



HOUSE

OF LORDS

Environment and Climate Change Committee

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

Tuesday 16 November 2021

10 am

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Members present: Baroness Parminter (The Chair); Baroness Boycott; Lord Browne of Ladyton; Lord Cameron of Dillington; Lord Colgrain; Lord Lilley; Lord Lucas; Baroness Northover; The Lord Bishop of Oxford; Lord Whitty; Baroness Young of Old Scone.

Evidence Session No. 1

Heard in Public

Questions 1 - 9

Witnesses

[I](#): Ewa Kmietowicz, Team Leader, Committee on Climate Change; David Joffe, Head of Carbon Budgets, Committee on Climate Change; Toby Park, Principal Advisor, Energy, Environment & Sustainability, Behavioural Insights Team.

Examination of witnesses

Ewa Kmietowicz, David Joffe and Toby Park.

Q1 The Chair: Good morning and welcome to this first inquiry of our new session on behaviour change for climate change and environmental goals. We are pleased to have three witnesses with us here today. We have Ewa Kmietowicz and David Joffe from the Committee on Climate Change and we also have Toby Park from the Behavioural Insights Team. You are all extremely welcome. Thank you for joining us today.

The aim of our session is to explore both organisations' engagement to date in behaviour change and to try to understand better where the main policy challenges might be in this area and who might fill some of those policy gaps as we look forward to putting forward a recommendation later next year to influence the Government's thinking in this key area.

I need to remind all attendees that a transcript will be taken and will be made public. Witnesses will have sight of that before it is published. It is webcast live and is subsequently made available via the parliamentary website. I remind all members that if you have any relevant interests, please declare them before you ask any questions.

To all the panellists, do not feel obligated to chip in if you do not have anything further to add after the initial person has spoken, but please do not feel excluded from adding comments if you so wish.

Ewa, where does behaviour change fit into the UK's long-term climate change and environmental goals? Specifically, in what sectoral areas could new or indeed revised government policy on behaviour change for climate change and the environment add the most value?

Ewa Kmietowicz: I will let David Joffe answer that because we have split the questions up between us and he was going to take that one, if that is okay.

The Chair: That is absolutely fine. Co-operation between witnesses is no problem at all.

David Joffe: Thanks, Ewa. If I take a brief tour through the different sectors, the buildings sector will be hard to decarbonise. Two aspects of behaviour change are important there. One is getting people to insulate their homes better, which is actually to their benefit financially in many cases and will lead to more comfortable homes. Then there is also the technology side and, when we talk about behaviour, it is important to recognise that adoption of new technologies is also important. Adopting heat pumps, for example, would be crucial there.

On the transport side, switching to public transport and active travel, again, can have health benefits, with people walking and cycling, and then adopting electric cars.

On the aviation side, an important contribution to demand management is not that no one can fly any more but that people should fly a bit less if they can. Pricing has a role in that as well as people deciding to fly less.

On the land use side—and Ewa can talk more to this—diet change has an important role. Healthier diets will also tend to be lower-carbon diets with less red meat and less dairy.

In some of these areas, we do not have policy to help drive those. That is not to say that these changes will not happen anyway, but policy to encourage that along would be helpful and to give people the information as well as the nudge, I guess, to make those changes.

Ewa, is there anything you want to add to that?

Ewa Kmietowicz: I will add a little bit more detail on the importance of diets in our scenario. Meat and dairy are by far the most carbon-intensive food products. Not only do they cause a lot of direct emissions in their production but they use a lot of land. That means that the opportunity cost of using land is high for those products, land that could be used for other purposes, such as carbon sequestration, regeneration and biodiversity.

Our central pathway—or our balanced pathway, as we call it—to net zero has quite a significant shift in diet change from where we are now to a reduction of around 35% by 2050 for those reasons. That allows high woodland creation and afforestation rates and also peatland restoration, which also contribute to wider environmental goals.

Baroness Boycott: I want to pick up on the issue about diet and to ask all of you or one of you—whoever can answer it—how you are reacting to Henry Dimbleby's food plan, which of course has a lot about land use, reduction of meat eating, proposals for taxes on meat and different ways of evaluating food; in other words, it is a systemic change rather than individual changes, which in my years in the food business seemed to make fantastically little difference because you need something much more holistic.

Ewa Kmietowicz: We were welcoming of the broad thrust of the food strategy and Henry Dimbleby's report. It put healthy eating, sustainability and climate impacts of our food production at the centre of the debate and focused on tackling all those problems simultaneously. Government guidelines on healthy eating are about reducing protein consumption, particularly meat and dairy. We found with our analysis that if you do that, you can move towards healthier eating as well as freeing up land for carbon sequestration and reducing direct emissions from rearing livestock.

Baroness Boycott: What kind of campaign would you see being able to step up? 5 A Day did not shift the dial about vegetable consumption one iota. I know—because I have had meetings with them—that Saatchi is contemplating doing a big thing about meat. Will the Government step up

to the idea of taxing it? Where do you see your role in meat consumption? How would you do it?

Ewa Kmietowicz: Toby can probably add to this, but you can use a spectrum of options for this sort of thing. We set this out in our 2018 report on land use policies to deliver our land use trajectories. Start off with the easy things such as information and guidance, “nudge” types of things, increase supply and availability of low-carbon options, make them more visible in supermarkets and mandate the public sector to offer vegetarian options in different public settings. Towards the end of the spectrum of choices for policy instruments are the more self-regulatory options and taxes are probably right at the end. None of that, as far as I can tell, has happened yet. Even starting off with the easy things has not happened.

The Chair: Thank you. I will call Toby in to respond to that and then I can see that Lord Colgrain wants to come in.

Toby Park: Thank you. Yes, I am happy to respond to that. Maybe I can go back and provide some general comments to the question at some point as well.

I agree with your assessment, Lady Boycott. In our assessment of anti-obesity policy, for example, over the last 30-plus years is that where it has failed, unfortunately rather often, that is because there has been too much reliance on individual agency and individual behaviour change in terms of reducing calorie content, being more active and exercising more. The evidence overwhelmingly shows that our diet and our food consumption is largely a product of our food environment; in other words, we live in a society saturated with salt, sugar, fat and so on. We do need some more upstream or systemic changes to create a healthier and more sustainable food environment and then the choices will flow from that.

Certainly, we have proposed using taxes and so on. There are huge political challenges to a more conventional “sin tax” type of design. It should not be a case of penalising people who want to eat meat but a slightly more sophisticated design—a bit like the sugar levy, which is more outward-facing¹ and designed to incentivise innovation, reformulation and so on—to try to take the carbon out of the food we eat would be more effective.

You might have seen recent comments from George Eustice over the last few weeks. He spoke a little bit about this at one of the side events at COP. The Government’s current mindset is not towards something that would be labelled a tax because that does have political challenges but, for example, repurposing common agricultural policy subsidies, which of course have been redesigned anyway, to that end. We have seen commitments to reduce methane by 30% coming out of COP 26, which is

¹ Toby Park later clarified that he was referring to upward-facing policy, towards producers and suppliers, rather than “outward-facing”.

fantastic. Farmer- or producer-facing incentives will almost certainly be part of that.

I also agree with Ewa that you can do a huge amount within localised food environments: supermarkets, restaurants and so on. Again, the evidence is strong that by making the more sustainable and healthier options more available, prevalent and prominent on shelves, using price signals and so on can be effective.

We do not want to rely on imploring and encouraging people to do all the hard work themselves and change their diets. That might get us a little bit of the way and certainly, as Ewa says, we have not tried too much on that yet, on the sustainability point, but it will not be enough in the long run.

Lord Colgrain: I have a question for Toby, please, on buildings and decarbonisation. I would like to hear your comments on the Government's EPC approach because there is a stick-and-carrot attitude, either providing funding for things such as insulation or trying to fine where EPC levels have not been raised sufficiently. Can you see which of those two proposals has been the more successful? Is the whole EPC approach likely to get the sort of response that we need within the targets being set?

Toby Park: EPCs have a number of problems. They are based on engineering models of building efficiency. Real-world efficiency can be quite different from what the EPC suggests. They can be gamed and they can be a bit inaccurate.

In terms of incentives and some of the big changes we need—heat pump adoption being the main one and, prior to that, insulating properties to ensure they are sufficiently efficient for heat pumps to be effective—financial barriers are a significant part of the problem here. That is true for landlords as it is for tenants. Of course, rental properties are even more complex because the tenants pay the energy bills but the landlords have to invest, so there is a split incentive and it does not necessarily make much sense for landlords to invest. Big subsidies are, unfortunately, necessary and so that is the right approach. Long-term future commitments to bans on fossil fuel boilers and so on are probably necessary and the right approach, as long as we can get that in early, which of course gives the industry the confidence needed to invest in R&D, innovation, training and so on. The Government at the moment are rather counting on that leading to a significant reduction in prices, particularly for things such as heat pumps. Time will tell if that pans out. I hope it will.

Penalties can work, there is no doubt about that, but they can of course be rather more politically challenging to implement, can risk being regressive and damaging and can lead to bad outcomes if we do not design them incredibly carefully. We need to be cautious about that. Often those who are perhaps least able to pay, are suffering from fuel

poverty and so on, live in the least efficient housing. Levying penalties and fines on those individuals is not the thing to do.

I tend to err towards positive incentives for that reason, but it is not just about money. Heat pump adoption, again, to come back to that, is such a complicated process behaviourally compared with getting a like-for-like boiler replacement. If your boiler breaks down—and they tend to break down in the winter when you need heating—you can get a new boiler in a couple of days if you need to. Heat pumps could take many weeks. You have, potentially, planning applications and noise assessments to go through. Most people barely know what they are. You might need to find a suitable spot to put it in your garden. You might need to dig up your lawn if you want a ground-source heat pump. You might need to change your radiators and so on. This is not a frictionless behavioural adoption curve and it needs to be. Incentives, yes, but let us also try to make that process of adoption absolutely as simple as it possibly can be as well.

Lord Colgrain: I am glad to hear you stress some of the negatives about heat pumps. They seem to be a panacea for everything at the moment, which clearly they are not. Thank you.

The Chair: David, did you want to come in on this one briefly?

David Joffe: I wanted to come in on the point that Toby made about EPCs being estimated. It is important. We now know how to measure the thermal performance of a home. If you know the temperature inside the home, the temperature outside the home and how much heat your heating system is pumping out, you can work out how much is leaking through the walls. We can measure that now with smart-meter data.

Once you start measuring, you can hold contractors to account. If they say they will bring your home from a D rating to a C rating, you can see once they have done the work whether they have managed to do that. If they have not, you can ensure that they come in and make it better. That will create a much better dynamic in the home improvement market for energy-efficiency improvements.

Q2 **Baroness Northover:** Building on what you have been saying, what key considerations should policymakers keep in mind when seeking to enable behaviour change for climate change and the environment? What are some of the principles that may underlie this, whether the importance of social norms, the role of “nudge” or other considerations?

Toby Park: That is a big question. My starting point is to emphasise the importance of understanding how behaviour change happens, essentially. It is important to recognise that as individuals we of course have a degree of agency. We are free to make choices in our lives. We are free to choose to go on vacation locally or to fly abroad. We are free to turn our heating up or down.

But we are also hugely influenced and constrained by the “choice environment”: what is available, cheap, perceived to be normal or socially desirable, the default choice if we go with the flow. The research,

by and large, as I alluded to earlier, shows that changing the choice environment to change behaviour—such as making the green choices cheaper and more available—is often more effective than trying to change what is inside people’s heads and hearts and persuading them to make different choices that are currently difficult, expensive, unfamiliar, and so on. We refer to this as acting upstream. We are changing the flow of the river rather than trying to get people to swim against the current.

The question then becomes how the Government can change the choice environment. Some things can be done directly, perhaps using procurement levers, but also we need to be thinking about creating the right incentives for businesses, restaurants and supermarkets, vehicle manufacturers, boiler and heat pump manufacturers, clothing companies. Whether it is simple incentives such as a carbon tax or more sophisticated incentives like the sugar levy, ultimately we want to create effective markets and create a world within which businesses are creating low-carbon, sustainable choices, which creates a choice environment for consumers where it is much easier and more likely that people will choose sustainable options. That becomes a win-win outcome.

Alongside all this, yes, we can also of course help and ask citizens to take direct steps where they can and when it fits in with their lives. We need to make the ask of citizens as clear, simple and reasonable as possible and also to direct them towards some of the actions that are truly impactful in their lives. Our recent data, for example, shows that most people do want to make some changes in their lives and are up for it, but most people are also quite confused as to what steps are worth while. People tend to focus on not using a plastic straw when they go to a bar or on recycling a bit more at home but do not tend to recognise the far greater impacts they could have by, for example, changing how they travel, changing what they eat, making modifications to their homes and so on.

To briefly draw out your point there when you mentioned social norms and so on, when we talk about creating an environment in which green choices flourish, that absolutely includes a social dimension, what is perceived to be the norm, as well as practical dimensions, what is easy and available, and financial dimensions—what is cheap. Even within the digital space, if you go to your grocery website, what order do things come up in? What promotions are there? What is made salient to you as a consumer? The choice environment has all these dimensions and we are influenced by them as we go about our daily lives.

Ewa Kmietowicz: I agree with everything that Toby has said but I will make three points about the essential ingredients for behaviour change.

First, Toby mentioned making it easier to make sustainable choices by providing the right information to consumers. A lot of the time that is currently missing and people do not know the carbon impact of their consumption.

Secondly, make low-carbon choices affordable, clear and available. Sometimes you do not know where the products are coming from. Also, a lot of the low-carbon products are more expensive than the incumbent, so we have to bridge that cost gap during the period until cost parity is achieved. Policy needs to address that financial penalty.

Thirdly, phase out products that are bad for the environment. People want this to happen, as we have seen with plastic bags. Also, make changes in how we market products. A lot can be done there to take advantage of sustainable products.

Lord Lucas: What is the role of openness and truthfulness in procuring behaviour change and what should the Government do to make sure quality, detailed information is available for all citizens so that they can form their own views on the worthwhileness of what they should be doing? At the moment, the refuse truck pulls up in front of the house and crunches the glass into the paper, so why recycle? What is the point? If I go to the supermarket and would like to reduce my animal consumption but oat milk is twice the price of cow's milk, what is going on? How do we use information to shift that sort of problem?

Toby Park: You have highlighted multiple important points there in your question on openness and truthfulness. Absolutely, various behavioural points are implicit in that question. People need to maintain a sense of self-advocacy²: the sense that they can have a meaningful and worthwhile impact. Seeing that we are doing our best to recycle and then it is not carrying through the system will massively undermine our motivation and our effort to do so. Likewise, seeing that other people around us—and that will include institutions and leaders—are not doing our³ bit will undermine our own motivation to do so. We have an instinctive understanding that this is a collective problem and a diffuse problem, and so contributing our own effort only makes sense if everyone else is also contributing their own effort; otherwise, we get a tragedy of the commons type of problem and it will not make sense for anyone to contribute effort. These are all important.

You also mentioned price in the supermarket. Yes, we have touched on that already but, absolutely, price is important. People generally are quite keen to do the sustainable thing but normally as a nice-to-have. Most people are not willing to accept a huge price penalty in their lives just to be green. There are exceptions to that, but we need to achieve price parity or better if we want green behaviours to flourish in a big way.

You said something about quality of information as well. We refer to this as deshrouding this important attribute in the market. This Government believe in the ability of the market to solve problems and that is wonderful, but the market tends to deliver optimal outcomes only on metrics on which businesses are competing, normally price and

² Toby Park later clarified that he was referring to self-efficacy, rather than self-advocacy.

³ Toby Park later amended "our" to "their".

sometimes quality and so on. Businesses are not effectively competing with each other to be green because consumers cannot discern which option is greener. I cannot tell as a consumer which packet of sausages, which airline or which pair of jeans is the greener option. Therefore, there is no pressure on those businesses to do better, to innovate and to be greener and for greener companies to flourish over less green ones. This information needs to be there. It is a big job. Having eco-labels and everything, you can imagine is a hugely complex job, but there are ways of doing that. As long as it is roughly right and the axis of competition is at least tilted in the right direction, it would be a big win.

The Lord Bishop of Oxford: Thank you very much to our witnesses. You present a hopeful picture of a great deal that can be done and needs to be done quite urgently, but what should we be looking for as we scrutinise different government departments as signs that this is being done in terms of the level of energy, department priorities and structure? Can you give us any examples of good practice and where a government department is going for this and is on fire to make change in these directions?

Toby Park: I can try. First, in my experience working across different departments in this Government, a lot of smart and capable people are trying hard to solve some of these problems, but of course the scale of the challenge is so vast that it is never enough. This is still a relatively niche area of expertise. Many government departments in the UK now have their own behaviour research teams called various things, such as "social and behavioural research team" and so on. The Behavioural Insights Team—as we mentioned earlier, previously owned by the Government, no longer—is part of that network, essentially, and is still the biggest team, with a couple of hundred staff globally now. There is nothing within government that is at that scale. Arguably, there ought to be, given the scale of this challenge.

There are examples where it has been done well. There have been some big successes in behavioural policy-making. To give one obvious example, auto-enrolment into pensions is a simple and elegant solution. We now have to opt out of a private pension. Previously we had to opt in. That led to roughly 10 million additional savers in the UK, which is a big deal. We could easily replicate those kinds of successes in the environmental space. One of our ideas is to auto-enrol people into green pensions rather than just the default ones.

That said, there are plenty of examples where it has not been done as well as it could have been. We have seen energy-efficiency policies over the years fall a little bit flat, be it the Green Deal, the Green Homes Grant and so on. The failings or the limitations of those policies are in the behavioural details at implementation. Why is it so complicated that suppliers do not want to bother registering for these schemes? Why are the incentives not thought through in quite enough detail to realise that they are not as appealing to consumers as they should be?

We need to think about not just using nudges as a discrete technique but having a behavioural lens applied to policy generally because, ultimately, policy needs to be designed for human beings. It does not need to have the clever psychology, cognitive biases and so on generally associated with nudging, but the basic, good hygiene practice of applying a behavioural lens to policy so that it is designed for real human beings who are busy, have limited attention and willpower and do not always want to wade through complex communications, systems, customer journeys and so on.

There is still a huge amount of scope to routinise that more across government. I say that not wishing to be too critical because, as I say, there is a lot of good work and good people making a strong effort to do that.

The Chair: Thank you. I will move on to make sure that we get through all the questions and can allow for some supplementaries. I now move to Baroness Young.

Q3 **Baroness Young of Old Scone:** Thank you very much. A number of my questions have already been touched upon but perhaps I could press them a bit further.

Toby, I was taken with your *Net Zero: Principles for Successful Behaviour Change Initiatives* report. What you were describing and what you talked about in your most recent answer was what in the good old days we were taught to believe was a basket of instruments surrounding a problem and pushing the problem towards a solution. Is there enough understanding of that approach in government to make sure that all the factors that need to be taken account of and can be deployed in achieving change are brought in in the right order, sequenced properly and co-ordinated? If not, what can we do about it? Who should be leading on this?

Toby Park: I do not wish to dominate but I guess we are slightly closer to the government departments. Yes, some of my comments in my previous response bear there in terms of whether the Government are equipped for this, but I definitely want to pick up on your point about sequencing, making sure we have the full suite of tools and so on. Again, it is a big question, but maybe I will highlight a few thoughts on sequencing.

First, we do need sufficient political capital for this to work. That is a big task for public engagement and delivering a narrative that everyone can get behind and a vision of the future that truly delivers on the co-benefits that we all want to see, is fair and so on.

Secondly—and Ewa has picked up on this in some of her previous responses—we do need to build basic public awareness of what we can all do if we want to act. That is not sufficient but it is a basic necessity. It does not have to be finger-wagging or telling people what to do. It is more about allaying that common confusion about the impactful steps people can take in their lives.

Thirdly, we definitely need some long-term policy commitments so industry can respond and have that confidence in R&D, investment, training and so on. A future ban on combustion vehicles and a future ban on fossil fuel boilers are good moves for that reason.

Fourthly, we need local plans as well and we need to bring in local government much more. Imagine how annoying it would be to buy a heat pump and then two years later realise you are being moved to a district heat network or your street is being converted to hydrogen? That is silly. We need those plans as soon as possible.

Fifthly, we need markets to work more effectively—and I have already touched on this—particularly on the deshrouding the environmental attributes of products and services so that we can leverage that consumer pressure to drive innovation as well as get the right incentives upstream to drive innovation.

Sixthly—and this is a big one—we need to remove all of the frictions and barriers to green choices. There is so much in there. That means, as I said a moment ago, building policy around real human beings and building products and services around real human beings. At the moment, that is not done to the standard it needs to be when we think about, for example, heat pump adoption, the more conventional insulation of homes or even changing of diets, which is not straightforward to do. Most people tend to have a repertoire of five or six recipes, which are habitual and ingrained. People have poor awareness of exactly what products are sustainable. They tend to focus on plastic packaging more than they do on the product within it. A great deal of work needs to be done there to remove those informational, practical, social and financial barriers, and so on, across the board.

We need all of that. You could maybe debate the precise sequence, but all of that needs to come through in policy-making in some form or another if we are to shift the dial on these issues.

Baroness Young of Old Scone: Whose job is it to get that sequencing and co-ordination to happen? In many instances, it will span several government departments.

Toby Park: Yes, you are right. This is where the net zero strategy that has been published is absolutely key. It is too early to say to what extent this Government will truly deliver on that. I agree that there is often a problem and that the right hand of government does not speak to the left hand of government, so we need more cross-departmental thinking.

It is right that, for instance, the Department of Energy and Climate Change has been merged with business and industrial strategy so that we have a bit more of that sort of holistic thinking, but how will it be co-ordinating with Defra and the DfT?

I do not have a great answer to this. Governments becoming siloed is a perennial problem. How we fix that I do not know, but you are absolutely

right to raise the issue. I hope that this committee as well can play a modest but important role in ensuring this connection across different bits of government and that they are being steered holistically in that direction. I do not know whether the CCC has further thoughts that might improve that thought.

Baroness Young of Old Scone: Ewa, do you have the answer?

Ewa Kmietowicz: I do not know about that, but I have some thoughts. I totally agree that this is a complex issue. It requires policies across the economy. It affects millions of people, communities and businesses over time.

We are planning to publish a report, probably early next year, around the need for an effective, comprehensive public engagement strategy and what that would look like, setting out clear milestones for the Government over time in how they can mandate and use a deliberative process with the public to encourage active participation in all of this and in the decision-making on what works to deliver net zero. Toby's team will be helping us with that work.

Part of that will be also thinking about indicators to track the progress the Government are making across all the disparate areas where we need changes. We have plans in train to do that work and our progress report, which comes in June each year, will have recommendations for the Government in that area.

Lord Browne of Ladyton: I was struck by the first sentence of your contribution, Toby, which I completely agree with, but I want to pose a question to you and the others based on this. You said that sufficient political capital is necessary for this to work, which is absolutely right.

It is important to have a vision and to have a pathway to that vision. If I ask Google Maps to get from here to somewhere, it offers me options. I can fly or I can take a train or I can take a bus. Some of those options are more expensive than others and some of them take longer, but I know the stages. In this area, it is important that there is something within the political cycle which shows that we are making progress or else we find that Governments exhaust their political capital and do not get re-elected. They need constant, reinforced permission from their electorate to continue to do this because it has an impact.

That is why when I was seeking election it was more important to have the scaffolding still on the new school rather than have the school delivered. As soon as it was done, it was as if it always there. As long as people thought something was happening, they were more likely to vote for you.

How do you encourage policies that deliver? What sorts of policies in this area—which is difficult—will deliver in the short term and will get the support of elected politicians because they think they will be re-elected by delivering them as they go along?

Toby Park: If you can solve the problem of short-term political cycles not being the best vehicle for long-term problem solving, then you have made a huge contribution to humankind. This is where the CCC comes into its own, surely, because ultimately our strength is that we have legally binding, short-term carbon budget targets as well. Those will, I hope, bite within the short-term political cycles even if the long-term vision is not fully subscribed to. I will be interested to hear the CCC's view on this.

Also, it is no longer so long-term. We are already starting to feel the impacts of climate change and we are starting to reach a point in the exponential curve of progress that we need that there should, I hope, be more accountability within a typical five-year political cycle than there would have been, say, 10 or 15 years ago on this issue. Maybe this is optimistic, but the electorate is expecting more swift action on some of these key points as well.

I am not wishing to put Ewa and David too much on the spot, but I will be interested to hear from them about the role of the CCC and the carbon budgets in ensuring that those interim targets do drive short-term accountability as well as the long-term vision.

David Joffe: It is worth reiterating the point that we do an annual progress report to Parliament on the progress towards meeting carbon budgets and net zero, which is a useful instrument to highlight areas where the Government are falling short of their own strategy. Now that we have their strategy, we will track progress on whether it is achieving what they have said it will achieve. We will also track things that they have not said that it will do but that might be a useful contribution if it did, such as dietary change, aviation demand and so on, to see the progress on that. If the Government are falling short in some of the areas where they have said they would take action and where emissions were going to come down rapidly and it turns out that that is not happening, then these are some of the levers that are available to go further on other things and to compensate for less-good progress.

It is also important to recognise that some of the behavioural changes that we are talking about are not just for climate change reasons. The dietary changes that we are talking about, for example, in many cases would be good for society anyway. In fact, the health benefits are probably considerably more than the climate benefits. I am hesitant to frame this as action entirely for the sake of climate change. It is for the well-being of society, including tackling climate change.

The Chair: I can see Baroness Northover has her hand up. We are running a little bit behind time, so, if it could be a short question, it would help.

Baroness Northover: It is a point of clarification. Ewa mentioned that you will be publishing something on public engagement early next year. Do you have some idea as to when this might be in relation to our report?

Ewa Kmietowicz: We do not have a fixed date at the moment but we hope to bring it out before the June progress report, sometime in the first half of next year. It depends on what other work and priorities we have at the time.

The Chair: Thank you. Toby, you still have your hand up. Did you want to come back in or can we move on?

Toby Park: I am happy to hold my points. They might pop up in another question. Thank you.

Q4 **Lord Cameron of Dillington:** One thing about being a member of an enthusiastic committee like this is, by the time you get to your question, you find it has already been asked several times in different ways.

My question is about the Government's drive, enthusiasm and indeed funding. I wondered. Is anybody actually driving the necessary funding and driving the necessary enthusiasm from the centre? Which departments are best at leading by example and changing the way they heat their buildings, changing the way they feed their clients, I suppose, because most departments are involved in giving food to somebody, and changing the way they transport their staff? Who is driving from the middle and which departments are good and which departments are bad at leading by example on this agenda?

The Chair: You are all nervous to answer that one.

Toby Park: I can make one or two points. I do not know whether I can fully answer you. I do not know if any of us have infinite insight into who is driving this from the centre. I hope it is coming right from the centre at No. 10.

Our experience of interacting with No. 10—and I will answer this as candidly as I can—is that there is a strong vision and that emerged in the net zero strategy, but it is a vision of techno-optimism. There is perhaps a narrow understanding of behaviour change and an aversion to finger-wagging and telling people what not to do.

There is a real danger if we perceive this challenge ahead of us of significant behaviour change to avert climate change as almost like another 29 years of Covid-esque restrictions. Nobody wants that. But we are not talking about that. We are talking about something more akin to building a world in which low-carbon choices and behaviours can flourish, not just admonishing, finger-wagging and restricting people's choices in the world as it currently is.

There is a way forward here where a vision of effective behaviour change is compatible with a technology-led approach. Indeed, as we heard from David at the beginning, most of the behaviours we are talking about are indeed technology adoption behaviour anyway. That vision is sort of there but it is still a little bit muddled and will take a little while to settle what this Government mean and think about behaviour change in a pure sense.

In terms of who is doing best on their own emissions and so on, I do not know that I could say who is doing best, but I do echo what is implicit in your question there: that institutional leadership is so important, which is one of the key principles we have highlighted in our recent research. The Government should be much more gung-ho in leveraging procurement and funding and so on. To give one example, this Government spend over £2 billion per year on food across schools, prisons, hospitals, courts and so on. There is no reason why that could not be aligned with net zero. All public vehicle fleets—the police, Highways England and so on—could be electric.

This is important for a number of reasons. First, it signals the legitimacy and the importance of the issue, whereas doing the opposite—perceived hypocrisy or inconsistency—can undermine that political capital and public investment in the narrative we are trying to create here. It also means direct emissions reductions for the Government's operations. Back to the public procurement issue, not only does that directly reduce the emissions associated with the goods and services the Government are buying but it can reduce the emissions associated with the entire bidding pool, which could be many times larger.

There is a lot that Governments and institutions of all flavours in the UK could be doing to signal the direction we are travelling in and that could have a fairly widespread behavioural and psychological benefit across the public at large in terms of their investment in the project generally, the perception of credibility and so on.

Lord Cameron of Dillington: Thank you. Sorry, I should have declared an interest as a farmer. Also, I am on the board of an airport parking and data business.

As a completely separate question, are any groups or sectors of society easier to influence than others or more difficult to influence? Does age, wealth or some other thing make a difference to the way people receive these messages and act on them? It is a rather general question.

Toby Park: I am aware I am slightly dominating but I am happy to give an answer to that as well.

There is no one-size-fits-all answer to that. Every behaviour we look at is different and will be subject to a different range of barriers and enabling factors. Of course, there will be differences in the population. We often think of it as a bell-curve distribution. We will always get a proportion of the population that is particularly averse to a given behaviour either because their motivations are misaligned with that particular choice or indeed because they face particularly problematic cost barriers or practical barriers. A proportion of the population we do not need to worry about because they are already convinced—keen greens—and a middle population will be quite open to the behaviour in question and perhaps need a gentle nudge, encouragement or support to find the right choice for them. Many behavioural policies implicitly if not explicitly target the

group where we can get the most bang for our buck in policy impact terms.

Maybe one thing that would also be useful in answering your question is to understand how we think about addressing barriers in a behaviour change sense. A useful model that you may want to look into in your committee's work is the COM-B model of behaviour change. That stands for capability, opportunity and motivation. It simply says that for a new behaviour to arise, people generally need to have sufficient capability to enact the behaviour, which includes: the physical capability to do it, the means, the time and so on; the opportunity to do it—in other words, whether that choice is readily available to them, socially normative and so on; and the motivation to do it. Do they want to do it? That applies to more cognisant desires and wants and also to habits, routines and so on. You need at least a sufficient degree of each of those for a behaviour to emerge. The more motivated someone is, you could argue it is less important if there are still some residual barriers to that behaviour because they might overcome them and vice versa, but generally you need to have a degree of motivation, sufficient opportunity to undertake a behaviour and sufficient capability to do it for a behaviour to happen.

The Chair: Thank you. I can see Lord Whitty has his hand up. I will hold that because you have a question in a moment, Lord Whitty. I will ask if you would not mind binding them together. I will move to Lord Colgrain.

Q5 Lord Colgrain: Could we look outside the UK for a moment? Are there examples of climate change and environment-related behaviour change by other Governments, businesses and civil society from which we can learn and what might be the key lessons?

Ewa Kmietowicz: I looked at two examples of this in preparation for this. One was recycling rates in South Korea. In the 1990s, South Korea recycled about 2% of its food waste and the Government wanted to tackle that. Now the recycling rate is about 95% of food waste. The types of measures introduced to achieve that were comprehensive and tackled different aspects of this. They included: banning food waste from landfill; compulsory food recycling using special biodegradable bags; approval of food waste as a fertiliser, which created a market for some of the food waste; use of smart pay-as-you-go bins equipped with weighing scales and ID to identify who was depositing waste there; and developing urban community farms to make sure that producers and consumers were more joined up.

Lastly and probably quite importantly was a change in social norms and in how people thought about food. In South Korea, the tradition at mealtimes is to have lots of small dishes made from different ingredients to pick from. That led to the high amount of food waste they traditionally had. But now that has changed slightly with a reduction in these offerings at mealtimes and the association in people's minds with the importance of reducing food waste. That is a clear and effective example of a strong policy framework that has worked.

Toby Park: That was a great example. Maybe in the interests of time, if it is okay, I will forward a recent report we have done on the principles for behaviour change for net zero. The basis of that report, if you can get through the main recommendations, and the bulk of that report is actually examples from the last 80 years across all OECD countries of effective and ineffective government-led behaviour change initiatives across different sectors. We tried to distil the principles that might apply to net zero. There is a lot in there. Is it okay to share that with the committee as a more effective answer to that question?

Lord Colgrain: That would be extremely helpful. I am stealing the Chair's thunder on that.

The Chair: Indeed. Thank you very much for that offer. Any examples where the Behavioural Insights Team had been involved in suggesting proposals that had then come to successful fruition would also be of great interest to the committee. I have one question from Lord Lilley.

Lord Lilley: A lot of the suggestions that have been put forward are effectively based on the principle that water runs downhill and, if you remove the obstacles, the barriers, the dams, the weirs, the silting and so on, it will speed up. By analogy, if you remove obstacles, lack of knowledge, marketing of green choices and so on, then changes in behaviour will accelerate.

But removing barriers will not make water run uphill. By analogy, will any of these changes you recommend encourage people to spend more to be green, to fork out £15,000 for a heat pump, to spend more on an electric car than they would on a fossil-fuelled car? In particular, can you think of any occasions when a Government abroad has proposed measures that involve increased costs and that has not produced an adverse reaction publicly? I think of the Swiss referendum defeat, the Macron gilets jaunes, and counterreactions in Ontario, Alberta and Australia. I cannot think of an example where cost has become a public issue and where the public has not said, "We do not want to pay higher costs, nudge us as you may". This is for the CCC. It is its job to bring this about.

David Joffe: We cannot speak for the examples internationally where they have been successful in persuading people to pay more, but I make the point that it is the job of the policy, the policymakers and the Government to frame things in such a way and to provide frameworks so that the green option does not cost more.

We have an excellent opportunity now in two areas of the energy system where investment in renewables will not cost more than investment in new fossil-fired electricity-generating capacity and where the switch to electric vehicles will actually save us money as a country, but we still have an upfront premium for electric vehicles. If we can find a way to rebalance the incentives so that buying an electric vehicle does not cost more than buying a petrol vehicle and maybe some of the running cost advantages of an electric car compared with a petrol car are recouped by the Government, the role of policy is to say, "This is cheaper", and people

can take it up more. But there are areas, clearly, where the low-carbon option does cost more. There is still a role for policy to either make the fossil alternative more expensive or make the low-carbon option cheaper.

We cannot expect wide-ranging uptake of things where people are having to pay more. I absolutely agree with the underlying premise of the question. But it is up to policy to create an environment where people are not sacrificing their financial well-being to take these choices.

Q6 Lord Lilley: If costs are objectively higher for the green good, they will be paid either in the price by the consumer or in taxes by the taxpayer. They will not be unpaid. Someone will pay for them. Surely the Government are the loser in a switch from petrol to electric vehicles to the tune of—whatever it is—£15 billion of revenue from taxes on gasoline and diesel, so the cost there will have to be borne by the public. It will be quite difficult to persuade the public to pay those costs if they are made clear to them.

We then have a question, going back to Lord Colgrain's question. If we are to have the support of the public, we have to be honest with them. But if we are honest with them about the costs, we will lose the support of the public.

David Joffe: If I can come back on the electric vehicle example, we think that if the Treasury finds a way to maintain the current tax take from fuel duty and so on, it will still be cheaper for the country to transition to electric vehicles. The costs fundamentally are lower for the electric vehicle alternative. Even if the Treasury, for example, was to introduce a road-pricing mechanism to maintain its revenue, it will still be cheaper for drivers. The challenge we have for electric vehicles is the upfront cost barrier specifically, but overall we think that is genuinely a cost saving for the country.

Clearly, that is not true in every case. It is important to recognise that where there are additional costs, we as a society have decided that they are costs worth bearing, but that does not mean that individual consumers need to be worse off by taking those choices. The Government can change the framework so that individuals are not worse off. Of course, yes, there is a net cost, but we have decided as a society—rightly—that tackling climate change is worth bearing those costs.

Toby Park: David has echoed a lot of my thoughts there. There are costs to not making these transitions as well, which are generally publicly borne: air pollution from combustion vehicles, the climate impacts and so on. A full assessment of the costs often comes out in favour of acting. I completely agree that any capital costs are ultimately borne by either the consumer or the taxpayer.

Also, we need to think about the balance between long-term and upfront costs. We as human beings tend to steeply discount the future, which means that upfront costs loom large while long-term savings tend to get

rather ignored in comparison. Electric vehicles and so on present a challenge in that sense because, often, they are much cheaper to run but we do not tend to fully account for that in our decisions.

There are some examples that come to mind, such as the plastic bag levy, which garnered a lot of support. Congestion pricing on roads tends to be unpopular before it is implemented and then public opinion quickly tips upward when people realise it is quite nice to live in low-traffic neighbourhoods. But I know they are not quite what you are talking about there because those are in a sense disincentives to doing something rather than encouraging people to do something that is more expensive. I cannot off the top of my head think of better examples than that; otherwise, I agree with everything that David said as well.⁴

Ewa Kmietowicz: We as the CCC have been up front about the costs of the transition. We have stated numerous times that it will be 1% to 2% of GDP and in our sixth carbon budget it has come out even lower.

Not taking action on climate change has a cost in itself and those costs are relative to now, not to a counterfactual where we have to take account of the costs of damage caused by climate change.

It is important to think about equity and TUPes, what a just transition looks like and who will be most affected by job impacts and price impacts, to make sure that we protect the vulnerable from these impacts and to set out fair and equitable policies.

The Chair: Thank you. Lady Boycott, I will come back to you if I can. We have two questions we have to ask. If we have time, I will bring you in, but we need to move on to Lord Whitty.

Q7 Lord Whitty: Thank you. What do you expect to be the two most serious problems facing you—or the range of serious problems, first, in terms of the areas where we are trying to get change and, secondly, in terms of the lack of effective governmental and departmental engagement?

In that context, on the back of Lord Cameron's question, how do you rate the Treasury? Whereas the British by and large do not like the Government telling them what to do—unlike the South Koreans sometimes—the biggest weapon the Government have is taxation. For example, we are now free of European rules and could completely rejig the whole VAT structure to favour greener goods. Is that happening in the Treasury and, if not, why not?

Lastly, are we deploying the expertise in the advertising industry, for which corporates pay a lot of money, on behalf of the Government?

⁴ On reflection, Toby Park added that there are infinite examples of people being willing to pay more where they perceive it to be worthwhile, and emphasised the importance of co-benefits, because the environmental benefits alone are not enough of a reason to pay more for many people, but many are willing to pay a bit more for a home which is warmer, or a car which is nicer to drive or cheaper to run, etc.

David Joffe: I can come in on the Treasury point. It is important that the Treasury has done its recently published net zero review, which we recommended when we advised the Government to set the net-zero target. That is important. Where we have landed on that, though, is that the Treasury has done a good assessment of the challenges and rather less on the answers to meet those challenges. We will do some further work setting out some of the answers and we are keen to work with the Treasury to move this along a bit further.

I agree with your assessment that the Government have not moved far enough on taxation and incentives to achieve this. Some of the key things are in departmental strategies and sectoral strategies such as the heat and buildings strategy, which proposes mechanisms for paying the extra costs for heat pumps. It did not necessarily come directly from the Treasury document but presumably had Treasury buy-in to create that mechanism.

A lot more needs to be done. Lord Lilley raised the issue of fuel duty. As we move to electric vehicles, we will have that revenue gap. As a country, the sooner we start dealing with that the better because it becomes harder and harder to impose new taxes once people start seeing that transport is less highly taxed than it used to be.

Toby Park: I do not have a lot to add. I agree with David's response. It is not just VAT. It is not just fuel duty. Another important one is the relative price of electricity versus gas. One reason why heat pumps are not particularly appealing for many people is that by running on electricity, they may be efficient in energy terms but are not that cheap to run. Of course, electricity is about the four times the price of gas per kilowatt hour. What do we do there?

Yes, there is clearly great scope to use pricing more effectively but, again, going back to our prior points, it needs to be designed so carefully that it does not become regressive. All too often these recurring costs that appear in all of our lives will hit the poorest the hardest and yet they may have the least means to make the changes we are trying to incentivise. Policy design does require care.

The Chair: Lady Boycott, if you are brief, we can squeeze you in before we go to Lord Browne.

Baroness Boycott: Okay. I want to ask about "stuff". We talk quite a lot about reducing meat, but it also has to be about reducing the massive consumption. Apart from the fact that we offshore an awful lot of our carbon emissions that are still not rated within our own carbon cuts, you just have to go into any shop to see endless cheap plastic stuff. Somehow that never seems to come up in behaviour change and yet it is a crucial part of our journey to a better planet. I wondered where you stand on this.

Also, the flight shaming in Norway interested me. Did the Government have anything to do with that or was it just about people turning

themselves into local heroes, which is in fact what Saatchi will do about meat? I can talk to you about that some other time. That is two questions. I am sorry.

Toby Park: Yes, I completely agree on stuff. There is of course a tension when it comes to government policy between economic growth, GDP and telling people to buy less. That is part of the problem, honestly, although hopefully there are ways around that. Ultimately, we need to move to a more circular economy. That does not necessarily mean we have to stop consuming but the material goods and the embodied carbon are recycled as much as they can be. The recent regulations on repairability are a good step in that direction but should go much further.

On offshoring emissions, I agree that it is a bit daft that we do not include that within our national accounting. Maybe that is where things such as border carbon taxes need to come in. That could of course be a boon to the domestic economy anyway if it shows the true cost of imported goods.

On flight-shaming, I am not familiar with the example of that, but certainly there is scope in the UK to discourage frequent flying. I am not suggesting we should penalise the occasional holidaymaker, but about 70% of flights are taken by about 15% of people in the UK. Clearly, there is a skew there. We could disincentivise frequent flying, particularly for business.

The Chair: Anything to add from the Climate Change Committee? No. Then we will move to our last question, which is from Lord Browne.

Q8 **Lord Browne of Ladyton:** This is the “Desert Island Discs” question. Bear in mind the purpose of this evidence session—or at least one of them—is to help us with our choices. Because of the diverse and quite comprehensive landscape that you have given us today, helpfully, we have to make choices about what we will concentrate on.

What are your key recommendations to our committee as we commence this inquiry and, if you are brave enough, what are your key recommendations to the Government on related policy? You can each have probably a minute or so to answer that.

Ewa Kmietowicz: Can I have a think? Let someone else start.

David Joffe: I do not get a chance to think. Okay. We picked up the Treasury review side of things. The interaction between the behavioural nudge aspect and the incentives to make the changes is a key issue. The Treasury needs some support and maybe a little nudge to go a bit further on some of these issues. That is an important area to concentrate on. It would be helpful to bring the real understanding that Toby and colleagues have shown in their paper together with the financial modelling of what the incentives look like, how we make sure that the revenues to the Treasury are acceptable or the spending from the Treasury is acceptable and so on, bring the behavioural and the incentive sides together and understand how they can work in the real world. That is an important

aspect. There is more analysis to do but there is enough evidence to start bringing out some of what we know already.

Ewa Kmietowicz: We need to start this dialogue with the public straight away. We cannot shy away from these difficult decisions. Bringing them on board and creating a joint shared narrative about how to achieve these difficult changes can only help in that process. We are trying to achieve the creation of a social mandate for change here.

The Government need to be more joined up in their policies. A lot of the individual departments are trying hard to move towards a decarbonisation pathway, but a lot of the purse strings are held by the Treasury, so there is tension there occasionally. The Treasury needs to be on board with this in a much more upfront way. The decisions in budgets, for example, are often taken at difficult political times and there is not much emphasis on green measures. That could be much better joined up.

Lord Browne of Ladyton: Toby, you will get the last word.

Toby Park: Yes, no pressure. I agree with everything said there. I have one small but important framing recommendation to the committee: do not think of behaviour change as a set of outcomes.⁵ It is clear and undeniable that we need a future world in which our behaviours are a bit different, driving different cars, driving a bit less, eating food that is somewhat familiar but slightly different, heating our homes differently and so on. That does not necessarily mean the way to get there is through a narrow understanding of behaviour change techniques. It is not all about encouraging and imploring people to change their own actions within their own lives, although that can absolutely be part of it. It is also, as I said, about building a world from upstream down in which those behaviours can flourish more readily.

In terms of key recommendations, the report that I intend to share has many concrete policy suggestions in it, which I hope will be useful. They include things I mentioned earlier, such as defaulting people into greener pensions. There is £3 trillion in UK pension pots that could be usefully invested. There are things such as deshrouding markets, so that people can see which supermarket or which airline is more sustainable. There are things such as upstream incentives to encourage innovation and reformulation of high-carbon goods, be that food, cement or other products. There is also the more detailed stuff around how we can streamline customer adoption journeys on key technologies and so on. I will share that report, which has lots of recommendations within it, if that would be useful for your work.

Q9 **The Chair:** As a supplementary to that, Toby, you have mentioned a few times these nine principles that you have recently published and all of you have talked about joined-up policies being the way forward. You may

⁵ Toby Park later clarified that his framing recommendation for the Committee was to think of behaviour change as a necessary set of outcomes, rather than as a narrow set of solutions.

be aware that in the Environment Act the Government drew up a set of environmental principles that they have drawn up a policy statement around and that all Ministers are now legally obliged to have regard to.

When you drew up your nine principles, was that what you were thinking of in terms of helping to get Ministers to drag these principles across government or is it just some other piece of paper that will get lost on a shelf?

Toby Park: I cannot say whether it will become a piece of paper that gets lost on a shelf, but certainly it is a good move. There were some echoes within our recommendations around potentially having a credible net-zero filter for all major government infrastructure projects and policies, which has been discussed in various forums for a while.

But again, from my side, from a behavioural perspective, it is not just about making the Government work more effectively, absolutely vital though that is. Our lens in that recommendation is more about the impacts on the public of that kind of step, the signalling of credibility, removing any risk of deceit, hypocrisy and so on.

We have seen this with the proposed coalmine in the UK. By the way, I do not scorn the Government for that, really. It was a complex decision and the alternative might well have been shipping in more coal from overseas for steel production. None the less, the behavioural implications are quite important in that that it does rather undermine public confidence and investment in the narrative. That kind of hidden cost is sometimes not taken into account with these policy decisions.

Lord Lilley: That assumes that the public cannot make rational decisions—that they cannot take into account the fact that we would otherwise have to import it.

Toby Park: I perhaps put more onus on the mainstream media than on the public there. That nuanced point was rather lost from the content that I saw in most media outlets. I say the public are very capable.

I also echo Ewa's point that public engagement, debate and discourse are so vital here. If you look at most citizens' assemblies on climate that have occurred around the world, we often see that the public is a step ahead of policymakers in their ambition and their willingness to be bold on this. I have a lot of faith in the public's ability to make good decisions on this point, but the public do need to be given the space, the information, the capacity and the time and indeed be listened to over an extended period to make that, rather than through soundbites and media-esque debate.

The Chair: Thank you for that, colleagues. I see hands up but I am afraid we are now over time and so I will have to bring the meeting to a close. I thank Ewa, Toby and David for their contributions, which have been fantastic. We appreciate your time today and we look forward to receiving the information that you have offered to send us to help us in our deliberations. I now formally, colleagues, bring this meeting to an

end. Thank you.