



# Environment and Climate Change Committee

## Corrected oral evidence: Mobilising action on climate change and environment: behaviour change

Wednesday 2 February 2022

9.55 am

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Members present: Baroness Parminter (The Chair); Baroness Boycott; Lord Browne of Ladyton; Baroness Chalker of Wallasey; Lord Colgrain; Lord Grantchester; Lord Lilley; Lord Lucas; Baroness Northover; The Lord Bishop of Oxford; Duke of Wellington; Lord Whitty; Baroness Young of Old Scone.

Evidence Session No. 8

Virtual Proceeding

Questions 59 - 73

### Witnesses

I: Dr Emily Gray, Managing Director, Ipsos MORI Scotland; Professor Wouter Poortinga, Associate Director of the Centre for Climate Change & Social Transformations (CAST), School of Psychology, Cardiff University.

## Examination of witnesses

Dr Emily Gray and Professor Wouter Poortinga.

**Q59 The Chair:** Good morning and welcome to this inquiry session of the House of Lords Select Committee on Environment and Climate Change. Our inquiry is into behaviour change to mobilise action for climate and environmental goals. Today we are looking specifically at issues around public attitudes to climate and environmental issues. We are delighted that we have two witnesses with us today. We have Dr Emily Gray, who is the managing director of Ipsos MORI in Scotland, and Professor Wouter Poortinga, who is the associate director at the Centre for Climate Change and Social Transformations, the School of Psychology, University of Cardiff. Welcome to you both.

We will put a number of questions to you in the hour that we have and to give some overall context I will ask a question of each of you. Dr Gray, could you say a few words about the changes that have occurred in the UK's public's awareness, understanding and concern about climate and environmental goals over the last few years and particularly in the run-up to and after COP 26, and address some specifics around the quantitative issues? Professor Poortinga, could you talk about the relationship, or sometimes the lack of relationship, between public attitudes and environment-related behaviours? Thank you.

**Dr Emily Gray:** Good morning. We are fortunate to have a lot of historical evidence now on how UK public attitudes to climate change and the environment have changed over time. We have been tracking the top issues of concern to the British public for decades. Levels of concern about this issue have always fluctuated, for example in response to extreme weather events, hurricanes, flooding and so on. We have noticed that overall concern about the environment and climate change has been on the rise among the public for the last four years or so and it rose particularly in 2019 and early 2020, before the pandemic hit.

Thinking about last year, we saw that public concern rose in the summer in the wake of the events such as the California wildfires and flooding in northern Europe. We certainly found a COP effect where public concern about climate change and the environment rose in the run-up to and during COP 26. At that time, two in five of the British public told us, without prompting, that climate change and the environment were important issues that they saw facing Britain.

That level of concern has fallen back a bit since, to similar levels to those we saw early on in 2021 and I will point to a couple of reasons for that. It is partly because of the intensity of the media coverage around COP 26, which fell off quite sharply after the event, and also because other issues have risen up the public's agenda over the last couple of months. When COP was taking place in November, we were in a position where most restrictions to do with the pandemic had been lifted. Then the new variant came along and recent controversies such as Downing Street parties and so on have gone back to the public agenda, which has meant

that concern about climate change and the environment has fallen back a little bit. None the less, I think that evidence will point to greater public concern about this issue being here to stay.

A final thing to note is that when we were looking at this a few years ago, concern about climate change and the environment tended to be a younger, more metropolitan, more left-wing view, and that is not the case now in the same way. We see now that this is a much more mainstream concern across British society. We are seeing high levels of awareness of the UK's net zero target, reaching net zero by 2050, and there is also a sense of urgency. Around half of the UK public tell us that they would like the UK to get to net zero sooner than 2050. We also see high levels of worry about climate change, which are important because there is good evidence to suggest that personal worry about climate change is a good predictor of how likely people are to shift to more sustainable behaviours.

**Professor Wouter Poortinga:** The question about the relationship between public attitudes and environment-related behaviours is a big one. Public attitudes are important and you can see that people who are extremely concerned about climate change are willing to engage in a range of behaviours, but it is not the case that a high level of concern automatically leads to behaviour change. This is known as the value action gap, the attitude behaviour gap or the intention behaviour gap, depending what the focus is on. You may have the intention to quit smoking but not everybody who has the intention does in the end quit smoking and there is a number of reasons for that.

One reason is that we do not only consider the environment when making decisions about how to behave. There are many different considerations—time considerations, financial considerations, social considerations, for example. Environmental considerations are only one of multiple considerations when deciding whether to behave in a certain way or not.

Another reason is that many environment-related behaviours are entangled in our day-to-day lives: we have to go to work; we want to visit our families; after a long pandemic, many people are craving to go on holiday. If there is no bus, if a train is very expensive and if people feel that cycling is not safe, of course people will drive. If there is one option and driving is the most convenient one, the cheapest one, people will choose that.

On top of that, there is also a distinction between deliberative and habitual behaviour. It is not that we always think about the behaviours that we do; they are automatic. In the morning, when we come down, we turn on the kettle and we hardly think about it, and that is also the case with many environmental-related behaviours. It is not only about attitudes; it is also about the contexts in which the behaviour takes place. Behaviour will not magically change—and here we often say that we need system change to get behaviour change. If we want people to get cycling, we need to make sure that it is convenient to cycle.

**The Chair:** Thank you. I know that we will drill down further in some of the questions that Members wish to pose.

Q60 **Lord Colgrain:** How aware and supportive is the UK public of the behaviour and lifestyle changes that may be required to meet the Government's long-term climate and environment goals and the policy measures that might support them? Dr Gray, could you start on that, please?

**Dr Emily Gray:** The priorities that people see for climate action depend in part on the area that you are asking about. The UK public tends to see areas such as transport, home energy and material consumption as important priorities for action from government and industry but rank the importance of changes to our food systems and diet, for example, much lower. This also comes through in qualitative research. For example, last summer Glasgow City Council commissioned a climate assembly ahead of COP 26, bringing together 50 members of the public broadly representative of the city of Glasgow to look at their recommendations for how the city should come together to tackle climate change. It was clear that the link between tackling climate change on the one hand and our diet and food systems on the other was not immediately clear to many people. In contrast, people can quite clearly see the link between how we travel, petrol and diesel vehicles and so on, and climate change.

It depends in part on the area but certainly when it comes to the policy measures that might support lifestyle and behaviour change in this area, the public is more supportive of some types of policies than others. Generally speaking—and no doubt Professor Poortinga will say more about this—people are more likely to support policies that incentivise or support them to change their behaviours and help to put the infrastructure in place for them to do that rather than policies that are more restrictive. The sense is that government has an important role to play, according to the public, in putting the right environment in place to help people make changes and make it easy, convenient and relatively cheap for them to do so.

**Lord Colgrain:** I was going to ask a supplementary question, and I will come in on it now on the strength of what you have just said. What expectations does the UK public have about the role of government in enabling behaviour change for climate and environmental goals? How much does the public want instruction and a very firm lead rather than just a rather sort of background sense of things?

**Dr Emily Gray:** The evidence suggests that the public wants government to take a lead in this area. Around three-quarters say that this is an area where government should be taking action first and foremost, but under half of us think that is happening at present. There is a gap between people's expectations of government and the action that they see being taken at the moment. The same is true for industry, but the gap is smaller. It is interesting that the perception of many people is that we are already doing enough as individuals, and I think that is one of the challenges for lifestyle and behaviour change in this area. There is a

perception that we are already doing our bit, but government and industry need to take the lead on this.

Part of that is also a knowledge gap about what lifestyle changes would make the most difference. The evidence suggests that we tend to overestimate how much of a difference to carbon emissions lower-impact actions such as recycling and so on will make. We underestimate the impact of higher-impact actions that will make more of a difference to reducing carbon emissions in the UK, such as taking fewer flights or living car-free. There is a knowledge gap here that I think is important for government to bear in mind when making policy on this issue.

**Lord Colgrain:** Thank you. That was an extremely interesting reply. Professor Poortinga, please?

**Professor Wouter Poortinga:** I have a very similar response. In general, the public is on board with the net zero agenda and is aware of the urgency of climate change. The British public is also aware of the urgency with which climate change needs to be addressed and a clear majority is expressing those views in surveys.

People are also aware that radical changes are needed in a range of areas: household energy use, travel and transport and to a lesser extent with material consumption and diet, for example, as Emily Gray mentioned. People are also expressing a willingness to change their own behaviour—but a note of caution here is that it is an expressed willingness; it does not mean that people will actually change their behaviour, and that is that famous intention behaviour gap again.

On the role of government therein, people expect government to take the lead on climate change, which is seen as an issue over which individuals have little control. It is a global issue; it is very large, and individuals do not feel capable to deal with it, so the involvement of government and international bodies is needed.

Last year, we did a study comparing responses to coronavirus and climate change and we looked at the perceived responsibilities of individuals and government as well as personal efficacy and trust. Personal efficacy relates to whether people feel their own actions are effective or not and trust is about whether they expect government to take effective action. With coronavirus, there was a clear shared responsibility between individuals and government. People felt personally responsible to deal with coronavirus and felt that government is also responsible—so a joint responsibility to deal with the issue—and also felt that their own actions would be effective, so they were happy to take those actions. It was slightly different with climate change. There the public saw the responsibility clearly for government, and also felt that their own actions would be less effective. The problem here is that people did not really trust, or did not express trust in, the Government to take effective action, which also has consequences for individuals' willingness to take action themselves.

**Lord Colgrain:** Can I ask you to expand on that last comment, that people do not trust the Government to take effective action?

**Professor Wouter Poortinga:** One of the reasons why we study public attitudes to climate change is not only about individual behaviour change but about a social contract between citizens and their governments. Issues such as coronavirus or climate change need to be dealt with, and everybody needs to play their part. If individuals do not see the Government taking the lead, or taking their part, in dealing with those crises, individuals are also less willing to play their own part in trying to deal with the issue.

**Lord Colgrain:** Thank you. That was very instructive.

Q61 **Lord Browne of Ladyton:** I have a couple of specific questions about awareness. Is there any data about public awareness of the Climate Change Committee's view that behaviour change plays a role in almost two-thirds of the emissions reductions that we require? That is the first question. Has anybody tested the awareness of that advice that has been given to the Government and Parliament beyond the people to whom it was given?

The second question is the issue of people's perception that they are doing their bit for this. I think I probably agree with that from conversations I have had with people, but is there any data that suggests that they think they are doing their bit and therefore, from our point of view, how do we improve that level of awareness?

**Dr Emily Gray:** I will respond to the second question first. When we look at public opinion globally on these sorts of topics, we see that actions to tackle climate change still are not an integral part of everyday life in the UK, with the exception of recycling. Relative to other countries, recycling, packaging, plastics—these issues are top of mind for the British public for environmental behaviour. We see this in qualitative evidence as well. The sorts of comments you might hear are, for example, "We are really green in our household. We make sure to recycle everything". It is those sorts of actions that people think they are already doing and where they think they are already playing their part.

We find that awareness of the extent of the transformation that will be needed in society is relatively low. About one-third of us recognise the need for quite major transformation across the range of how we live our lives today, on things like how we generate energy, how we produce our food, how we get around, how we produce and price goods and services. Also on a more micro, individual level, we do not always have a strong understanding of the types of changes that would make the most difference to getting us there.

**The Chair:** I think that was a no, there have not been any quantitative or qualitative studies undertaken on the specific issue of the Climate Change Committee's view.

**Lord Browne of Ladyton:** It also suggests the gap in people's level of

awareness, which presumably the people who govern them have some responsibility for.

**Dr Emily Gray:** That is right. We have not asked specifically about awareness of the Climate Change Committee's view but certainly we found that awareness of the UK's net zero target for 2050 was relatively high. Ahead of COP, four in five of the UK public were at least aware of that.

**Lord Browne of Ladyton:** I was less concerned about whether they knew about the Climate Change Committee than that they knew about the advice. I think the advice is fairly fundamental to understanding where behaviour change lies in this challenge that we have, but I think you have answered that question for me. Thank you very much.

**The Chair:** Yes, not the extent of the transformation.

**Lord Browne of Ladyton:** Yes.

Q62 **Baroness Young of Old Scone:** You said earlier that concern about climate and the environment used to be a sort of middle-class, young, leftie preoccupation. Tell us a bit more about how this works out across different population groups and their views on climate change, the environment and behaviour change and also their attitudes towards the sorts of policies that they want to see put in place. Is there any feel for how that has changed over time?

**Professor Wouter Poortinga:** We have done work on this for the last 10 to 20 years. From research we did about 10 years ago, we found that climate-sceptical beliefs were very much concentrated in specific age groups, older age groups who hold conservative values and who are from a lower socioeconomic background. It also holds true that climate-sceptical beliefs are less common among younger age groups with more self-transcendental values, more environmental values. Other research from about five years ago, from the European Social Survey, found that younger age groups and graduates are more likely than older and less-educated groups to think that climate change is caused by human activity and are also more concerned about it.

We have found in recent years that these differences have disappeared. The age differences are much more than they used to be five to 10 years ago and also the differences between those who are on the left side of the political spectrum and those on the right. That may be because engagement about climate change has increased among older age groups and among those on the right of the political spectrum.

**Dr Emily Gray:** As Professor Poortinga has said, concern about this issue is now much more mainstream, although it is interesting to note that women are still more likely than men to say that they are very concerned.

One thing that continues to make a big difference to people's level of concern is socioeconomic status. Generally speaking, the more affluent

are more likely to be concerned about climate change than those who are struggling financially. We see a pattern when we look at levels of support for particular policy measures. If you are someone who lives in one of the most deprived areas of the UK, generally speaking you are less likely to support net zero policy measures than someone who lives in one of the least deprived parts of the UK. While political affiliation now makes less of a difference when it comes to a general concern about climate and the environment, it still makes a difference when we look at support for particular policy measures. For example, when you look at how people voted at the last general election in 2019, those who voted Labour or Liberal Democrat or Scottish National Party were more likely than average to support most net-zero policies. Those who voted Conservative were less likely, on average, to support those sorts of policies.

When we look at which groups in society were more likely to have made net zero behaviour changes during the pandemic, financial difficulties have clearly had an impact. People who have felt the negative financial impact of the pandemic have been more likely to make changes to their lifestyles during the pandemic that are more positive from an environmental point of view. It is very important to note that these sorts of behaviours may include things like turning down your thermostat, not heating certain rooms, the sorts of things that are obviously bad for people's general well-being, so people who were making those sorts of changes and were feeling the pinch financially also reported higher levels of general anxiety and so on. This is especially important to bear in mind in 2022 and beyond, given the energy price rises that we are set to see and the general increase in the cost of living. Cost and affordability are central issues to address with the public when it comes to lifestyle change on this issue.

**Q63** **Baroness Young of Old Scone:** Before I finish, could I ask Professor Poortinga about some of his other research that is not immediately on the agenda at the moment but might be interesting to the committee? If I understand it, some of your research has looked at where it is most appropriate to message communities, whether locally or nationally, and what is most effective. Would you like to make any comments on that? Do interventions in communications with the public make more of a difference at a local level or a national level?

**Professor Wouter Poortinga:** I am not absolutely certain how to answer that question. It really depends on what we are talking about. The main point I want to mention here is that behaviour change will not happen automatically. People will not automatically change their behaviour. You will need to have a range of measures. Informational intervention or where you have so-called behavioural intervention in most cases are not themselves sufficient. You would have to look at a combination of measures that include information, education, taxation and infrastructure changes.

As for local and national, there have been several examples—the plastic bag charge, for instance, done at the national level or, to put it more

correctly, at the subnational level—and they have been highly effective. I am not sure that completely answers your question.

**Baroness Young of Old Scone:** It was very helpful. Thank you very much.

Q64 **Lord Grantchester:** Following that up across populations, where countries or their governments have done more or are perceived to have done more, is there evidence to suggest that those populations have greater awareness? If they have greater awareness, does that translate into greater behaviour change?

**Dr Emily Gray:** It is a very interesting point. We see variation in public attitudes across countries. Recently we looked at attitudes among young people across the G20 countries as to which Governments they see leading the way on these issues. Within the G20, Japan and Germany are seen as leading the way and also the UK, following them. The UK is not seen as lagging behind other countries on this issue, but the perception from the UK public is that people want government to be doing more and taking more action on this issue.

Q65 **Lord Browne of Ladyton:** I think this is probably a question for Professor Poortinga on the basis of his many years of work in this area. Is there any indication whether people's attitudes are different if they are grandparents or parents? Has anybody measured whether having equity in future generations affects people's attitudes? I ask this question because when Extinction Rebellion was out in large numbers outside my office, I went out to speak to them and was struck by how many women of my age, who were grandparents, were out demonstrating. They were very middle-class people, too. I was quite surprised.

**Professor Wouter Poortinga:** That is a very good question and we have done some work on it in recent years. We have looked at whether people who become parents also become more concerned about climate change because of the risks to their offspring. We have not found evidence for that. We have looked at several longitudinal datasets where we tracked people over time and where people became parents for the first or the second time and we did not find any effect. The only effect we found was that people who were already concerned about climate change became even more concerned. You would need to have an already existing concern about climate change for it to have an effect. We did not look at grandparents. We only looked at adults who became parents for the first or the second time.

**Lord Browne of Ladyton:** I do not know if Dr Gray has anything to add about that.

**Dr Emily Gray:** When we have looked at groups in society who have been more likely to change their behaviours during the pandemic, we have found the presence of children in the household makes a difference, but it is very hard to disentangle whether that is because of the sorts of feelings you suggest around future generations or whether it is because

of accompanying financial difficulties at home, say, among that group. It is a complex picture.

**Q66** **Baroness Northover:** Your evidence is fascinating and very informative. I will follow up on the question that Baroness Young put. Professor Poortinga mentioned people's reactions to the pandemic, and experts have come to the fore in the pandemic—scientific and health ones. There has been some pushback of course, a certain amount of noise, people objecting and so on, but if you look at the levels of adherence to lockdowns and to uptake of the vaccine, you can see that the experts have been heard and listened to, and there was a collective effort that you have both referred to.

Baroness Young asked about local versus national messaging. What role do you see potentially being played here by experts and scientists? They will no doubt be shot down in social media, but in the pandemic their voices have, by and large, prevailed. Given that politicians may not be trusted, is that something that we should be looking at? We know that David Attenborough has been immensely influential, but what about the scientists and the experts in this area? Might you be able to comment on that?

**Professor Wouter Poortinga:** There is a role for scientists to play in the communication of climate change. Scientists are more trusted than any other group. There is an idea that there has not been a scientific consensus about climate change. I will not go into too much detail, but research has shown that when you message the scientific concerns about climate change, it will increase engagement with the topic. Here, however, you have to make a distinction between engagement with climate change and behaviour change. We have seen over the last four to five years that belief in climate change has increased, concern about climate change has increased and engagement with the topic has increased for that reason. That does not mean that people will change their behaviour accordingly, for a multitude of reasons—most likely for different kinds of considerations and environmental behaviour being too entangled in day-to-day life.

**Dr Emily Gray:** I agree that it is important to think about the messengers and influencers on this issue, but it is also about how they are getting the message across. We know from research that, when it comes to behaviour change, focusing on the environmental benefits first and foremost does not work all that well. We should probably be talking more about what you might call the co-benefits of policy measures. Many of the sorts of policies that the Government might wish to put in place to help to reach net zero have benefits for the people—say, through reduced air pollution, health, safety, individual well-being, benefits to society, job creation and so on. It is important to think about what could help to shift people on these issues, and there is a lot of evidence on that.

Take the example of electric vehicles. While people tend to acknowledge that switching to an electric or hybrid vehicle would be better for the environment, it is not something that they tend to give all that much

thought to. It is more about factors such as the cost of electric vehicles, the charging infrastructure, gaps in people's knowledge about them, how the vehicles look and what others around them have experienced. For example, if your neighbour gets an electric vehicle and waxes lyrical about it, that may well get you thinking about it too. It is important to look at what other factors could help to shift support for these kinds of policy measures and assist government in bringing the public along with them.

**Q67 The Lord Bishop of Oxford:** Thank you both for your evidence so far. I want to probe into whether the research differentiates at all between our own Government and the global consensus around climate. Professor Poortinga said earlier that people expect the Government to act but do not trust that the Government will act. Clearly, there are dimensions to the climate crisis that are more global than local. Is there any research on how that affects behaviour change—if the Chinese Government will not move away from coalfired power stations, why should a person not fly abroad for their holidays, that kind of thing?

**Professor Wouter Poortinga:** When we talk to people about climate change, it is often said, "I can't do anything about it. What I do will not have an impact on climate change", and they are correct to some extent. We will not be able to address climate change without everybody acting and by "everybody" you can mean everybody in someone's community, everybody within the UK, everybody in Europe or everybody across the world. Often people say, "There is China, so why should we act?" Here you have to consider that there is a difference in the amount of carbon we emit. If you are looking at the amount of carbon we emit as UK citizens, it is many times higher than it is in other parts of the world, so we have a responsibility, as high emitters, to reduce our emissions. It is a global issue, but we also have to consider the amount of carbon related to our behaviour.

**Dr Emily Gray:** Often, of course, we are asking people about their views on the UK Government specifically because it is important to be precise about these things. I will make a general point, however, which certainly is not unique to climate change and the environment; it is an overarching public concern. Perceived fairness is very important to the British public overall, and for specific policy measures. In the Glasgow climate assembly work I mentioned, a big concern for people, right from the start of those deliberations, was fairness. There was concern about people being left behind, what policymakers might call part of a just transition to net zero. We also see that sense of fairness playing out when it comes to policy. For example, there is evidence to suggest that people welcomed the principle that the polluter should pay, and we see that this also impacts support for particular policies, such as frequent flyer levies, for example.

**Q68 Lord Whitty:** I have two questions. Among those who are not aware or have low awareness of climate change, is there a significant group who are hostile to such thoughts or denial? Is there an equivalent to an anti-vax movement on the climate side that we ought to take care of? If so,

who are they and how big?

My other question is about the relationship between attitudes to what people are prepared to do and the cost. In a sense, it is slightly paradoxical. On the one hand, people may be aware that they ought to change their mode of transport, but buying an electric car is extremely expensive. On the other hand, they may not be very aware and not prepared to do much about their diet, where changes could be cheaper and much easier economically. Is there an economic balance that is logical, or is my perception of an illogical economic balance correct?

**Professor Wouter Poortinga:** I will start with the first question. We have done work on climate scepticism, the denial of the existence, or the causes, of climate change. Between 2005 and 2010, we saw an enormous increase in scepticism, a trebling of climate scepticism. Around 2010, it was quite a substantial movement although that can be overstated, but it was around say 10%, 15% or 20% of the UK population. Since then, it has diminished substantially and currently there are very few climate sceptics around. The number of people who flatly deny the existence of climate change, or who say that it is not caused by human activity, or who say that the impacts will not be negative, is negligible. At the moment, there is a very small group, and it is not significant at all.

The majority of the UK public is aware of climate change happening, aware of the human causation and aware that it will have negative impact. On top of that, looking at engagement with climate change, you can also see that the number of people thinking that it is already happening is increasing rapidly. Ten years ago it was only a minority, around 40%, whereas now 60% to 70% say that we are already feeling the effect of climate change, so a large majority of the UK population think that it is here and now—it is happening. I do not think that awareness is an issue at the moment. It is more about responses to climate change, how to get to net zero and how to get everybody on board.

**Dr Emily Gray:** If I may come in on the cost point, cost is really important to people. When we have carried out research looking at public support for a range of net zero policies across transport, mobility, home heating, material consumption, sustainable pensions and so on, generally speaking there is support for these types of policies, although it does vary depending on the policy. When you introduce to people the possible implications for their own lifestyles that a policy may have, or the personal financial implications—what if, for example, this meant that people needed to pay more tax or pay more to take a flight—public support for those policies falls off sharply. When we look at the arguments that people find persuasive for and against net zero policies, cost concerns are a unifying argument that people find convincing against these policies.

It is fundamental for government to be communicating with the public about the costs, how policies will be paid for, and the financial support and incentives that may be available to help people along the way. If we

do not talk about cost, it will be the elephant in the room, and we know it is off-putting across demographic groups in society.

**Lord Whitty:** That would be expected where resistance is logical, but there are also relatively small and less-cost changes that people are hostile to, in particular to their mode of transport. They are prepared to use their own cars rather than get public transport, or they are not prepared to change their diet for either health or climate change reasons. In some cases, cost does not play a significant role; if anything, it is a negative relationship.

**Dr Emily Gray:** The other thing is that it is a whole package of policies. I think that you need to look at the environment surrounding people in the round and understand the evidence on people's concerns about these policies, because that helps to frame the policy measures in a way that helps to bring people along. Also, of course, having the right infrastructure in place to support people to make more sustainable choices is important.

**Professor Wouter Poortinga:** If I could continue with that theme, people are willing to make minor changes. Look at recycling; many people are willing to do that and many people recycle when local authorities provide recycling facilities or offer kerbside recycling. Recycling rates are very high, particularly in Wales. The choice of transport mode may be a small change for some, depending on where you live. In London, you may have lots of different options—you can use the Tube or the bus or you can walk or cycle, especially now with the changes in the infrastructure—but if you live in a rural area and there is no provision by way of a bus or cheap transport by train, it is a much larger change to make, especially if you are on a low income.

Q69 **Baroness Boycott:** I have two questions. One is about the co-benefits. Certainly the Clean Air Act was immensely helped when it became a health issue. I wonder whether and how we can apply that to meat. I am thinking of your evidence about, say, men's willingness to eat less meat being not that great—and I wonder how we could use that.

I think you have already answered this next question but I would love you to spell it out. How important is it that the public sees the Government not only changing their behaviour but making this an important issue? How damaging is what is going on now to people's concerns about climate and about establishing some kind of sense of trust that this is important?

**Professor Wouter Poortinga:** Both Emily and I are able to respond to that. Co-benefits provide a way to reach the non-usual suspects. Many people are already concerned about climate change and have changed their diets for that reason but it is not an argument that will sway everybody. You can see that the co-benefits, of health for example, or reducing air pollution are arguments that are accepted much more widely, so if you want to get to the non-usual suspects in behaviour change, citing the co-benefits may be effective.

There are two aspects to the Government taking the lead. There are things that individuals can do and things that the Government can do, and people would like to see the Government doing the things they can do, but they would also like to see the Government doing the things that will enable people to change their individual behaviour. Here you can have several examples, but I always use the example of cycling. To promote cycling, you have to provide a safe infrastructure. A number of people are very committed to cycling, but a lot of people and groups do not feel safe, and gender is a very important factor in that.

**Dr Emily Gray:** When we have looked at why people have made changes to their lifestyles to shift to more sustainable actions, during the pandemic it was not, by and large, for environmental reasons. At best, that has been a secondary motivator, so it is important to be thinking about other sorts of co-benefits, communicating them and engaging the public on them.

I think Professor Poortinga has covered the government question. There may also be some merit in talking about the cost of inaction and in having a transparent conversation with the public about what happens if as a society we do not make these changes, which will require action from government and industry, but also from individuals and communities, and what the impact of inaction will be.

Q70 **Lord Lilley:** Have you done any studies of what people expect would happen if we and the world took no further action to reduce or prevent the growth of carbon emissions, in the sense of what they would expect to happen to the sea level in 100 years' time and to their living standards and their life expectancy if we took no action? That is one question. Secondly, have you done any work on what people expect it to cost them as families, or the country as a whole, to achieve net zero?

**Dr Emily Gray:** We have not tested the first question about what people think the impact would be if we took no action. We may well test it, so thank you for your idea on that. When it comes to expectations of government, again that is an area to do more on.

**Lord Lilley:** And cost? The question was on expectations of cost—how much it would cost to achieve the programme of net zero.

**Dr Emily Gray:** That is a huge question for people and, frankly, people do not know a lot about it at the moment. I go back to the example of the climate assembly that was held in Glasgow ahead of COP 26, where there was concern about cost. When people were introduced by experts and scientists to the big changes that the city could need to take, they were surprised at the scale of the changes that might be needed—but a central question for people was who was paying for it, because it must cost a lot. This is not an issue that is necessarily on people's minds every day. Although concern about it has increased, people have a lot else on their minds and do not necessarily have a clear idea of what the cost of inaction would be. These are big questions for any of us.

**Professor Wouter Poortinga:** We have not done any work on the cost of inaction either, but it is a very good suggestion. On the cost to individuals and households, net zero policies have a bit of a perception problem. They are not all seen as fair, and many of them are seen as restrictive and costly to households. When you are talking about a carbon tax, for example, a lot of people do not like the idea, simply because it is labelled as a tax, whereas it would have an impact only on those who are high emitters. There is a perception problem there.

**Q71 The Duke of Wellington:** My interest is the economic aspects of individual behaviour change. It seems to me—and indeed Professor Poortinga touched on this—that a low earner living in a rural area may wish to change to an electric car and in reality will not be able to afford to do so. I imagine that your research shows that.

On the more general point of heating one's home, which applies in cities and rural areas, again there will be considerable expense involved in changing heating methods. I imagine, therefore, that the research shows that among low earners there may be a desire to change their system of heating, but the affordability must be very much in doubt for an individual who is a low earner as opposed to a high earner. What does your research show, if you have done any, on those two points?

**Professor Wouter Poortinga:** This is one of the reasons why so-called pull measures—measures that make positive behaviours more attractive—are supported and liked much more than punitive measures that make the polluting options more expensive. Subsidies for electric vehicles or for insulation, for example, are widely liked across the political spectrum and across different income groups, even if the evidence shows that mostly high earners will benefit from those subsidies. They are seen as supporting people to make those changes and that is liked across the UK public. Taxation, on the other hand, which is better in a way because it impacts more the high polluters, is disliked because it is seen as restrictive and punitive.

**Dr Emily Gray:** Concern around costs and affordability is likely to be particularly acute for low earners, but it is a shared concern about net zero policies that cut across demographic groups. Cost arguments against such policy measures resonate with people across society. It is also important to take rurality and geographical location into account. Here in Scotland, for example, one in five of the population lives in a remote or rural location and there are some areas where charging infrastructure for electric vehicles and public transport options will be more limited. It is important to understand the different contexts within which people may be receiving such policies.

**Q72 The Chair:** Could each of you reflect briefly on how attitudes can be sought in a meaningful way? You have mentioned the Glasgow climate assembly a couple of times and there are other initiatives like that at local, subnational and regional levels. My understanding is that the Government do a BEIS tracker on this issue, which I think is qualitative or quantitative research, but they do not do any of that more deliberative

style of attitude seeking. Do you want to make a comment about how in this area the way that one seeks awareness can also be part of the process of moving the dial on getting to net zero?

**Dr Emily Gray:** I think it is particularly important that the policy in this area should be based on a holistic understanding of the impact of policies like this on people's lives and what concerns people may have. As you have heard from the evidence so far, there is a host of factors that can act to push or deter people from adopting more sustainable lifestyles, and it is important to use a behavioural framework to look at them holistically in the round as we make policy.

Certainly deliberations have become more used on climate change issues in recent years. At COP 26 there was a global climate assembly, for example, and there have been national and local climate assemblies. Part of the reason they have become a popular mode is to do with the amount of time that people are able to spend hearing evidence about the issues and thinking them through so that they can debate and discuss with each other and come to informed decisions on the issues in a way that you cannot do in a quick quantitative survey.

None the less, I think it is about having a range of different types of evidence, because different types of evidence will give you different things. Quantitative surveys remain important to track how things change among the population. With the appropriate policy measures, you would expect that attitudes and behaviours will change over the coming years, rather than behaviours being relatively stuck as they have been over the last decade or so.

**The Chair:** Thank you. I will move to Lord Browne now before allowing Professor Poortinga to respond.

**Q73 Lord Browne of Ladyton:** This is the last question and I think you have been given notice of it. What are your recommendations for government on communications and behaviour change policy for climate and environmental issues? You may think that you have been answering that question for the last hour, and you have been, so I invite you, since we have a couple of minutes, to treat it like the last question on "Desert Island Discs". If from all that you have been saying you could select only a couple of things, tell us what they are, please.

**Dr Emily Gray:** Gladly, and I will keep it short. Government needs to get to a point where low-carbon lifestyles are part of the fabric of our society and people have the information and the access that they need to take advantage of new infrastructure and technology as it becomes available. For me there are three things, which have all come up in the session: first, talking about the co-benefits, because we know that focusing on the environmental benefits does not work for people; secondly, addressing people's concerns about affordability and cost; and thirdly, thinking about the impact of these policies in the round and bringing real-life evidence into policy.

**Professor Wouter Poortinga:** I will add two recommendations. The first is that there is no silver bullet for behaviour change and/or behavioural interventions. Behavioural interventions in most cases have only a very small effect but can be very important as part of a wider programme of interventions. You need to think about it holistically. You need to combine multiple measures that include education, communication, infrastructure investments, taxation or fiscal measures and regulation. Successful case studies are those where multiple measures have been combined. The second thing, and I have already mentioned it, is that trust is incredibly important. You want to have the trust of the public to get to net zero.

**The Chair:** Thank you. I thank both our witnesses for the fascinating insights they have given us. I am going to be brief in my thanks because I squeezed in so many questions from Members, but please do not take the shortness of our thanks as anything other than that I did not chair the meeting perhaps as well as I should have done. I will now formally close the meeting. Thank you very much.