early in the research, many Diarists held the view that net zero required action from all of society. However, they were also pessimistic about the chances of the UK meeting its

targets. These two intuitions didn't ultimately change through the research but were elaborated on and become more refined in a number of ways.

Government: distrust and lack of feeling of political agency

Diarists brought a significant degree of scepticism about government's ability and appetite to make decisions with climate change considerations at the forefront of their thinking. Specifically, they were concerned that those involved in the UK political system are too focussed on staying in power and not upsetting their base to take meaningful action, and they fear this constitutes a global barrier for the net zero transition.

As Diarists knowledge and understanding developed throughout this process, they began to realise that this barrier was of even greater significance than they had initially thought. They felt this short-sighted, 'selfish' outlook was the exact opposite of what they thought was needed from government to hit the 2050 targets (see 2.3 for a full breakdown of this), and this was consequently the most significant contributor to the increase in pessimism seen at the conclusion of the Net Zero Diaries.

"[On the net zero Strategy] Experts mentioned that the money that has been promised for investment isn't enough, are they aware that they aren't going to meet the targets? The government aren't being realistic." (General Public)

Recent events such as the controversy over Government contracts for Covid PPE were alluded to as part of the reason for mistrusting governments willingness to regulate big business. COP26 was also seen as an example of a failure to act by the UK Government. This fed into a general cynicism that net zero would be achieved. It was clear that people did not feel they were capable of shaping government decision making.

"I made a comment just there about cynicism and I've been becoming really cynical and that leads to feeling really hopeless." (Engaged Citizen)

Some Diarists felt that there was no way to reconcile the importance of government and the lack of trust in them to act. They called for a 'higher power' to act independently of government and take the necessary decisions. This would reassure them that decisions would be made for the good of the population, not any one political party.

"I now strongly believe that we need the decisions being made on climate change to be taken out of ours and politicians' hands, possibly being given over to a team that sits above or at least outside the level of government." (Engaged Consumer)

Business: we are all in this together, but government needs to take the lead

As with government, Diarists across all cohorts started the process with a degree of scepticism about the intentions of businesses with regards to climate change. They felt that the main challenge would always be the desire to maximise profits, which would negate efforts by others to put pressure on business to decarbonise.

However, whilst this scepticism persisted to some degree throughout the Diaries, the broad-brush perception of all businesses was replaced by a belief that there were two distinct tiers in terms of approaches to net zero. These were driven by the size and purpose of companies, with an assumption that green-oriented business can currently only be achieved by smaller, purpose-led companies with less profit motivation.

“Is it possible to still make profit and not be good, as a business? I had a burning question, it’s a difficult one.” (General Public)

By the end of the process, Diarists exhibited some more developed views on what they want to see from the role of businesses in the net zero transition, and were much more able to articulate clearly what they wanted to happen moving forward (see 2.4 for a full breakdown of this). However, despite this more developed understanding of the potential routes forward for business, the pre-existing scepticism was hard to shake, and they did not all end the process more optimistic that the changes they want to see will be implemented.

“It’s good but a lot of companies bend the rules with these things. For example, something can say less sugar but still have loads of sugar. So they can bend the rules to make things look eco-friendly when they’re not” (Engaged Consumer)

Most Diarists felt that government needs to play an active role in steering business decisions. By the end of the process participants were able to identify specific areas they believed government needed to intervene – including stopping fossil fuel subsidies. Some of the engaged cohort offered a more nuanced take on the role of business, highlighting the employment and economic benefits that may need to be considered when implementing strong environmental regulation.

Individuals: have a role to play, but also need support from government

Early in the research, many participants thought too much emphasis was placed on individual action. As the research progressed, participants began to identify the support from government they expect in order to reduce their own emissions. This included better access to information and affordable low carbon options for travel, shopping, and home energy use.

At the start of the Net Zero Diaries, most Diarists were of the opinion that collective and civic actions were unlikely to have a significant impact on the net zero transition in comparison to other behaviours, notably reducing the number of flights taken by individuals and transitioning towards electric vehicles. They felt that they, as individuals and citizens, lacked the agency to make a difference through engagement with local politics, and, as laid out in 2.5, large-scale climate protest was considered polarising.

With each session giving Diarists a deeper understanding of net zero and the role that individuals could play, their estimation of their own agency grew, as did their appreciation of the impact that individual actions can have if repeated on a larger scale. Whilst aware that this is not the only solution for tackling climate change, they leave the Net Zero Diaries process feeling empowered about the roles they could play moving forwards.

Beyond their role as consumers, people primarily saw their potential to affect change through the lens of local community. There were extensive discussions about examples of community-led environmental initiatives people were aware of or were involved in.

“Community is key to this, because people change their behaviour in groups that they trust: this could be the family, the local neighbourhood, a community of interest.” (Engaged Citizen)

Many Engaged Citizens expressed, as a result of the process, a greater motivation to share the messages they took to heart with a wider group, and challenge the status quo as they currently see it. They have therefore been seeking opportunities to be more involved in local political spheres or civic actions, with some feeling increasingly optimistic about the issue as a result.

“To begin with, I felt that there was little change I could do personally. Although I do feel like I am still a small part of the change; due to the fact I have felt more empowered to have discussions; I am a lot more content in the part I am playing.” (Engaged Consumer)

Whilst the impact wasn't quite as substantial for the General Public and Engaged Consumers cohorts, they do feel far more comfortable talking about climate change with those in their close circles as a result of taking part in the process. Generally, this tends to take the form of advice sharing based on their greater knowledge of the smaller, individual actions or behavioural changes that they feel could have a compound impact in the future. However, some have tried to engage friends and family in conversations about the nature of net zero and the systemic changes they feel will be needed to mitigate the impacts of climate change in the long-term.

Despite the positive impacts of the Diaries on engagement, in the short-term many have found it more difficult to engage with people than expected. Whilst they feel they can convey the need for smaller changes well, and describe themselves as “climate activists” within social groups, there is a sense of disappointment in terms of the impact they feel they are having. Ultimately, they recognise that replicating the changes they've gone through during the process are difficult, and that some of the more complex issues – such as fairness – are difficult and potentially divisive to discuss with friends and family.

Location and local community play a significant role in how keenly this is felt, and optimism connected to personal agency was often linked to who Diarists were engaging with outside of the Net Zero Diaries. For instance, where there is a strong sense of local climate action backed by strong local government support, Diarists felt increasingly optimistic that grassroots activity could directly lead to systemic changes – initially on a local level, but eventually national. Conversely, where levels of community engagement were much lower, or where they were high but not backed by local government support, Diarists were unable to shake the concern that their impact would be limited.

Case studies: How place impacts engagement

Bee lives in Warwick and continues to be part in the Warwick District People's Climate Inquiry, which she first got involved with at the start of 2021. She has been impressed by the action taken and pledges made by **Warwickshire Country Council** following this inquiry and as part of their **Climate Action Group**. This includes the allocation of **funding** for climate change **mitigation** and **adaptation** and involvement in a **nationwide network of local authorities** to **share knowledge** and **lobby** the government around net zero. As a result of seeing this local action and the support it has garnered, she feels **very optimistic** about the UK's ability to reach its net zero goals.

Keeley is a single mother living in an area of deprivation in Leeds. She has become much more engaged with the issue of climate change throughout the research process, but she began with little understanding of or concern about the issue, which she feels is the norm for people in her circumstances and her neighbourhood. Although supportive of civic action around the issue in theory, she **feared she would be mocked** if she were to **protest** in her **local area**. This perceived disengagement among her peers, combined with inaction by businesses and distrust in the government, leads Keeley to feel pessimistic about UK's net zero goals.

Darren lives in a small village in West Yorkshire which has been hit by **severe flooding** in recent years. It is home to several **local, sustainable food initiatives**, one of which Darren is an active volunteer for, setting up community gardens and grow groups, and more recently teaching others about sustainable growing practices. On top of the efforts of his local community, the Net Zero Diaries workshops have shown Darren that more people are engaged with the issue than he previously thought. He stated his intention to begin a business in the future that tackles the issue of producing food sustainably for his local community. However, he remains **pessimistic** about a net zero future due to **a lack of motivation among businesses and governments**, in particular citing very little visibility in terms of support from his local government for grassroots climate action.

Behaviours and attitudes

At the start of the process, most Diarists were engaging in behaviours that they felt were broadly good for the environment, but these tended to be quite small scale and easy to incorporate into their current lives.

For General Public and some Engaged Consumers, environmental concerns were rarely the critical factor behind making a decision – if the opportunity was placed under their nose, they were happy to take it with a vague notion that it was more environmentally friendly, and that they were doing their bit. However, they tended to prioritise convenience, speed and cost, and if the environmentally friendly option was perceived to add more friction or expense then most wouldn't consider it to be viable.

Making more significant changes were often based on, or more motivated by, other factors, such as selling a second vehicle to save money or focussing more on domestic holidaying due to Covid restrictions.

Whilst there was greater awareness amongst the General Public and some Engaged Consumers of the more significant and impactful steps that they could take in terms of transport – namely cutting down on car and plane travel – understanding of similarly impactful behavioural changes in other sectors, such as switching home heating systems or moving to a seasonal and plant-based diet was underdeveloped.

Additionally, there existed some misconceptions about replacement behaviours that some Diarists felt represented more environmentally choices. For instance, some were initially using

a log burner instead of central heating with no perception of the overall carbon and air quality impact of doing so, or, in fact, the need for alternatives to both.

As laid out in chapter 3, Engaged Citizens had already been more active in their attempts to change their behaviours, particularly with regard to their diets and transport choices. However, even they showed a relatively low understanding of the overall impact these changes were having on the UK's net zero transition.

As a result of the Net Zero Diaries process, all Diarists have a clearer sense of the steps that citizens in the UK need to be taking to support the transition. They feel better informed, and subsequently have greater stated intentions for changes that they have or would like to make in the short and long term. And some have taken significant steps for them, including some major ones:

"At work I have implemented a no printing policy, everything must be done electronically" (General Public)

"I sold my car! We are now a one car household and using our bikes for more journeys." (Engaged consumer)

"Planning to install a wind generator." (Engaged Citizen)

Whilst many of the changes Diarists were making by the end of the process could be considered relatively incremental, they also appeared to have a better understanding of others they could make that would have a bigger net impact on the transition. For example, exploring switching from gas to more renewable home heating alternatives and moving away from 'traditional' diets.

Despite being more motivated to adjust their behaviours on a wide scale, Diarists also became increasingly frustrated by the barriers they encountered as they tried to enact these changes throughout the process. Broadly speaking, these barriers can be broken down into:

Practicalities and availability: These were often issues that Diarists recognised prior to this process, but grew in perceived significance. Generally, these barriers accessibility or cost based and Diarists feel that support from businesses and government is necessary to enable them to close the gap between stated intentions and behaviours. For instance:

- The cost implications involved with moving to an electric car and using public transport for longer distances, or having adequate, convenient local public transport available for shorter distances.
- General affordability of alternative home heating solutions, in particular heat pumps.
- Perceived costs involved with moving to meat alternatives, and supermarkets actively encouraging movement towards seasonal diets.
- Having a packaging-free refill grocery option in the local area.

"I am not in position to purchase an Electric Car or install energy saving equipment in my property. So have concentrated on how I can make a difference." (General Public)

Reluctance: Whilst this did diminish over the course of the Net Zero Diaries, when reflecting on how their behaviours had changed some Diarists felt that there were some aspects of their life that they were less willing to change. However, they did concede that they felt more guilt

about these, and there was a sense that they would be willing to take steps to mitigate or alter these behaviours in the future if viable options became available.

- The clearest example of this barrier remained flying. Whilst many Diarists were actively thinking about taking fewer flights in the future, the majority were unwilling to discount it entirely. Instead, they stated their strong desire for there to be a way to fly carbon neutral that is more credible and easier to understand than offsetting.

Information and knowledge gap: Diarists told us from day one that they found choosing the climate friendly option difficult and complicated, and this was strengthened by their increasing knowledge of particular topics. This was particularly true when Diarists looked into more significant changes for themselves, for example:

- Being aware of the pressing need to move away from gas boilers – and wanting to for both climate and cost efficiency reasons – but feeling they do not know enough about the alternatives, or finding the way they're sold too technical.
- Wanting to move away from a meat-based diet, but having poor understanding of how to do so on a cost-efficient basis.
- Understanding the full environmental implications of moving from a petrol or diesel vehicle to electric.

Overall, despite being far more aware of the behaviours that they want to be engaging with to support the UK's net zero transition, Diarists don't suddenly feel they are more equipped to do so. The consistent barriers that they called out illustrate the limitations of providing in-depth education to the public without also enacting significant structural and societal changes.

In their own words: how Diarists felt they changed during the course of the Net Zero Diaries

Case study: Engaged Citizen

Having been part of Scotland's Climate Assembly, Susie was not sure how much she would learn about climate change and net zero targets, however, Susie found Net Zero Diaries fun, informative and challenging as well as supportive and well organised. Doing group activities has had the biggest influence on Susie as it gave her the confidence to contribute and listen to different perspectives.

Being part of the research has reminded Susie of some of the wider areas where ordinary people can affect change. She also feels more aware of how things are presented in the media – she feels better able to identify attitudes and biases of the media and other organisations.

Susie wants to start calculating her daily footprint and keep on learning about the subject so she is able to identify when companies are greenwashing. She is keen to raise awareness on climate change, not just through lobbying MPs and the media, but by also having discussions with ordinary citizens.

Case study: Engaged Consumer

Paul feels he has learnt a lot from taking part in Net Zero Diaries and he found the mixing of online community activities and workshop activities especially useful. Listening to experts and having discussions with other Diarists made Net Zero Diaries an engaging experience for Paul.

After listening to experts and understanding the impact that methane emissions have on the climate, Paul has decided to reduce his meat consumption. Since engaging with business owners that are B Corp certified during Net Zero Diaries, Paul wants to find out more about ways of investing responsibly.

Case study: General Public

Aleesha thinks she has become more educated on a variety of topics related to the environment and it has influenced the things she does in her personal life.

Even though Aleesha already cared about the environment, discussions with other Diarists who are passionate about climate change has led her to have a greater sense of urgency and more confidence in what she is able to do at an individual level.

Before Net Zero Diaries, Aleesha already recycled and had reduced her meat intake, however, since learning more on the subject she buys products with recyclable packaging, and she groups Amazon orders together to save on packaging. She also has reduced her energy consumption by keeping an eye on light switches and heating, only boiling water she needs and using dryer balls.

4.2. Ideas, stories and information: what influenced Diarists most?

Through the diaries we heard a number of repeated stories or narratives, some of which participants brought themselves, and others which they heard from the various speakers and became a regular part of their discussions. These narratives can help us understand how attitudes to climate are formed, and how communications can be made most effective. Some of the most common narratives were:

Evolutions in the understanding of fairness

The need for the net zero transition to be fair was a regular refrain through the process. There was a concern to correct past or current harms and injustices through a net zero transition, as well as a desire to not exacerbate inequalities. Diarists' views evolved through the process and clustered around issues of economic, intergenerational, and international equality.

Protecting those on low incomes through the net zero transition: Diarists felt strongly that those on low income should be prioritised for targeted support through the net zero transition. As the process went on, this general concern developed. Diarists, particularly those from the engaged cohort, started identifying specific policy areas where inequalities would have to be addressed. These included the transition to low carbon heating, and support for low carbon

transport. The gas price crisis that began during the research fed into a growing sense that fuel poor households require particular support. Some Diarists went further and suggested that rebalancing economic inequalities should form part of the transition to net zero.

“[On the net zero Strategy] I don't think I have seen fairness represented in the [government's] net zero one at all.” (Engaged Citizen)

“How are the most vulnerable people going to be supported? I am extremely worried about fuel poverty given the rise in energy prices. I am worried because I know people who are really going to struggle.” (Engaged Citizen)

Not passing on the burden to the next generation: Early in the process there was a widely held view that it was the current generation of adults that have the responsibility to deal with the climate crisis. Many expressed a desire not to pass on the issue to their children, or that it would be too late by then. This general feeling regarding intergeneration justice did not develop significantly through the process, appearing early in the Diaries, receiving some substantiation in the second wave of research and remaining present as a general and important principle by the final wave.

“The general consensus was generationally, but the buck has to stop now, the reason why we are where we are is that the buck has been passed too many times already.” (Engaged Consumer)

“It falls upon us, I would hate to see this to be on my children.” (General Public)

However, there are limits to how effective this narrative is at motivating action among individuals. Diarists believed strongly in the power of education, and when faced with difficult challenges or behaviour changes they were reluctant to accept they would revert to calls for better education in schools. Similarly Diarists were impressed by the actions of youth activists around COP26, but could fall into a degree of fatalism about the potential of older people to act with the same conviction and urgency.

Less consistent interest in international justice: Diarists were given an early presentation on impacts of climate change from an international perspective, the UK's historical responsibility and current environmental and social impacts from international supply chains. Directly following this presentation there were expressions of concern regarding this, though no concrete suggestions for what could be done. Most Diarists did not return to this issue with the same prevalence as they did issues of domestic, economic inequality and intergenerational justice. The notable exception were two Diarists who had a pre-existing interest in this issue and did return to it throughout the research.

“Talking about lithium, yes that would help the UK and the western world run their cars better, but will it do any good to the people living in the countries that are being stripped of their lithium, and is it relevant to them how we run our cars?” (Engaged Consumer)

“It’s difficult because we have been through our industrialisation and other places haven’t. You need to get it right at home first, and if it works at home, export that everywhere.” (Engaged Consumer)

A backward looking future vision

Even by the end of the process, few Diarists had a clear vision of what a net zero future would look like, and found it hard to piece together the varied policies, arguments and proposals they had heard about into a coherent whole. This was particularly the case where there was limited policy available to provide, for example food. And when we presented Diarists with extracts from anonymised political parties manifestos they strongly favoured the party presenting the most positive vision of the future (even if they also thought it was too good to be true!). In the absence of a strong positive vision from policy or experts, Diarists tended to cast backwards to known or imagined pasts to inform their vision of a sustainable future.

Simple equals more sustainable: There was a strong sense amongst some Diarists that past practices were more sustainable and offered a potential vision for the future. This included more localised and small-scale agriculture, less plastic packaging, and being less wasteful with food and products. Some Diarists even suggested a reintroduction of canal and horse transportation as part of their business plans. Many of these ideas were animated by specific experiences Diarists had of local community initiatives. Some of the more informed Engaged Citizens, however, questioned if these older practices are necessarily more sustainable, and few engaged explicitly with the conflict with their own current choices and preferences.

“Brown bags, no plastic... What it was like in the 70s... They could cook on wood, no gas... deliveries could be horses.” (General Public)

“[We could try] Stepping back toward the old methods of [less industrial] farming.” (General Public)

Kids these days: There was a feeling that the values and knowledge of current young generations have moved on and become entwined with unsustainable forms of economic activity. Young people were seen by some Diarists as being less likely to reuse and repair things, to be less willing to go without luxuries, and less knowledgeable about seasonal eating and cookery. This shift in values and priorities was seen as a potential barrier to the return to what were seen as more sustainable practices.

“It seems as if the oldies are more familiar with tightening our belts but [younger Diarist]’s generation have probably been brought up by us to consume more and I wonder how difficult it seems to [younger Diarist] and her mates to cut down.” (Engaged Consumer)

At the same time Diarists recognized that other behaviours are more engrained for older people, those with young children talked about their level of awareness and knowledge of climate change from school. Other examples like youth activism were seen positively and gave some Diarists hope.

The need for inward investment: The vision many people had for the future was of a more localised and simplified economy. Though some of this may be accounted for by a desire to return to the past, it was also animated by a desire for inward investment into communities as part of the net zero transition.

“The most exciting thing that came out of that was that the northwest which includes Manchester, Liverpool, Preston, and Blackpool are all trying to set up a local bank like the North West of England bank. The banks will be local Enterprise driven and not profit-driven. They would then be much more sympathetic if you want to set up a local business.” (Engaged Consumer)

What’s normal then?

Diarists were strongly influenced by perceptions of what ‘normal’ people would and wouldn’t do, and would often benchmark their own behaviours against this perceived norm to determine whether they were being asked too much. For example, with flying the bar for what’s normal is set quite high – with most Diarists feeling one foreign holiday a year is the least people should be able to expect, with penalties only for this exceeding this, and even then they were easily persuaded by exceptions like those with family living abroad. Other examples include references to plant-based diets as a variation from the ‘norm’, and therefore more expensive. Similarly electric vehicles and heat pumps were seen as out of reach for most people due to their high costs.

These ideas of normal are strongly influential on behaviour, and shifting them has the potential to make the stated desire of people like the Diarists much more achievable. For the most sceptical of our Diarists this process of normalisation was one of the impacts of the diary project itself, as they became aware of the breadth of people engaged:

“[What did you learn during the project?] That it is real, not just a phase for so called “eco warriors” to push their views on to us” (General Public)

Misconceptions about proposed changes

Food miles, plastic packaging and pricey vegetarian options

Again and again through the diaries we heard a preference for local action, local businesses and locally specific solutions to climate change. This was most prevalent in relation to food, where Diarists felt strongly that the most sustainable food is the most local (the food miles concept) even when experts pointed out that *which* food was often more important. While the role of plant-based diets was acknowledged (particularly among younger Diarists) and even the more reluctant Diarists reported eating less meat for health reasons, there was a common perception that a vegetarian diet would be more expensive. Again this persisted for many even when it was pointed out by peers or experts that many vegetarian options are cheaper.

The boiler ban

During the diaries there was much media discussion of heat pumps, and their potential to reduce emissions from heating the UK’s homes, including the introduction of legislation to ban the installation of gas boilers in new homes from 2025, and suggestions of a ban on the sale of all new boilers from 2035.

“The [more efficient] gas boiler replacement is a priority, however it will cause some upheaval with walls, flooring and kitchen units etc, so it’s a bit of an undertaking.” (Engaged Consumer)

Despite this being introduced several times by experts, participants tended to assume these policies would require the removal of gas boilers from homes, at unnecessary cost to the

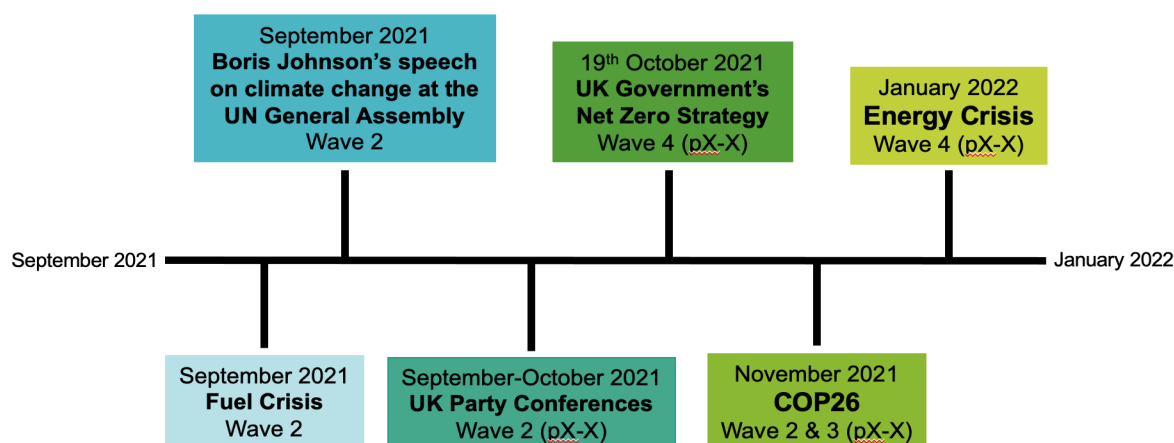
homeowner. This led to concern about how the more vulnerable would cope, and given the common perception that low carbon heating systems are more expensive, the majority of Diarists felt they would be unable (or unwilling) to meet these perceived costs. This emphasises the importance of clarity in communication of policies to phase out unsustainable products – participants were keen to assume a more radical and negative interpretation, when in fact they regularly expressed support for policies like the one proposed.

Everyone doing their bit

Less of a misconception and more of a mantra, Diarists often went backwards and forwards between a focus on the need for systemic change and a reliance on ‘everyone doing their bit’. This persisted from the first week, where some felt this was what net zero meant for the UK, to the last session, where people reflected that what they had learnt from the whole project was the importance of everyone doing their bit. This simple message is highly pervasive, and should not be underestimated as part of any climate communications. Where Diarists differed towards the end of the process was the complexity behind the statement, everyone doing their bit encompassed everything from cross-party political action, to businesses supporting consumer choice, not just individual citizens changing their behaviour.

4.3. Events: how did Diarists respond to climate news and activity during the project?

To maximise the impact from this project, we aligned our research with key net zero policy and conference moments, and were also able to respond in real-time to news stories that had a knock-on effect on the climate change conversation. These have largely been covered extensively elsewhere in the report; but the below timeline outlines the key events taking place during the Diaries and where to find the information related to each.



COP26: what did Diarists expect from the conference, how did they respond to it in real-time and how did they reflect on it two months on?

Diarists had low expectations for COP26 and didn't trust that the government would act in the best interests of the planet

Diarists saw COP26 as a big opportunity for the UK government to work together with the rest of the world to tackle climate change. There was a general understanding that global leaders would be gathering to discuss what each of their nations can do to help reach net zero.

Diarists from engaged cohorts were acutely aware that the conference was coming up and understood its importance, whereas our general public participants started with some awareness that the conference was happening but understood very little about its aims.

There was a strong concern among all Diarists that the UK government would be unable to move past party interests and effect real change over the coming years. They described:

- A sense that climate change has been overly-politicised and is generally used as a vote winner rather than a true government priority.
- A perception that efforts so far to tackle climate change have been unmonitored.
- A lack of confidence in the government's ability to achieve large-scale change in the required timeframe.

Diarists were also sceptical about the volume of emissions that the conference itself would produce. Many felt there is an irony in gathering leaders from different corners of the world, particularly following the widespread adaptations of Covid-19 where important conferences were successfully held online.

Diarists wanted to see:

- International working relationships built between the UK and other nations
- Domestic relationships built between the government, private/public companies and individuals

"It isn't a political battle but something that needs to be a joint political decision. If it's joint we will have better outcomes." (General Public)

We asked the diarists to send a message addressed to the UK government sharing their thoughts on the COP26 conference and the UK's contribution to the conference:

A message from an engaged citizen:

Now COP26 finished I'd like the government to do what they promised and what they've agreed to do in the Glasgow climate pact.

I want them to improve even on the promises that they've made and put all they've learned into action. Not to open any more coal mines, to transition to green energy, to make it easier and cheaper for people to retrofit their homes and to make choices that are healthier for them and the planet.

I'd like there to be more public information campaigns and I'd like politicians to listen to what people want in order to make those changes that we're all going to have to make. So act quickly, act radically and don't put it off or kick the can down the road.

A message from a member of the general public cohort:

To the UK government: I just wanted to express my thoughts after the top 26 meeting. I do feel like it did go okay... You know things were put into place and you, as the government, said you were going to look into the trees, into cars and things like that.

However I do feel like you need to start to incorporate some of the young people's views. I do agree that there's not enough younger people's opinions getting out there and the younger generation do have a lot to say so I think that this is something that you should take into consideration.

I do believe that the intentions are good that you know you do want to keep the 1.5 degree alive however I feel like more could still be getting done.

A message from an engaged consumer:

Dear UK government,

With COP26 over, was it really worth it? The millions spent, the emissions wasted, the flights, the cars... Many of the goals that were not met but they never could be because there were countries that just weren't showing up or signing up to the schemes. Of course, this is not to put it down on the things that were achieved, such as the deforestation pledge that was great. But, this could have been done on Zoom or a conference I'm not sure why we had to emit so many emissions.

Another major downfall was the lack of youth representation, it's our future and to not be included as a massive shame. The average age of the government at the moment is 51 so by the time the 2050 target roles around they'll all be 80+ and they're not the ones that have to deal with the mess in the future so why are they making a mess of the present?

Less engaged Diarists tended to feel COP26 had been successful, largely because of the amount of coverage it had received

For many in our general public cohort, this was the first climate summit they had engaged with, and they spoke positively about its' achievements. Seeing world leaders discussing climate seriously made them feel excited and hopeful. But this optimism was often based on the assumption that increased awareness would translate into action, both for governments and for individuals – effectively taking an information deficit view of behaviour change.

"I'm hopeful as all the world was watching on and will now be more aware of the problems facing the planet and how everyone has to change their way of living." (General Public)

More engaged Diarists, who know more about tackling climate change, felt far less confident about the conference's success

The main reasons for engaged Diarists to feel sceptical about the conference's success were:

- A perceived lack of practical action led some to describe it as an expensive greenwashing event
- Some felt that wealthier countries are not taking responsibility
- Even the most engaged in the cohort felt unsure about exactly what had been agreed

"Mean-spirited as the developed world made pledges of support to the developing world yet had failed to uphold previous promises." (Engaged Consumer)

Diarists were sceptical about the agreements, and whether they would be adhered to long term

Less engaged Diarists tended to feel more positively about the agreements than those with more background knowledge. However, most Diarists, when being asked to read an article outlining what has been agreed at COP26, picked up on the fact that commitments are self-policing and expressed concern that they won't be upheld. The more engaged group of Diarists pointed to the slow uptake of Paris commitments as evidence of this.

We also heard many say that agreements seemed too limited in scope or not sufficiently financed. However, given the relatively low levels of awareness of climate finance this is likely to be based at least in part on media tone.

"None of the agreements are legally binding and are phrased as quite vague statements. On the main points the countries mainly responsible did not sign those agreements." (General Public)

In contrast to more general coverage of agreements, single issue pledges like deforestation were favourably received

Our Diarists overwhelmingly felt that the deforestation pledge was a positive step forward and many were impressed by the involvement of larger developing nations such as Brazil. They liked that the pledge was linked directly to a specific mechanism driving climate change, and that it had clearly linked financing.

Most Diarists were acutely aware that young people will bear the brunt of climate impacts and want them to have a seat at the table

Most Diarists felt disappointed that individuals from younger generations – along with other minority groups – were not widely included in the COP26 conference and agree with the idea that those most affected should have a voice.

Some argue that government (and other elites) have failed to act so far and feel that the lack of inclusion only reduces trust further.

"I feel the youngsters should have been given more representation beyond the Blue area and selected from every country to speak." (General Public)

More engaged cohorts want new ways of keeping COP26 at the top of the news agenda in order to keep politicians accountable

On final reflection, Diarists were disappointed with the lack of action following COP26. The general feeling is that mainstream news has quickly shifted its focus from COP26, and for this reason, they have concerns that any opportunity to keep politicians accountable to their promises has now disappeared. This was particularly the view of more engaged Diarists. Diarists want to develop new ways of keeping climate change at the top of the news agenda.

"The news was full of it with the COP, but now there's nothing, other than articles about the icebergs and volcanoes. Why can't we have it as part of a news bulletin, 5-10 minutes every day to bring people up to date with what is happening now, the developments...it can be good news. Just to keep it in people's minds!" (Engaged Consumer)

4.4. People: who had most influence on Diarists views, peers, citizen experts or professionals?

The workshop element of the diaries was designed to give participants opportunities to hear from each other as well as from a range of professionals, activists, policy professionals, business leaders and academics working on net zero. These ‘experts’ were tasked with giving information, from their own particular perspective, often in pairs to expose Diarists to a range of views. These information sessions typically made up no more than a third of the workshop, with Diarists spending the rest of each day discussing the issues raised together, with the experts around the table with them. This allowed us to observe not only how they were influenced (or not) by information presented by the experts, and by each other. Much as we found that Diarists benchmarked their behaviour against perceived ‘norms’ in their everyday lives (section 4.2) we also found that they were influenced by their new peers, the other Diarists.

What became clear as the diaries progressed was that the initial criteria used to distinguish between engaged citizens, engaged consumers and general public didn’t necessarily result in a completely clear-cut distinction between the different cohorts. Attitudes and behaviours didn’t always align and whilst we had a number of Diarists in each cohort that very much lived up to expectations, there were others that did not. E.g. some of our engaged citizens displayed attitudes more akin to the general public, and some in the general public cohort already engaged in behaviours that were more in line with engaged citizens. Therefore, what is outlined in this section in terms of interactions between cohorts and how they interacted with experts or professionals is true overall but there were also some exceptions to the rule.

The type of interactions between cohorts

Engaged citizens and consumers more likely to ‘drive’ the discussion and lead on shaping the outcome when e.g. coming up with manifestos, sustainable business plans etc. They were also more likely to volunteer as (or be nominated to be) the ‘**spokespeople**’ for their break-out groups, summarising and reporting back on discussions.

Participants from the general public were, overall, more likely to sit back and ‘take things in’, whether in terms of absorbing the information given to them by experts in the workshops and/ or the ensuing comments and questions from engaged citizens and consumers.

There were, however, **a few instances in the workshop session when a comment or idea from a participant in the general public cohort created a ‘light-bulb’ moment and very much shaped the ensuing discussion and co-creation**. However, after the initial spark the discussion tended to be driven forward by engaged citizens and consumers.

Engaged citizens or consumers were also likely **to build on an initial perception/ reaction from a participant, forcing clarification and taking the discussion forward**. Also, the engaged citizens and consumers were more likely **to add nuance to points made by participants** from either their own cohort or the general public cohort.

Participants from the general public were, when prompted by session moderators, more likely **to voice agreement with points made by others, as opposed to necessarily building on what’s been said or taking the discussion in a new direction**. As the diaries progressed

a minority of participants from the general public cohort felt equipped and emboldened to take a bigger role in workshop debates. However, the general pattern remained the same throughout the Net Zero Diaries.

Diarists, throughout, told us they **greatly enjoyed the process of hearing other people's perspectives**. Practical changes Diarists had made as individuals - that others could learn from and adopt - tended to be top-of-mind in terms of 'learnings', with influences related to net zero on a broader perspective happening on a more subconscious level.

"Throughout the whole thing, the most influential thing that has happened to me is the discussions with others. This has not only strengthened my views but also allowed me to question things that I previously took as gospel.... Going forward, I am planning on writing to my local council to try and get them to change their ideas on the waste management of the local area, which is currently incinerated but not used to produce any energy." (Engaged Consumer)

"During the project the most influential impact on my opinions on climate change has been the other participants and this has inspired me to get more involved in a local community food growing project and be more aware of the impact of any purchases I make." (General Public)

Case Study: A truly worthwhile business idea

In Wave 3 the Diarists were tasked with creating sustainability plans for fictional businesses. Right at the start of the break-out discussion one of the Diarists from the general public cohort suggested the idea of a model similar to Amazon Fresh/ Getir but for **packaging-free food** and **household goods** delivered by **electric vans**. The rest of the group was immediately onboard with the idea and started building it out. The bulk of the discussion was primarily driven by the engaged citizens and consumers in the group but the core idea changed very little from the initial suggestion and the diarist from the general public cohort was visibly proud when the idea - and the plan created for it - 'won' as the most promising one (as voted for by the business representatives taking part in the workshop).

Across the cohorts, but most significantly amongst the engaged consumers and general public, the participants point out how they, as a result of taking part in the Net Zero Diaries now **feel empowered to act as 'climate activists' amongst their social circle** of family and friends.

"I genuinely follow climate change a lot more seriously and I've become a climate activist amongst my friends and family and even got some of them to recycle more which is a step in the right direction." (Engaged Consumer)

"[The process] has certainly opened my eyes to the world around us on a more environmental level. I now question whether my will actions have a positive or negative impact. I also find myself becoming the type of person who will point out to someone the effects their actions can have." (General Public)

The role of net zero experts

Deliberative methods are designed to provide individuals with the time and information they need to consider a complex or unfamiliar topic in greater detail than they would in their everyday lives. The most effective deliberative approaches involve **two way communication: while participants learn from the experts, the experts also learn from the participants about the citizen perspective on their area of expertise**. For the Net Zero Diaries we brought in experts from as wide a range of backgrounds and expertise as possible, from academics to activists – you can see a full list in the appendix.

Throughout the Net Zero Diaries process it became clear what made experts engaging for Diarists in terms of format and style (as well as what tended to turn them off).

The style and format that Diarists perceived as engaging:

- When the argument was presented in **layman's terms**, ideally as part of a **framework**, with **clear guidelines and implications** on what it means in terms of the path to net zero
- When the argument was made **easily relatable** to the Diarists own lives and worldviews
- When the argument was **brought to life** with tangible examples, parallels and stories
- When the experts played an **active role in break-out sessions** by challenging Diarists - at their own level - and bringing new perspectives to aid the discussion

The style and format that tended to turn Diarists off:

- When the argument was presented in **too technical or academic terms**, without clear take-outs for the Diarists on what it means in terms of the path to net zero
- When the argument was perceived as **too 'far removed' from the Diarists own lives and worldviews**
- When the argument **relied too much on statistics and data**
- When the experts brought a **too technical or academic a perspective to the break-out sessions**, flummoxing all but the most knowledgeable participants

The engaged citizens and consumers were typically the ones to be most forthcoming with questions to or challenges for the net zero experts. Diarists from the general public cohort were more likely to pitch in with expressions of general agreement or examples of how what the expert had presented resonated with their lives and/ or experiences.

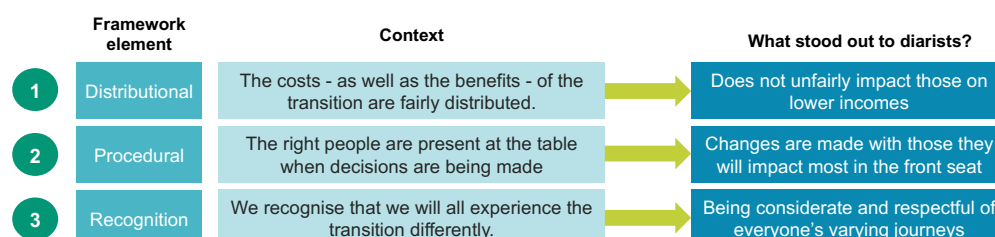
The role of business representatives

The role business representatives played and what made them engaging (or not!) for our Diarists largely aligns with what's been outlined above with regards to the role of net zero.

However, an additional angle that the business representatives brought to the table was **the role of consumer choices - in a much wider sense than the Diarists had previously perceived them - as a route to achieve net zero**. Especially how buying 'green' isn't simply the preserve of those with unlimited budgets but can be made affordable to the masses through clever business mechanisms. The concept of Ripple Energy (highlighted in Chapter 3) brought this to life particularly vividly and acted as inspiration for many of the Diarists own sustainable business plans.

Case Study: Getting the Diarists to understand, and to buy in to, the idea of a ‘just’ transition

In the Wave 2 workshop we covered how a ‘just’ net zero transition could be achieved. Six experts attended the workshop to debate with Diarists. One expert from the NEF (New Economics Foundation) introduced a framework that set out clear guidelines for how to reach net zero. For those Diarists that heard it, this framework stood out and helped to crystallise ‘fairness’ by **highlighting three areas that are particularly important** to them on the road to net zero:



In addition to helping the Diarists get to grips with what ‘fairness’ could look like on the road to net zero, this expert also helped the break-out group to come up with the ‘winning’ manifesto (as voted for by their fellow Diarists) by challenging them - at their own level - and bringing new perspectives to aid the discussion:

“Diarist 1: We need to pay more for our energy systems.

Diarist 2: You can’t say ‘pay more’ in a party manifesto!

Diarist 3: We should tax fossil fuels to a level that greener energy is the cheapest option.

Expert: can I jump in to say that green energy is typically already the cheaper, there is nothing additional that we need to do, what we need to do is to remove the subsidies for carbon intensive energy or fossil fuels energy.

Diarist 1: Then that’s what we should say in our manifesto!”

4.5. What kind of engagement would Diarists want to see going forward?

Based on their own experience of the net zero Diarist process, the Diarists are - perhaps unsurprisingly - strongly in favour of implementing more mechanisms for informing, educating and consulting the public on the path to net zero. At the end of the process there was a strong sense, amongst Diarists across the board, of feeling empowered and equipped to take part in the net zero debate and there was a consensus that access to these types of processes should be available more widely.

As part of the final workshop the Diarists were presented with four different models for including the public in future climate conversations:

- Permanent and consultative (e.g. Newham Citizens’ Assembly)
- Permanent and decision-based (e.g. Ostbelgien Citizens’ Council)

- One-off and consultative (e.g. Climate Assembly UK)
- One-off and decision-based (e.g. Gdansk Citizens' Assembly)

In their responses to the models the Diarists were particularly in favour of those that had an emphasis on decision-making, highlighting how this would ensure accountability from those in charge of driving change. They also saw a lot of value in having permanent set-ups, especially if modelled so as to involve members of the public on a rolling basis (e.g. the Newham Citizens' Assembly) to allow for a greater number of citizens to get involved.

One of the Engaged Citizens described her experience of taking part in both Climate Assembly UK and the Net Zero Diaries as such:

"I was invited to take part in the Climate Assembly [UK], the guy who came to me from the climate change commission said 'you want to say something' and I was just like 'No, why does anybody want to hear what I've got to say, these are all climate scientists, these are all people from the financial sector people from you know...'. But through the process I found that I had something to say on just about anything that anybody else was saying actually, I know my stuff. The only difference between us and politicians is that this isn't our profession but if we're given the information we're perfectly capable of deliberating. I've watched this happen in this process. I've watched it happen at the Climate Assembly [UK]. We submitted a report to the government that they were legally obliged to respond to. We're perfectly capable of doing it given the right information. It's just a matter of education." (Engaged Citizen)

The Diarists not only enjoyed the Net Zero Diaries process but also wholeheartedly believe that including the public in future climate conversations is the right thing to do, and the necessary thing to do.

Case Study: How one Diarists described the experience of taking part

In the online community taking place in advance of the Wave 4 workshop we asked the participants to 'write a letter to someone invited to future rounds of the Net Zero Diaries'. This is how one of our engaged consumers described his experience of taking part:

Hi Champ,

Hope you're well... I understand you've been invited onto the Net Zero Diaries project? Welcome aboard Champ - you'll love this as it's interactive, speakers from business owners like you and academics and varying good positive constructive speakers which I think you'll find very engaging... Since I've completed this Net Zero Diary myself, just thought I'd give you a heads up on what to expect...

Like I say, it's varied in as much as we listen to speakers, read information, interact with other participants and really feel our input is valued.

You might even find that you make small changes in order to reduce your carbon footprint like I've done and you'll honestly feel that you're making a positive, conscious decision to do good.

Anyways, hope you enjoy the experience and let me know if you want anymore info.

I'm off for a walk up to my local supermarket tomorrow instead of taking the car. Fancy a walk, chat about this and getting fit too?

(Engaged Consumer), The climate change man